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International
Mathematical Union**



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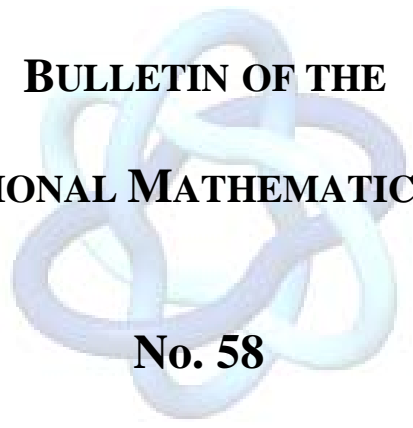
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IMU

**BULLETIN OF THE
INTERNATIONAL MATHEMATICAL UNION**



No. 58

July 2010

Secretariat:

*c/o Konrad-Zuse-Zentrum
Takustr. 7
D-14195 Berlin, Germany*

<http://www.mathunion.org>

Dear Members of the International Mathematical Union,

This Bulletin includes the supporting material for the General Assembly (GA) of IMU which will take place on August 16-17, 2010 in Bangalore, India.

Further information on the General Assembly is available at:

URL <http://www.icm2010.org.in/imu-general-assembly-2010>.

All documents that are relevant for the General Assembly are available for download at:

<http://www.mathunion.org/GA2010/>.

For this password protected Web site the user name and the password have been provided by the IMU Secretary.

The narrative reports by the EC, ICMI, CDE, ICHM, and CEIC cover, in principle, the period 2007–2010 whereas financial reports are for the years 2006–2009.

This Bulletin will not be distributed at the GA in printed form but will only be electronically available. Those who prefer to have a print copy are asked to download the document and bring it along to the GA.

with best wishes



Martin Grötschel
IMU Secretary

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1. Agenda of the 16th IMU General Assembly

July 29, 2010

**16th General Assembly of the International Mathematical Union
August 16-17, 2010
Bangalore, India - Hotel Chancery Pavilion, Grand Ballroom**

AGENDA

Monday, August 16

08:15 – 09:00 Group photo, Chancery Pavilion porch

09:00 – 10:30 GA meeting, 1st session

1. Opening of the 16th General Assembly (Welcome and Approval of the Agenda)
2. Appointment of Subcommittees, *Appendix*
 - 2.1. Procedures for Election (vote on changes), *Appendix*
 - 2.2. Credentials Committee
 - 2.3. Tellers Committee
 - 2.4. Finance and Dues Committee
 - 2.5. Resolutions Committee
 - 2.6. Election Committee
3. Review of the activities of the Union (part 1)
 - 3.1. Overview on Union activities
 - 3.2. CDE/DCSG presentation, including vote on new CDC Terms of Reference, *Appendix*

10:30 – 11:00 Coffee/tea break

11:00 – 12:30 GA meeting, 2nd session

4. Future IMU Stable Office
 - 4.1. Presentation of the proposal to install a stable office, including proposal of the resulting changes of the Statutes (see para 28, 29 in the appended Statutes), *Appendix*
 - 4.2. Presentations of the IMU Stable Office candidates
 - 4.2.1. Fields Institute, Toronto, *Appendix*
 - 4.2.2. IMPA, Rio de Janeiro, *Appendix*
 - 4.2.3. WIAS, Berlin, *Appendix*
 - 4.3. Report of Stable Office Committee
 - 4.4. Question time
 - 4.5. Vote on Stable Office (Yes or No) + Vote on Statutes change para 28 and 29

12:30 – 13:50 Lunch

13:50 – 15:45 GA meeting, 3rd session

5. Vote on the IMU Stable Office candidate institutions

6. Review of the activities of the Union (part 2)
 - 6.1. CEIC and electronic IMU, vote on Best Practices document, *Appendix*
 - 6.2. ICMI presentation
 - 6.3. ICHM presentation
 - 6.4. IMU finances/dues

7. Ballot result of vote on IMU Stable Office

15:45 – 16:15 *Coffee/tea break*

16:15 – 18:15 **GA meeting, 4th session**

8. Nominating Committee
 - 8.1. Introduction of the Nominating Committee and explanation of the nominating process
 - 8.2. Presentation of slates proposed by the Nominating Committee, *Appendix*
 - 8.2.1. IMU President
 - 8.2.2. IMU Secretary
 - 8.2.3. IMU Vice Presidents and IMU EC Members-at-Large
 - 8.2.4. President, Secretaries and Members-at-Large of CDC
 - 8.2.5. IMU Representatives to ICHM
 - 8.3. Nominations from the floor
9. Further Statutes changes (see proposed changes in *Appendix*), explanation and votes

Subcommittee meetings in the evening by individual appointment

- Locations of the subcommittee meetings to be announced -

Tuesday, August 17

08:30 – 09:30 **Subcommittee sessions by individual appointment**

09:30 – 11:00 **GA meeting, 5th session**

10. Presentation of the Election Committee's proposals and Elections
 - 10.1. Executive Committee (EC) of IMU
 - 10.2. Commission for Developing Countries (CDC)
 - 10.3. International Commission on the History of Mathematics (ICHM)
 - 10.4. Election of the 2011-2014 EC, CDC, and ICHM officers
11. Finance and Dues Committee, *Appendix*
 - 11.1. Recommendation
 - 11.2. Balloting

11:00 – 11:30 *Coffee/tea break*

11:30 – 13:30 **GA meeting, 6th session**

12. Review of the activities of the Union (part 3)
 - 12.1. ICSU
 - 12.2. ICIAM
 - 12.3. Friends of IMU, Itô Fund, and Fundraising
 - 12.4. ICM 2010
 - 12.4.1. Report of the Program Committee
 - 12.4.2. Report of the EOC

13:30 – 14:30 *Lunch*

14:30 – 16:40 **GA meeting, 7th session**

13. Ballot results
14. Resolutions, *Appendix*

- 14.1. Presentation of Resolutions Committee
- 14.2. Resolutions balloting
- 15. ICM 2014
 - 15.1. IMU EC Site Recommendation for ICM 2014, *Appendix*
 - 15.2. Presentation of the Committee for Seoul ICM 2014
 - 15.3. Location of ICM 2014 balloting
 - 15.4. Meeting of the 17th IMU General Assembly
 - 15.5. Vote on establishment of the ICM Emmy Noether Lecture
- 16. IMU Membership
 - 16.1. New Members
 - 16.2. Group changes
 - 16.3. Applications for Membership/Associate Membership, *Appendix*
Presentations of Cambodia, Moldova, Montenegro, Nepal, Oman
 - 16.4. Membership applications balloting
- 17. Miscellaneous
- 18. Any other item with the permission of the President

Tuesday, **August 17**, at **19:00 h**, **dance performance** “OJAS” by Abhinava Dance Academy artists followed by a dinner at the Grand Ballroom of the Chancery Pavilion. This dinner will be hosted by the Local Organization Committee.

2. Executive Committee 2007-2010

INTERNATIONAL MATHEMATICAL UNION

Executive Committee

January 1, 2007 – December 31, 2010

President:	László Lovász	(Hungary)
Vice-Presidents:	Zhi-Ming Ma	(China)
	Claudio Procesi	(Italy)
Secretary:	Martin Grötschel	(Germany)
Members-at-Large:	M. Salah Baouendi	(USA)
	Manuel de León	(Spain)
	Ragni Piene	(Norway)
	Cheryl E. Praeger	(Australia)
	Victor A. Vassiliev	(Russia)
	Marcelo Viana	(Brazil)
Ex-officio Member (Past President)	John M. Ball	(United Kingdom)

Meetings of the Executive Committee in 2010:79th EC Meeting, Rome, Italy, February 27/28, 201080th EC Meeting, Bangalore, India, August 15, 2010

3. Members of the Union

The following 72 countries are members of IMU as of January 1, 2010:

Group I	Armenia Cameroon Cuba Greece Indonesia Latvia Nigeria Philippines Serbia Tunisia Venezuela	Bosnia & Herzegovina Colombia Estonia Hong Kong Ivory Coast Lithuania Pakistan Romania Singapore Turkey Vietnam	Bulgaria Croatia Georgia Iceland Kazakhstan New Zealand Peru Saudi Arabia Slovenia Uruguay
Group II	Argentina Denmark Mexico South Africa	Austria Egypt Portugal Ukraine	Chile Ireland Slovakia
Group III	Australia Finland Norway	Belgium Hungary	Czech Republic Iran
Group IV	Brazil Netherlands Sweden	India Poland Switzerland	Republic of Korea Spain
Group V	Canada Germany Japan United States	China Israel Russia	France Italy United Kingdom
Associate Membership	Ecuador Thailand	Kenya	Kyrgyzstan

The following 3 organizations are members of IMU as of January 1, 2010:

Affiliate Membership	African Mathematical Union (AMU) European Mathematical Society (EMS) Unión Matemática de América Latina y el Caribe (UMALCA)
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4. IMU Officers 2007 - 2010

COMMISSION ON DEVELOPMENT AND EXCHANGES (CDE)

January 1, 2007 - December 31, 2010

President:	S. Dani (India)
Secretary:	G. Gonzalez-Sprinberg (France)
Members at Large:	G. Boente (Argentina)
	P. Cordaro (Brazil)
	J-P. Gossez (Belgium)
	M. T. Niane (Sénégal)
	M. Sanz-Solé (Spain)
	J. Zhang (China)
Ex-officio Members:	L. Lovász (Hungary)
	M. Grötschel (Germany)

INTERNATIONAL COMMISSION ON THE HISTORY OF MATHEMATICS (ICHM)

January 1, 2007 - December 31, 2010

IMU Representative	C. Houzel (France)
IMU Representative	P. M. Neumann (UK)

INTERNATIONAL COMMISSION ON MATHEMATICAL INSTRUCTION (ICMI)

January 1, 2007 - December 31, 2009

President:	M. Artigue (France)
Vice Presidents:	J. Adler (South Africa)
	B. Barton (New Zealand)
Secretary-General:	B. Hodgson (Canada)
Members at Large:	M. Bartolini Bussi (Italy)
	J. Carvalho e Silva (Portugal)
	C. Hoyles (UK)
	S. Kumaresan (India)

F. Koon-shing Leung (Hong Kong)
A. Semenov (Russia)
Ex-officio Members: H. Bass (USA)
L. Lovász (Hungary)
M. Grötschel (Germany)

January 1, 2010 - December 31, 2012

President: B. Barton (New Zealand)
Vice Presidents: M. Teicher (Israel)
A. Ruiz (Costa Rica)
Secretary-General: J. Carvalho e Silva (Portugal)
Members at Large: M. Bartolini Bussi (Italy)
S. Je Cho (Korea)
R. Howe (USA)
R. Vithal (South Africa)
Z. Yingbo (China)
Ex-officio Members: M. Artigue (France)
L. Lovász (Hungary)
M. Grötschel (Germany)

COMMITTEE ON ELECTRONIC INFORMATION AND COMMUNICATION (CEIC)

January 1, 2007 - June 30, 2008

Committee Members: J. M. Borwein, Chair (Canada)
M. Doob (Canada)
D. Eisenbud (USA)
J. Ewing (USA)
U. Rehmann (Germany)
A. van der Poorten (Australia)

July 1, 2008 - December 31, 2012

Committee Members: J. Ball, Chair (UK)
O. Caprotti (Finland)
J. Davenport (UK)
M. Doob (Canada)
C. Hutchins (USA)
P. Olver (USA)
U. Rehmann (Germany)

**Representatives/Liaison persons on behalf of the
International Mathematical Union**

Body	Representative/ liaison person	(end of) Term
COSPAR	Alain Bensoussan	2010
Gruber Foundation Cosmology Prize	Roger Penrose	2011
ICSU	Manuel de León	2010
ICSU Ad hoc Group on Weighted Voting	Marcelo Viana	2010
ICSU Regional office for Asia and the Pacific (ROAP)	Manuel de León	2010
	Zhiming Ma	2010
	Cheryl Praeger	2010
ICSU Regional office for Latin America and the Caribbean (ROLAC)	Marcelo Viana	2010
ICMI	Cheryl Praeger	2010
CEIC	John Ball	2010
Niels Henrik Abel Memorial Fund	Ragni Piene	2010
Ramanujan Prize	Marcelo Viana	2010
ICHM	Peter Neumann	2010
	Christian Houzel	2010
IMU archive at Helsinki university	Guillermo Curbera	2010
UNESCO	Michèle Artigue	2010

5. Approved membership dues 2007 – 2010

International Mathematical Union				
Approved membership dues 2007 – 2010 (Swiss Francs)				
Group	2007	2008	2009	2010
I	1386	1455	1528	1605
II	2772	2910	3056	3210
III	5544	5820	6112	6420
IV	11088	11640	12224	12840
V	16632	17460	18336	19260

6. Corrected version of the approved IMU budget 2007-2010

International Mathematical Union					
Approved Budget for 2007-2010 (Swiss Francs)					
Expenses	Approved Budgeted for	5% Dues increase	5% Dues increase	5% Dues increase	5% Dues increase
Schedule A:	2003-2006	2007	2008	2009	2010
Secretarial help, IMU office	22.000	22.660	22.660	22.660	22.660
Secretarial help, President	5.000	5.150	5.150	5.150	5.150
Accountant	9.000	9.270	9.270	9.270	9.270
ICMI	11.000	15.450	15.450	15.450	15.450
CDE	6.000	6.180	6.180	6.180	6.180
Office expenses (including postage)	16.000	16.480	16.480	16.480	16.480
Travel expenses of the EC	30.000	30.900	30.900	30.900	30.900
President's and Secretary's expenses	4.000	4.120	4.120	4.120	4.120
Contribution to ICSU	9.500	9.785	9.785	9.785	9.785
IMU Bulletin	5.000	1.500	1.500	1.500	1.500
Audit fee	8.500	8.755	8.755	8.755	8.755
General Assembly	4.000	4.120	4.120	4.120	4.120
World Directory of Mathematicians	20.000	0	0	0	0
Contingencies	2.000	2.060	2.060	2.060	2.060
Subtotal of Schedule A	152.000	136.430	136.430	136.430	136.430
Schedule B:					
IMU non-CDE conference support	90.000	20.000	20.000	20.000	20.000
ICMI scientific activities	29.000	27.810	27.810	27.810	27.810
CDE scientific activities	40.000	115.000	115.000	115.000	115.000
CDE support staff		56.000	56.000	56.000	56.000
CEIC scientific activities	15.000	25.000	25.000	25.000	25.000
Website support		6.253	6.253	6.253	6.253
ICM Site Committee		2.000	2.000	2.000	2.000
Program Committee for ICM	8.000	8.240	8.240	8.240	8.240
Subvention to ICM	28.000	28.840	28.840	28.840	28.840
Prize Committees (subvention)		11.100	11.100	11.100	11.100
Travel grants (young & senior)	40.000	61.000	61.000	61.000	61.000
Media Relations		3.500	3.500	3.500	3.500
Subtotal of Schedule B	210.000	364.743	364.743	364.743	364.743
Total Expenses (A & B)	362.000	501.173	501.173	501.173	501.173
Income					
Membership dues	279.840	336.798	353.565	371.304	390.015
ICSU Grant	10.500	0	0	0	0
Special Development Fund	60.000	32.000	32.000	32.000	32.000
Interest on bank accounts	39.000	16.000	16.000	16.000	16.000
Abel Fund		59.220	59.220	59.220	59.220
Draw from Reserves		57.155	40.388	22.649	3.938
Return to Reserves		0	0	0	0
Total Income	389.340	501.173	501.173	501.173	501.173
Income less Expenses		0	0	0	0

Corrections:

Schedule A: ICMI - 11.330 changed into 15.450.

Schedule B: ICMI scientific activities - 29.870 changed into 27.810.

Schedule B: CEIC scientific activities - 15.450 changed into 25.000.

Having changed the varying draw from, and return to Reserves, the total Expenditure/Income of the approved 2007-2010 Budget is amended to 501.173 CHF.

7. Adhering Organizations and votes

Member Country	Adhering Organization	Votes
Argentina http://www.mathunion.org/members/countries/list/sorted-by-names/argentina/	Unión Matemática Argentina	2
Armenia http://www.mathunion.org/members/countries/list/sorted-by-names/armenia/	Institute of Mathematics, National Academy of Sciences	1
Australia http://www.mathunion.org/members/countries/list/sorted-by-names/australia/	Australian Academy of Science	3
Austria http://www.mathunion.org/members/countries/list/sorted-by-names/austria/	Austrian Academy of Sciences	2
Belgium http://www.mathunion.org/members/countries/list/sorted-by-names/belgium/	Academie Royale de Belgique	3
Bosnia&Herzegovina http://www.mathunion.org/members/countries/list/sorted-by-names/bosnia-and-herzegovina/	Bosnian Mathematical Society	1
Brazil http://www.mathunion.org/members/countries/list/sorted-by-names/brazil/	Conselho Nacional de Desenvolvimento Científico e Tecnológico – CNPq	4
Bulgaria http://www.mathunion.org/members/countries/list/sorted-by-names/bulgaria/	Bulgarian Academy of Sciences	1
Cameroon http://www.mathunion.org/members/countries/list/sorted-by-names/cameroon/	Société Mathématique Camerounaise	1
Canada http://www.mathunion.org/members/countries/list/sorted-by-names/canada/	National Research Council of Canada	5
Chile http://www.mathunion.org/members/countries/list/sorted-by-names/chile/	Sociedad de Matemática de Chile	2
China http://www.mathunion.org/members/countries/list/sorted-by-names/china/	Chinese Mathematical Society Mathematical Society located in Taipei, China	3 2
Colombia http://www.mathunion.org/members/countries/list/sorted-by-names/colombia/	Sociedad Colombiana de Matemáticas	1

Croatia	Croatian Mathematical Society	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/croatia/	
Cuba	Universidad de la Habana	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/cuba/	
Czech Republic	Academy of Sciences of the Czech Republic	3
	http://www.mathunion.org/members/countries/list/sorted-by-names/czech-republic/	
Denmark	Det Kongelige Danske Videnskabernes Selskab	2
	http://www.mathunion.org/members/countries/list/sorted-by-names/denmark/	
Ecuador	Sociedad Ecuatoriana de Matemática	0
	http://www.mathunion.org/members/countries/list/sorted-by-names/ecuador-associate-member/	
Egypt	Academy of Scientific Research and Technology	2
	http://www.mathunion.org/members/countries/list/sorted-by-names/egypt/	
Estonia	Estonian Academy of Sciences	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/estonia/	
Finland	Delegation of the Finnish Academies of Science and Letters	3
	http://www.mathunion.org/members/countries/list/sorted-by-names/finland/	
France	Académie des Sciences	5
	http://www.mathunion.org/members/countries/list/sorted-by-names/france/	
Georgia	Georgian Mathematical Union	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/georgia/	
Germany	Deutsche Mathematiker-Vereinigung	5
	http://www.mathunion.org/members/countries/list/sorted-by-names/germany/	
Greece	Academy of Athens	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/greece/	
Hong Kong	The Hong Kong Mathematical Society	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/hong-kong/	
Hungary	János Bolyai Mathematical Society	3
	http://www.mathunion.org/members/countries/list/sorted-by-names/hungary/	
Iceland	Icelandic Mathematical Society	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/iceland/	
India	Indian National Science Academy	4
	http://www.mathunion.org/members/countries/list/sorted-by-names/india/	

Indonesia	The Indonesian Mathematical Society	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/indonesia/	
Iran	Iranian Mathematical Society	3
	http://www.mathunion.org/members/countries/list/sorted-by-names/iran/	
Ireland	The Royal Irish Academy	2
	http://www.mathunion.org/members/countries/list/sorted-by-names/ireland/	
Israel	Israel Academy of Sciences and Humanities	5
	http://www.mathunion.org/members/countries/list/sorted-by-names/israel/	
Italy	Istituto Nazionale di Alta Matematica	5
	http://www.mathunion.org/members/countries/list/sorted-by-names/italy/	
Ivory Coast	Société Mathématique de Cote d'Ivoire	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/ivory-coast/	
Japan	Science Council of Japan	5
	http://www.mathunion.org/members/countries/list/sorted-by-names/japan/	
Kazakhstan	Center of Physical and Mathematical Researches	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/kazakhstan/	
Kenya	Mathematics Association of Kenya	0
	http://www.mathunion.org/members/countries/list/sorted-by-names/kenya/	
Korea, Rep. of	Korean Mathematical Society	4
	http://www.mathunion.org/members/countries/list/sorted-by-names/korea-republic-of/	
Kyrgyzstan	Mathematical Society of Kyrgyzstan	0
	http://www.mathunion.org/members/countries/list/sorted-by-names/kyrgyzstan-associate-member/	
Latvia	Latvijas Matematikas Society	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/latvia/	
Lithuania	Lithuanian Mathematical Society	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/lithuania/	
Mexico	Sociedad Matemática Mexicana	2
	http://www.mathunion.org/members/countries/list/sorted-by-names/mexico/	
Netherlands	Het Koninklijk Wiskundig Genootschap	4
	http://www.mathunion.org/members/countries/list/sorted-by-names/netherlands/	
New Zealand	The Royal Society of New Zealand	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/new-zealand/	

Nigeria	Mathematical Association of Nigeria	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/nigeria/	
Norway	The Norwegian Academy of Science and Letters	3
	http://www.mathunion.org/members/countries/list/sorted-by-names/norway/	
Pakistan	The Pakistan Academy of Sciences	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/pakistan/	
Peru	Sociedad Peruana de Matematica	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/peru/	
Philippines	National Research Council of the Philippines	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/philippines/	
Poland	Polish Academy of Sciences, Inst. Math.	4
	http://www.mathunion.org/members/countries/list/sorted-by-names/poland/	
Portugal	Comissão Nacional de Matemática de Portugal	2
	http://www.mathunion.org/members/countries/list/sorted-by-names/portugal/	
Romania	Romanian Academy	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/romania/	
Russia	Russian Academy of Sciences	5
	http://www.mathunion.org/members/countries/list/sorted-by-names/russia/	
Saudi Arabia	King Abdulaziz City for Science and Technology	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/saudi-arabia/	
Serbia	Mathematical Society of Serbia	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/serbia/	
Singapore	Singapore Mathematical Society	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/singapore/	
Slovakia	Union of Slovak Mathematicians and Physicists	2
	http://www.mathunion.org/members/countries/list/sorted-by-names/slovakia/	
Slovenia	Društvo Matematikov, Fizikov in Astronomov Slovenije	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/slovenia/	
South Africa	National Research Foundation	2
	http://www.mathunion.org/members/countries/list/sorted-by-names/south-africa/	
Spain	Comission Interministerial de Ciencia y Tecnologia	4
	http://www.mathunion.org/members/countries/list/sorted-by-names/spain/	

Sweden	The Royal Swedish Academy of Sciences	4
	http://www.mathunion.org/members/countries/list/sorted-by-names/sweden/	
Switzerland	Swiss Mathematical Society	4
	http://www.mathunion.org/members/countries/list/sorted-by-names/switzerland/	
Thailand	Mathematical Association of Thailand	0
	http://www.mathunion.org/members/countries/list/sorted-by-names/thailand/	
Tunisia	Société Mathématique de Tunisie	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/tunisia/	
Turkey	Türk Matematik Derneği	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/turkey/	
Ukraine	Ukrainian Mathematical Society	2
	http://www.mathunion.org/members/countries/list/sorted-by-names/ukraine/	
United Kingdom	London Mathematical Society	5
	http://www.mathunion.org/members/countries/list/sorted-by-names/united-kingdom/	
United States of America	U.S. National Academy of Sciences	5
	http://www.mathunion.org/members/countries/list/sorted-by-names/united-states-of-america/	
Uruguay	Sociedad Uruguaya de Matemática y Estadística	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/uruguay/	
Venezuela	Asociación Matemática Venezolana	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/venezuela/	
Vietnam	Vietnam Mathematical Society	1
	http://www.mathunion.org/members/countries/list/sorted-by-names/vietnam/	

8. Slates

At the URL:

<http://www.mathunion.org/GA2010/>

applying the user name and password provided by the Secretary the

– **Slates** for the General Assembly

can be viewed.

9. Proposed membership dues 2011 – 2014

	No. of Unit Contributions	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Unit Contribution		1,637	1,670	1,703	1,737
Group I	1	1,637	1,670	1,703	1737
Group II	2	3,274	3,340	3,406	3,474
Group III	4	6,548	6,680	6,812	6,948
Group IV	8	13,096	13,360	13,624	13,896
Group V	12	19,644	20,040	20,436	20,844

10. Proposed budget plan for the term 2011 – 2014

International Mathematical Union					
Proposed Budget for 2011-2014 (Swiss Francs)					
EXPENSES	Approved Budgeted for	2% Dues increase	2% Dues increase	2% Dues increase	2% Dues increase
Schedule A:	2007-2010	2011	2012	2013	2014
Secretarial help, IMU Secretary	22.660	20.000	20.000	20.000	20.000
Secretarial help, IMU President	5.150	8.000	8.000	8.000	8.000
Accountant	9.270	9.500	9.500	9.500	9.500
ICMI	15.450	16.000	16.000	16.000	16.000
CDC	6.180	6.300	6.300	6.300	6.300
Office expenses (including postage)	16.480	16.800	16.800	16.800	16.800
Travel expenses of the EC	30.900	32.000	32.000	32.000	32.000
President's and Secretary's expenses	4.120	5.000	5.000	5.000	5.000
Contribution to ICSU	9.785	9.785	9.785	9.785	9.785
IMU Bulletin	1.500	2.200	2.200	2.200	2.200
Audit fee	8.755	17.000	17.000	17.000	17.000
General Assembly	4.120	5.000	5.000	5.000	5.000
IMU office transfer		17.500	17.500	17.500	17.500
Contingencies	2.060	50.000	50.000	50.000	50.000
Subtotal of Schedule A	136.430	215.085	215.085	215.085	215.085
Schedule B:					
IMU non-CDC conference support	20.000	3.750	3.750	3.750	3.750
ICMI scientific activities	27.810	40.000	40.000	40.000	40.000
CDC scientific activities	115.000	120.000	120.000	120.000	120.000
CDC support staff	56.000	7.500	7.500	7.500	7.500
CEIC scientific activities	25.000	21.000	21.000	21.000	21.000
Website support	6.253	8.000	8.000	8.000	8.000
ICM Site Committee	2.000	3.000	3.000	3.000	3.000
Program Committee for ICM	8.240	10.000	10.000	10.000	10.000
Subvention to ICM	28.840	29.420	29.420	29.420	29.420
Prize Committees (subvention)	11.100	12.000	12.000	12.000	12.000
Travel grants (young & senior)	61.000	62.220	62.220	62.220	62.220
Media Relations	3.500	4.000	4.000	4.000	4.000
Subtotal of Schedule B	364.743	320.890	320.890	320.890	320.890
Total Expenses (A & B)	501.173	535.975	535.975	535.975	535.975
INCOME					
Membership dues	390.015	435.442	444.220	452.998	462.042
ICSU Grant	0	0	0	0	0
Special Development Fund	32.000	30.000	30.000	30.000	30.000
Interest on bank accounts	16.000	1.000	1.000	1.000	1.000
Donations (Abel Fund)	59.220	56.000	56.000	56.000	56.000
Draw from Reserves (here in 2010)	3.938	13.533	4.755	0	0
Return to Reserves (here in 2010)	0	0	0	4.023	13.067
TOTAL INCOME	501.173	535.975	535.975	535.975	535.975
INCOME LESS EXPENSES		0	0	0	0

11. Proposed changes to the Procedures for Election

Procedures for the Election of the

IMU Executive Committee (EC)

IMU Commission for Developing Countries (CDC)

Joint International Commission on the History of Mathematics (ICHM)

The procedures for election of the IMU EC, the IMU CDC, and the ICHM, as well as the Executive Committee of the International Commission on Mathematical Instruction (ICMI), which can be found below, were adopted by the IMU General Assembly in Bangalore, August 16-17, 2010.

1. The **Nominating Committee (NC)** of the International Mathematical Union is formed with the purpose of presenting slates of nominations to the Adhering Organizations in preparation for the elections at the General Assembly. It consists of seven people chosen as follows:
 - a. **Chair:** The Chair of the IMU Nominating Committee is chosen by the IMU President and must not be a current member of the IMU EC, or work in the same country as the President.
 - b. **President of IMU:** The current President of IMU, in the year that the Nominating Committee is formed, is a member of the IMU Nominating Committee with full voting rights.
 - c. **Three other persons** chosen at random from nominations: The Executive Committee of IMU arranges for the choice of three people at random from nominations received from Adhering Organizations of IMU of persons who are not current members of the IMU Executive Committee, who are willing to serve, and who do not work in the same country as the NC Chair or the IMU President.
 - d. **This call for nominations** should be sent to the Adhering Organizations by 1 September in the year ICM-2 (that is, two years prior to the International Congress of Mathematicians), with nominations to be received by 1 December of the same year. One person must be chosen from nominations submitted by Groups I and II, one person chosen from nominations submitted by Groups III and IV and one person chosen from nominations submitted by Group V. Each Adhering Organization may submit one name of a person who is willing to serve. If there are no nominations in one of these three categories, then a person will be chosen at random from the other two categories.
 - e. **Two persons with experience of IMU:** Finally two persons are chosen jointly by the NC Chair and the IMU President. In the event of disagreement, the Chair and President each chooses one person. These two people should ideally be former members of the IMU Executive Committee or, if such persons are unavailable, have significant experience of IMU's affairs. In order to gain a balanced IMU Nominating Committee, the Chair and President consider criteria such as geography, sub-field representation, and gender representation.

2. Duties of the IMU Nominating Committee

- a. **Nomination slates** are formed for the IMU Executive Committee (EC), the IMU Commission for Developing Countries (CDC), and the Joint International Commission on the History of Mathematics (ICHM).
- b. The **slates for the commissions** are formed taking advice from the current officers of these commissions, but this advice is not binding on the IMU Nominating Committee. The Nominating Committee is asked to distribute its nominations for the EC geographically so as to represent as equally as possible the whole international community of mathematicians. The connections of individual candidates to the countries where they were born, educated, or have lived in the past may be considered in addition to the country in which they presently reside.
- c. **EC Nominations:** The IMU Nominating Committee nominates one name for the position of President of IMU, Secretary of IMU, and one name for each of the two Vice Presidents of IMU. It nominates at least two more names than the number of Members-at-Large of the IMU EC.
- d. **CDC Nominations:** Six members of the CDC are elected by the IMU General Assembly. The IMU Nominating Committee forms a slate with at least one name for each of the positions of President, Secretary for Policy, and Secretary for Grant Selection and at least two names for each of the three positions for CDC Members-at-Large in representation of Africa, Asia, and Latin America. Alternative names for each of the positions can be proposed at the General Assembly from the floor. For each of the six positions the candidate with the most votes is elected.
- e. **ICHM Nominations:** The IMU Nominating Committee nominates at least two more names than the number of ICHM representatives.
- f. **Schedule:** By 1 September ICM-2, the Chair of the IMU Nominating Committee accepts post. By 1 February ICM-1, the Committee is complete.

3. Calls for Nominations

- a. By 1 November ICM-2, the IMU Secretary sends a call for nominations to the Adhering Organizations and Committees for Mathematics for the offices of President and Secretary of IMU. The Adhering Organizations' and Committees for Mathematics' submissions must include a candidate's declaration of willingness to serve if elected and a CV. These nominations are due by 15 January ICM-1.
 - b. By 1 September ICM-1, the IMU Secretary sends a call for nominations to the Adhering Organizations and Committees for Mathematics for the offices of Vice Presidents and Members-at-Large for the IMU EC, the President, Secretaries and Members-at-Large for CDC, and for the IMU Representatives to ICHM. The Adhering Organizations' and Committees for Mathematics' submissions must include a candidate's declaration of willingness to serve if elected and a CV. These nominations are due by 15 November ICM-1.
 - c. The Nominating Committee is free to nominate persons for all offices.
4. **Slate:** Two months prior to the IMU GA, the Secretary sends to the Adhering Organizations and Committees for Mathematics the IMU NC slates, including

candidates' CVs, plus a list of all persons nominated. The Adhering Organizations and Committees for Mathematics are asked to cooperate in having their delegates to the IMU General Assembly fully informed.

5. General Assembly

- a. On the first day of the GA meeting, an **Election Committee** is formed which consists of all members of the Nominating Committee and all Past IMU Presidents present at the GA and, if necessary, further GA delegates elected to reach a membership of at least five. The election shall be from names either proposed by the President or proposed and seconded from the floor by show of hands, unless the meeting decides otherwise. The Election Committee is chaired by the Chair of the Nominating Committee, or if unavailable, by the IMU President. The Election Committee is responsible for handling the election process and deciding on all issues related to it that may arise.
- b. The Chair of the Election Committee presents the EC, CDC, and ICHM slates to the General Assembly.
- c. Further nominations can be made from the floor after the slates of the IMU Nominating Committee have been presented. In case of the IMU EC, the nominations must be drawn from names previously offered by the Adhering Organizations and Committees for Mathematics as in item 3., signed by at least ten delegates, from at least three countries. In exceptional circumstances, EC nominations not previously offered as in item 3. can be made from the floor provided that each case be approved by a vote of the GA. Each such nomination must be accompanied by a statement of willingness to serve, a two page CV and be signed by at least ten delegates, from at least three countries.
- d. The IMU General Assembly shall then elect the following: the new IMU President, the two IMU Vice-Presidents, the IMU Secretary, and the six Members-at-Large for the IMU EC; the new President, the two Secretaries and the three Members-at-Large for CDC; the two IMU Representatives to ICHM. The vote is taken via written ballots that include the Nominating Committee slates as well as the list of nominations from the floor as stated in 5.c.
- e. Voting by the General Assembly shall be by delegations, provided that each delegation shall be free to cast the votes to which it is entitled either as a unit or divided in such a manner as it may determine. Each delegation receives the number of ballots corresponding to its specific number of votes and one envelope. The head of each delegation distributes a ballot to each delegate present. To record a vote, a delegate marks an "X" in the column next to the candidate's name and then places the ballot in the envelope provided. Each delegation must return all ballots distributed to them, even if the delegation votes as a whole, e.g., Group III receives three ballots and must return three completed ballots, even if the ballots are identical. The head of each delegation has the responsibility to complete any ballot for which no delegate is present.
- f. A vote shall be invalid if more names are marked in any category than the number of places to be filled (i.e., IMU EC — one each for President and Secretary, one for each of the two Vice-Presidents and one for each of the Members-at-Large, CDC — one each for President and the two Secretaries and one for each of the Members-at-Large, ICHM — one for each of the two IMU representatives).

- g. A candidate for IMU President or IMU Secretary is elected if he or she obtains a majority of the votes cast. In the event of a tie, the balloting is repeated. If a tie still exists, the IMU President decides.
- h. In the ballots for the IMU Vice-Presidents and Members-at-Large of the EC, the candidates who obtain the largest numbers of votes shall be elected. In the event of a tie, the IMU President decides.
- i. In the ballots for the CDC President and the CDC Secretaries a candidate is elected if he or she obtains a majority of the votes cast. In the event of a tie, the balloting is repeated. If a tie still exists, the IMU President decides.
- j. In the ballots for the CDC Members-at-Large, the candidates who obtain the largest numbers of votes shall be elected. In the event of a tie, the IMU President decides.
- k. In the ballots for the IMU ICHM representatives, the two candidates who obtain the largest numbers of votes shall be elected. In the event of a tie, the IMU President decides.

12. Proposed changes to the IMU Statutes

INTERNATIONAL MATHEMATICAL UNION

STATUTES

2010*

I. Objective of the Union

1. The objectives of the International Mathematical Union, hereinafter designated as the *Union*, are:
 - (a) To promote international cooperation in mathematics;
 - (b) To support and assist the International Congress of Mathematicians and other international scientific meetings or conferences;
 - (c) To encourage and support other international mathematical activities considered likely to contribute to the development of mathematical science in any of its aspects, pure, applied, or educational.
2. In the pursuit of its objectives the Union is explicitly, but not exclusively, empowered:
 - (a) To adhere to the International Council for Science;
 - (b) To organize international mathematical meetings and conferences;
 - (c) To engage in or support the publication and distribution of scientific material in the field of mathematics, provided that any expenses thereby incurred shall be treated as items of special expenditure under article 30;
 - (d) To engage in mathematical activities of an international character or to advise and assist other international organizations engaging in such activities, provided that any expenses thereby incurred shall be treated as items of special expenditure under article 30;
 - (e) To promote and facilitate the international exchange of mathematicians and students of mathematics for scientific purposes;
 - (f) To publish and distribute information concerning the organization and the activities of the Union.

II. Membership

3. A country adheres to the Union through an *Adhering Organization*, which may be its principal academy, a mathematical society, its research council or some other institution or association of institutions, or an appropriate agency of its government. The adhering countries are designated hereinafter as the *Members* of the Union.
4. The term "country" is to be understood as including diplomatic protectorates and any territory in which independent scientific activity in mathematics has been developed,

* Approved by the General Assembly on August 16, 2010.

and in general shall be construed as to secure the broadest and most effective participation of mathematicians in the scientific work of the Union.

5. In each case, the Adhering Organization shall form a *Committee for Mathematics* and its adherence to the Union shall not become effective until the composition of the Committee has been reported to and recognized by the Members of the Union. The Committee shall act as adviser to the Adhering Organization in matters concerning the Union. The Adhering Organization may, if it wishes, delegate some of its power to the Committee for Mathematics. The Committee for Mathematics shall communicate to the Secretary of the Union the name of its chair or secretary.
6. When an application is made for membership in the Union, the Executive Committee shall examine the application and shall make a recommendation thereon to the Members of the Union by correspondence, by e-mail, or at a meeting of the General Assembly. The Members shall accept or reject the application in the light of this recommendation and of any other considerations before them either by postal ballot** or at a meeting of the General Assembly. The adherence of a country is in one of the five groups I-V with corresponding voting powers and contributions as set out in articles 19 and 25. A country may change its classification with the approval of the Members of the Union upon recommendation of the Executive Committee.

III. Associate Membership

7. To encourage a country to become a Member of IMU, a country may adhere to the Union as an *Associate Member* through an Adhering Organization as described in article 3.
8. The Adhering Organization of an Associate Member shall form a *Committee for Mathematics* as described in article 5.
9. When an application is made for Associate Membership of the Union, the Executive Committee shall examine the application and make a recommendation thereon to the Members of the Union by correspondence, by e-mail, or at a meeting of the General Assembly. The Members shall accept or reject the application in the light of this recommendation and of any other considerations before them either by postal ballot or at a meeting of the General Assembly.
10. A country that has previously been a Member of the Union is not eligible to apply for Associate Membership.
11. Associate Membership is for a period of four years from the date of election, renewable for one further period of four years on request to the Secretary of the Union. Associate Members are normally expected to apply for membership of the Union beginning no later than eight years from the date of election. Associate Members have the right to participate in the General Assembly but shall have no voting rights. Associate Members have the right to submit proposals for joint activities to the General Assembly and to the President and Secretary for consideration of the Executive Committee.

** A postal ballot may be executed via ordinary mail, e-mail, fax, or any other way of communication considered appropriate by the Secretary.

12. Extensions of Associate Membership beyond a period of eight years from the date of election may be granted for further periods of four years at a time. A request for such a four-year extension must be made to the Secretary of the Union. The Executive Committee shall examine the request and make a recommendation thereon to the Members of the Union by correspondence, by e-mail, or at a meeting of the General Assembly. The Members shall accept or reject the application in the light of this recommendation and of any other considerations before them either by postal ballot or at a meeting of the General Assembly.

IV. Affiliation

13. For the purpose of facilitating jointly sponsored activities and jointly pursuing the objectives of the IMU, multi-national mathematical societies and professional societies can be affiliated with the Union.
14. The Members of the Union shall elect *Affiliate Members* by postal ballots or at meetings of the General Assembly upon recommendation of the Executive Committee. The affiliation may be terminated by the same procedure.
15. Affiliate Members have the right to participate in the General Assembly but shall have no voting rights.
16. Affiliate Members have the right to submit proposals for joint activities to the General Assembly and to the President and Secretary for consideration of the Executive Committee.
17. The Executive Committee, with the support of the Adhering Organizations and Committees for Mathematics, shall look for ways to keep close relations with the affiliated organizations and to enhance mathematical activities in their regions and fields of interest. They shall receive the Bulletin of the IMU and be kept informed of all activities relevant to them.

V. Administration

18. The authority of the Union derives from the Members and is exercised either by correspondence, by e-mail, or at a meeting of the General Assembly. The Union is administered by the Executive Committee, which, in accordance with these Statutes and subject to the direction and review of the Members, shall conduct the business of the Union.
19. The *General Assembly* of the Union consists of *Delegates* appointed by the Adhering Organizations, together with the members of the Executive Committee, and of the *Representatives* of Associate and Affiliate Members.

For each General Assembly, each IMU Member Adhering Organization shall appoint and certify to the Secretary of the Union a delegation, which shall have the number of votes corresponding to the Group in which it adheres, as follows:

Group	I	II	III	IV	V
Number of votes	1	2	3	4	5

provided that the number of Delegates shall not exceed the corresponding number of votes. Any Adhering Organization which desires to ensure its full quota of Delegates at meetings of the General Assembly by the appointment of alternates for its regularly named Delegates may do so, provided that no such alternate shall be permitted to participate in the work of the General Assembly until such Delegate has been duly certified to the Secretary of the Union as assuming the powers and duties of the Delegate he or she has been designated to replace. No person shall be a member of the delegation of more than one country.

Each Adhering Organization of an Associate Member and each Affiliate Member of the Union shall appoint and certify to the Secretary of the Union one Representative, who shall have no voting rights.

20. Voting by the General Assembly shall be by delegations, provided that each delegation shall be free to cast the votes to which it is entitled either as a unit or divided in such a manner as it may determine. The members of the Executive Committee shall have no votes as such in the General Assembly. Any Adhering Organization of an IMU Member not represented at a meeting of the General Assembly may forward its votes by registered mail to the Secretary of the Union; and such votes shall be valid, if received two weeks prior to the beginning of the General Assembly, and if the original question has not been modified by substantial amendments. Voting by correspondence shall be in such a way that each Member of the Union casts its votes as a unit, counted as many times as the group indicates. The majority of votes cast shall be decisive unless a specific provision to the contrary is contained in these Statutes.
21. The General Assembly may establish By-Laws on any matters not covered by these Statutes.
22. The *Officers* of the Union are the *President*, the two *Vice-Presidents* and the *Secretary*, all elected by the General Assembly by written ballot. The President and the Vice-Presidents shall hold office for a term of four years, shall assume office on the first day of the calendar year following that in which they have been elected and shall not be eligible for immediate re-election to the same office. The Secretary shall hold office for a term of four years, shall assume office on the first day of the calendar year following that in which he or she has been elected and shall be available for immediate re-election for one additional term. The *Members-at-Large* shall hold office for a term of four years and shall assume office on the first day of the calendar year following that in which they been elected. No Members-at-Large can serve three or more consecutive terms. In the event of death, incapacity or resignation of the President, the Executive Committee shall choose one of the Vice-Presidents to carry on the functions of the President until a new President has been elected by the Members of the Union for the unexpired term. In the case of any other office being vacated, the Executive Committee shall be empowered to fill the vacancy until the Members of the Union shall have elected a successor for the unexpired term. These

elections may be made at a meeting of the General Assembly or by postal ballot.

23. The Executive Committee of the Union consists of ten voting members, namely: the four Officers of the Union as designated in article 22, together with six Members-at-Large, elected by the General Assembly for terms of four years each, commencing on the first day of the calendar year following the year of their election. In addition, the retiring President shall be an *Ex-officio Member* without vote, for a period of four years. In the case of a vacancy among the Members-at-Large, the procedure shall be the same as designated in article 22.
24. The General Assembly shall normally meet once in four years, at a place and date determined by the Members either at a meeting of the General Assembly or by postal ballot and arranged so far as possible to coincide with the International Congress of Mathematicians. Special meetings of the General Assembly shall be held upon the call of the Executive Committee at such times and such places as the Committee may designate. At the request of a majority of the total number of votes assigned to the Members, the Executive Committee shall within six months call a special meeting of the General Assembly.

VI. Finance

25. Each Adhering Organization of a Member of the Union shall pay an annual subscription in accordance with the group in which it adheres, as follows:

Group	I	II	III	IV	V
Number of unit contributions	1	2	4	8	12

Associate and Affiliate Members of the Union pay no dues.

26. The unit contribution shall be determined by the General Assembly.
27. The Union may accept gifts, legacies and subventions, subject to the approval of the Executive Committee, and shall maintain a roll of benefactors on which shall be inscribed annually the names of those individuals or institutions that have contributed.
28. The Secretary of the Union shall act also as its *Treasurer*, unless the Executive Committee appoints another person for this position.
29. The legal domicile of the Union shall be located at the offices of the Union.
30. The financing of special projects of the Union shall be kept distinct from general expenditure, and an Adhering Organization shall be pledged only for the annual subscription in respect of general expenditure.
31. The Adhering Organizations shall be responsible for the payment of their respective annual contributions in accordance with the groups in which they adhere. Subscriptions are due and payable on the first day of the calendar year to which they

apply.

32. Any Adhering Organization which is in arrears with its contributions for two years shall be warned and shall be deprived of its voting rights. Any Adhering Organization which is in arrears for four years shall cease to be an adherent of the Union. In any case, before taking action, the Executive Committee shall submit the question to the Members of the Union by postal ballot or at a meeting of the General Assembly who under special circumstances may waive these provisions by a two-thirds majority of the total number of votes assigned to the Members.
33. Any Adhering Organization, which shall withdraw from the Union or shall cease for any reason to be an adherent thereof, shall forfeit claims upon the funds of the Union.
34. In the event of the dissolution of the Union, the settlement of its indebtedness shall be chargeable to general expenditure; and any surplus remaining after such settlement shall be disposed of by the General Assembly on recommendation of the Executive Committee, in such manner as may then be deemed most likely to aid the development of mathematical science.

VII. Statutes

35. Changes in the Statutes may be proposed by the Executive Committee or by any of the Adhering Organizations. Notice of changes so proposed shall reach the Secretary of the Union at least four months before the meeting of the General Assembly at which action is to be taken. No change shall be made in the Statutes except at a meeting of the General Assembly and with the approval of the two-thirds majority of the total number of votes assigned to the Members. Statute changes become effective on the day following the close of the General Assembly, unless otherwise stipulated in the proposed Statute change.

VIII. Duration of the Union

36. The Union shall not be dissolved except at a meeting of the General Assembly, and with the approval of a two-thirds majority of the total number of votes assigned to the Members.

BY – LAWS

I. Administration

37. The General Assembly shall meet as provided in the Statutes. Notice of special meetings shall be dispatched to the Adhering Organizations at least six months in advance.
38. The Executive Committee, the Adhering Organizations, and the Commissions of the Union may propose business to be transacted at meetings of the General Assembly. Such proposals shall reach the Secretary at least four months before the meeting at

which they are to be considered.

39. The agenda for a meeting of the General Assembly shall be dispatched by the Executive Committee to the Adhering Organizations at least three months before the meeting at which they are to be considered. A question which has not been put upon the agenda may be discussed, but shall not be put to the vote unless a proposal to that effect be approved by a majority of the total number of votes assigned to the Members.
40. The President with the approval of the Executive Committee may invite any person to participate in a meeting of the General Assembly for purposes of consultation upon specific items on the agenda, but such an invited participant, called *Observer*, shall have no vote.
41. The General Assembly shall
 - (a) Admit or reject organizations in the manner laid down in the Statutes;
 - (b) Elect the Officers of the Union and the Members-at-Large of the Executive Committee;
 - (c) Establish the Commissions of the Union, determine their terms of reference and elect their chair; and elect also representatives of the Union on Joint Commissions formed in cooperation with other international organizations;
 - (d) Examine and establish the regular budget and propose the projects which shall be financed independently of general expenditure, in accordance with the Statutes of the Union;
 - (e) Receive and consider reports from the Executive Committee and from Commissions of the Union;
 - (f) Determine the calendar of its ordinary meetings;
 - (g) Prescribe rules under which the Executive Committee may initiate and conduct postal ballots among the Members of the Union during periods between meetings of the General Assembly;
 - (h) Prescribe rules for the representation of the Union on the International Council for Science;
 - (i) Take such other actions as are necessary in the exercise of its authority under the Statutes and these By-Laws.
42. The Executive Committee shall present an annual report on its activities and those of the Union to each Adhering Organization and shall also report on its activities and those of the Union at each ordinary meeting of the General Assembly. The report to the General Assembly shall be dispatched by the Secretary to the Adhering Organizations at least two months before the meeting at which it is to be received.
43. The Executive Committee shall meet on the call of the President. The quorum for the transaction of its business shall consist of five voting members. The Executive Committee may conduct its business by postal ballot.

II. President and Vice-President

44. The President is chair of the General Assembly and of the Executive Committee. In the President's absence, one of the Vice-Presidents will chair the General Assembly. The President is an Ex-officio Member of all Commissions of the Union. In specific

cases the President may delegate this responsibility to some other member of the Executive Committee.

III. Secretary

45. The Secretary is responsible for conducting the ordinary business of the Union and for keeping its records and shall act as Treasurer subject to the proviso of statute 28. At least once every four years the Members of the Union shall obtain from the Executive Committee an audit of the accounts.

IV. Commissions of the Union

46. The *Commissions* of the Union which may from time to time be established by the Members of the Union by postal ballot or at a meeting of the General Assembly, may co-opt additional members, and shall generally have full freedom in arranging their own internal structure and work within the framework of the Statutes and By-Laws of the Union. If special funds are provided for their use, they may make their own financial arrangements, subject to the approval of the Executive Committee.
47. The chair of each Commission, or in the case of Joint Commissions one representative designated for that purpose, shall forward records of all meetings of the Commission to the Secretary and shall report on the activities of the Commission to the General Assembly. The reports of Commissions to the General Assembly shall reach the Secretary at least three months before the meeting at which they will be received and shall be dispatched by the Secretary to the Adhering Organizations at least two months before that meeting.

V. Finance

48. The Executive Committee shall prepare financial reports and budget estimates for the consideration of the General Assembly at each of its ordinary meetings, covering in its reports the period between the immediately preceding ordinary meeting and the meeting at which they are to be received, and covering in its estimates the period between the meeting at which they are received and the next following ordinary meeting. These reports and estimates shall be dispatched by post or by e-mail to the Adhering Organizations at least three months before the meeting at which they are to be received.

13. New CDC Terms of Reference (approved by postal ballot)

TERMS OF REFERENCE
of the
COMMISSION FOR DEVELOPING COUNTRIES (CDC),
a commission of the International Mathematical Union (IMU)
(Adopted by the IMU General Assembly on August 16, 2010)

The Commission for Developing Countries was established by the IMU General Assembly via postal ballot on July 17, 2009 to take up its activities in January 2011 and to replace the Commission on Development and Exchanges (CDE) and the Developing Countries Strategy Group (DCSG). The CDC is charged with the following mission:

- to manage, strengthen, and promote the programs of the IMU in developing and economically disadvantaged countries,
- to search for funding to support the corresponding activities, and
- to establish institutional partnerships with scientific organizations with common goals.

1. The Commission for Developing Countries (CDC) consists of
 - (a) six members elected by the General Assembly:
 - President
 - Secretary for Policy
 - Secretary for Grant Selection
 - three Members-at-Large, in representation of Africa, Asia, and Latin America;
 - (b) two Members-at-Large appointed by the incoming IMU Executive Committee, following its election at the General Assembly;
 - (c) one Member-at-Large appointed by the ICMI Executive Committee.
 - (d) The President of IMU is an Ex-officio Member of CDC.
2. Every member will be elected or appointed for a four-year term starting on the first day of the calendar year following that in which the election or appointment has taken place. The President will not be immediately eligible for a second term. The Secretary for Policy, the Secretary for Grant Selection, and the members-at-large can be elected or appointed for at most two consecutive terms in the same position.
3. In the event of death, incapacity, or resignation of one of the members in Clauses 1(a) and 1(b), the IMU Executive Committee shall appoint a successor for the unexpired term. In the event of death, incapacity, or resignation of the members in Clause 1(c), the ICMI Executive Committee shall appoint a successor for the unexpired term.
4. The composition of the CDC should reflect good regional balance consistent with its goals. The members will be established mathematicians chosen for their work on behalf of

mathematics in the developing world. The members-at-large mentioned in Clause 1(a) will be mathematicians working permanently in a country of the corresponding region.

5. The CDC will designate a Grant Selection Committee that will be chaired by the Secretary for Grant Selection. The composition of the Grant Selection Committee should reflect good regional representation consistent with its tasks.

At least half of the Grant Selection Committee members should be from outside the CDC.

6. For the election of the members listed in Clause 1(a) the IMU Nominating Committee will form a slate with at least one name for each of the positions of President, Secretary for Policy, and Secretary for Grant Selection and at least two names for each of the three positions for members-at-large.

Alternative names for each of the positions can be proposed at the General Assembly from the floor. For each of the six positions the candidate with the most votes is elected.

7. The budget of the CDC will be established by the IMU Executive Committee on a year-by-year basis, based on the budget estimates approved by the General Assembly for the CDC term.
8. The President of CDC reports to the IMU Secretary and the General Assembly as specified in article 47. of the By-Laws of the IMU Statutes.

14. Best Current Practices for Journals

Best Current Practices for Journals

In 2004, the CEIC produced a document listing various recommendations relating to the changing environment of peer-reviewed journals and digital distribution of research in its various stages. Now, in 2010, we wish to return to that document and offer more details on how journals can best serve the mathematical community. Specifically, this document focuses on how a good mathematics journal should be organized and managed.

Journals remain one of the most important tools of mathematical research and communication. A good journal adds value to the manuscripts submitted to it by providing:

quality control: The peer-review process evaluates and aims, inasmuch as possible, to certify the correctness, importance, novelty, and clarity of a paper.

improving content and presentation: Journal referees, editors, and publishers improve the quality of published manuscripts and provide feedback to their authors.

dissemination: Journals help to categorize the literature and help authors, readers, librarians, historians, and others to find relevant works.

archiving: Journals ensure that papers remain accessible. They help establish priority and certify the historical record. In addition, they provide tags such as volume numbers and document identifiers that can be cited and linked to.

On the other hand, a poorly run journal has a detrimental effect on the mathematical literature. The proliferation of poorly run mathematical journals is becoming an increasing burden to the community. Some of these have been created for dubious reasons, such as the hoped for prestige of the editors or institutions involved, or with no clear purpose beyond financial incentives. Even journals created with the best of intentions may fail to provide the services above because of inadequate planning or stewardship.

In this document, we draw together some best practices for journal management based on the experience of existing journals. Certain fundamental principles apply to all. Primary among these are transparency and integrity.

By *transparency* we mean that all the journal's stakeholders – readers, authors, referees, editors, publishers, etc. – are fully aware of the decision processes that affect them.

Integrity of the publication process is paramount. It includes maintaining an objective review process focused on scientific quality, proper acknowledgment of sources, and a respect for confidentiality where required.

Professionalism is also important. This includes timely handling of manuscripts at each stage of the process, and continuity of management, scope, and vision as they evolve.

This document is necessarily based on currently available technology, and, while some practices are universal, others must be reformulated to adapt to new and unanticipated technological developments. The Best Practices and recommendations presented in the document will be periodically revisited and updated as circumstances require.

1. Rights and responsibilities

There are many ways to organize the decision-making processes of a journal. However the editors and publishers decide to implement the details, there are certain basic rights and responsibilities of the authors, referees, editors, and publishers that should be respected in all circumstances.

Authors

Authors who submit a manuscript to a journal have the right to a careful, timely and unbiased peer-review overseen by the journal editors, who often seek the advice of referees. The level of detail of the review can vary greatly, but, following the principle of transparency, authors have a right to know in advance the processes by which their manuscript will be handled, and a right to be informed of the grounds for the acceptance or rejection of their manuscript, including normally being given access to any referee reports that have been sought. However, manuscripts that are deemed not to adhere to the journal's standards or scope can be quickly returned to the authors with a brief editorial justification.

Authors must abide by high standards of research integrity and good scholarship. It is the responsibility of authors to submit a well written, mathematically correct article, if necessary seeking advice if it is not written in their native language, to clearly describe any novel and non-trivial content, and to suitably acknowledge the contributions of others, including referees. Submission of a paper to a journal implies that it is not currently under consideration by any other journal, and that any substantial overlap with other published or submitted papers is duly acknowledged. In addition authors should be responsive to correspondence with the journal. Multiple authors should communicate fully, speak with one voice, and accept mutual responsibility in their communications with the journal. All authors are expected to have materially contributed to the paper, and to be familiar with its contents. The ordering of authors' names is at the discretion of the journal and/or authors, although the standard practice in most mathematical papers is to list authors alphabetically.

Referees

Researchers who benefit from the literature and contribute to it as authors also have an obligation to participate in the peer-review process, in particular by serving as referees in their areas of expertise. When doing so, they have a right to anonymity, unless this is clearly waived by the referee, or by the stated policies of the journal. While no one has an obligation to referee any particular paper, the decision to do so or not should be communicated in a timely fashion. Potential referees should disclose any circumstances which might compromise their ability to provide an unbiased review.

Once a referee has agreed to serve, that referee should adhere to the agreed-upon schedule (typically including revisions) and inform the editor of unanticipated delays. Referees must act with integrity. They should familiarize themselves with the expectations of the journal and the review process, and do their best to implement them in an unbiased fashion. They should respect confidentiality, neither disclosing the fact that the paper has been submitted nor that they are refereeing it, nor disclosing any

non-public content to others, nor using for their own purposes results that are not publicly available. Referees wishing to seek the opinions of colleagues on the submitted article should seek permission from the journal editors. Referees are expected to base their written assessment on publicly available works.

We have noticed a trend, perhaps reinforced by manuscript tracking software, for referees to communicate additional opinions to editors which are not meant for transmission to authors. This concerns us, since the principle of transparency implies that authors should be fully informed of the grounds for the decision on their work. Such confidential comments should be the exception rather than the rule, and do not relieve the referee of the obligation to make an honest assessment of the qualities of the paper in the report that will be transmitted to the author.

The obligations of a referee are primarily as expert advisors to the editors of the journal; secondly, through the editors, to the mathematical public, where the obligation is the maintenance of standards in the mathematical literature; and thirdly to the authors. Although the opinion of referees on the correctness of a paper is normally sought, ultimate responsibility for correctness lies with the authors. Refereeing is also an opportunity to provide positive guidance to the author. Although a referee does not have an obligation to do this, it can be an extremely valuable contribution, particularly in the case of authors in the early stages of their career.

Editors and editorial boards

The editors and editorial boards bear the primary scientific responsibility for guiding a journal. Transparency requires that the journal have a clearly formulated statement of its vision and scope, and a detailed description of its submission, peer-review, and publication processes, including the responsibilities of editors and referees. These should be publicly disseminated, and, in particular, all editors should both be aware of and in agreement with them. In many cases, the editorial board will take the primary role in formulating, monitoring, and updating these statements. The editorial board should also be familiar with and take an active interest in the publisher's pricing policies.

A primary responsibility of the editors is to implement the peer review process, ensuring its integrity and fairness. This is carried out by

- a wise choice of referee or referees, with sufficient expertise but avoiding conflicts of interest,
- communicating with authors, referees, managing editors, and publishers in a timely manner,
- ensuring that the process moves forward by following up on referees and appointing new ones when necessary, and
- arriving at decisions on objective grounds which are communicated to authors as discussed above.

Editors should ensure that papers are reviewed on purely scientific grounds, and that authors are not pressured to cite specific journals, papers, or books for non-scientific reasons. There should be clear and transparent procedures for handling submissions by editors which guarantee that the standards of the journal are maintained.

Some journals use a quick reject procedure in which editors may determine that a paper is unsuitable for the journal without sending it outside for review. In this case, the editor must ensure that his or her own decisions are made fairly and objectively. The decision whether to accept or reject a

manuscript is a complex judgment, depending on the submitted manuscript, the extant literature, and the goals and standards of the journal. Different referees and editors may well come to different conclusions. Referees sometimes make mistakes, and it is important that appeals against rejection of an article are fairly handled.

As noted above, authors have the right to be informed of the grounds for the acceptance or rejection of their manuscript, including normally being given access to all referee reports. There may be exceptional circumstances when an editor can reasonably decide to exclude part of a report, for example if it contains libelous or insulting remarks, or certain kinds of sensitive information. Nonetheless, it is important that such editorial discretion is not used to suppress inconvenient comments, such as a recommendation to accept the paper when the editor's decision is to reject it.

Editors should be alert to unethical practices such as simultaneous submissions to different journals, plagiarism, and self-plagiarism, be prepared to impose appropriate sanctions (such as refusing to consider further submissions from an offending author for a certain period), and cooperate with publishers in adopting procedures to eradicate such practices.

Publishers

For most journals, the editorial board does not itself oversee the production and business processes. These are usually carried out by a commercial publisher, a professional organization, university, or other institution. The support publishers receive from authors, editors, and referees in the mathematical community carries with it responsibilities. Most important is a commitment to the mathematical literature and its dissemination. Publishers must also adhere to the principles of integrity, transparency, and timeliness. Detailed information concerning the journal, including editorial board members, journal vision and scope, submission and publication procedures, fees, page charges, subscription pricing, etc., must be made publicly available to all concerned parties.

Publishers should ensure that papers are widely accessible, affordable in all parts of the world, and permanently archived in a form that can be readily located, referenced, and (possibly after paying a reasonable fee) accessed. Sales arrangements should be flexible, allowing, for instance, the purchase of individual journals and articles. Alternative modes of financing the publication process, such as through author fees, submission fees, page charges, or combinations of these create significant ethical challenges. First, the opportunity to publish in a peer-reviewed venue should be available to all, subject to scientific merit, not the ability to pay via research grants, institutional support or other means. Therefore there should be methods to opt out of payment when needed. Second, payment in direct return for publication creates a potential conflict of interest with the peer-review process. For this reason, any such journal requires clear, well-defined, effective processes to insulate peer review and editorial decision-making from monetary considerations.

Accepted papers should be typeset, copyedited (if appropriate), and published online and/or in print in a timely manner. Publishers should establish and clearly communicate to potential authors their policies concerning copyright and authors' web posting. Publishers should track and publish the date of submission, final revised submission, if applicable, and date of publication (electronic and/or print) of published papers. Publishers should respond to and investigate allegations of plagiarism or other unethical behavior connected with their journals, publish a clear and specific retraction in confirmed

cases, and protect the rights of authors by seeking appropriate redress for plagiarism and unauthorized use of their work.

2. Recommendations

In this section, we append some more general recommendations for successful journal stewardship which are based on observed best practices among existing journals. These are presented to help editors and publishers launch successful new journals, as well as strengthen and improve existing journals. Not all are currently followed by even some of our most successful journals, and we are not presuming to second guess the stewardship of well run journals.

The vision and processes of a journal are very important to its success, and we encourage journals to involve their editorial boards in addressing these issues. Communicating this vision to all involved with production of the journal will, in the long run, save a great deal of time and effort, avoid problems and misunderstanding, and contribute greatly to the success of the journal.

The maintenance of a careful, professional system for handling manuscripts throughout submission, refereeing, revision, acceptance or rejection, and publication requires careful thought and effort. A clear procedure for handling mistakes, errata, retractions, counterexamples, and updates should be established. We have observed a worrying increase in instances of plagiarism, and we encourage journals to consider instituting procedures for detecting, publicizing, and appropriately dealing with plagiarism in submitted articles. Such procedures rely on editorial judgment, but may well be supported by automated systems, commercial or otherwise, and we encourage the development of such systems appropriate for use by journals.

The publisher and editorial board should determine the expected standards of exposition, including the languages of publication. In the case where the author is unable to meet these standards, they should decide how much, if any, editorial support or copyediting the journal will supply. There is clear value to well-written and typeset papers, and editorial efforts by a journal are a significant contribution to the quality of the mathematical literature.

We believe that all the editors should be actively involved in the editorial processes of the journal, or, when this is not the case, that a designation such as "honorary editor" should be used. In any case, editors should be informed of and agree to their responsibilities, the scope of the journal, and the processes used to evaluate submissions. Even the agreement to serve as an honorary editor is a public statement of support for the goals and running of the journal, and should be entered into thoughtfully. It is advisable to establish a clear term length for editors, and procedures for renewal. Information about the history of a journal, such as the make-up of the editorial boards over time, is an important part of the historical record, and publishers should endeavor to archive such information in a readily accessible form.

It is an editor's responsibility to know the pricing policies of the publisher, and to take an active interest in them as regards the journal's goals and the dissemination of scientific knowledge as widely as possible. Some of the very best mathematical journals operate without assessing page charges and with liberal policies for posting of articles in web repositories and on authors' home pages, while maintaining reasonable subscription fees and flexible bundling arrangements. This is a standard to be striven towards. All such policies must be clearly spelled out by the publisher. See also previous CEIC

recommendations on open access to the mathematical literature:

http://www.mathunion.org/ceic/Publications/Recommendations/6_call.shtml

While some predict the imminent demise of journals, we hesitate to join that view. We recognize that there are many forces affecting how journals will be run in the future, and that innovations in publishing will lead to researchers interacting with content in new ways. We hope with this document to support such evolution. If journals are run well, they will continue to play an important role in furthering mathematical research and communication for many years to come.

This document was prepared by the International Mathematical Union Committee on Electronic Information and Communication (CEIC), which gratefully acknowledges the valuable contributions to its contents and writing by Douglas Arnold. CEIC also expresses its thanks to a number of persons whose comments on an earlier draft led to substantial improvements.

References to other sites:

CEIC Best Current Practices:

http://www.mathunion.org/ceic/Publications/Recommendations/3_best_practices.shtml

Association for Computing Machinery (ACM) Rights & Responsibilities:

<http://www.acm.org/publications/policies/RightsResponsibilities>

Committee on Publication Ethics (COPE): <http://publicationethics.org/>

US Government Office of Research Integrity: <http://ori.dhhs.gov/>

American Mathematical Society (AMS) Ethical Guidelines:

<http://www.ams.org/secretary/ethics.html>

Society for Industrial and Applied Mathematics (SIAM) Authorial Integrity in

Scientific Publication: <http://www.siam.org/journals/plagiarism.php>

15. Resolution proposals

US Resolution on Donors' Conference

"In recent years the International Mathematical Union has increased the support that it gives to mathematicians and advanced students of mathematics in the developing world. Undoubtedly this is a tribute to the generosity of colleagues in developed countries and to the heroic efforts of mathematicians in the emerging world as they defend and enhance the subject, often in extremely difficult circumstances. But it should also be seen as an instance of enlightened self-interest by the profession. There is no more cost-effective investment in the future of the subject than the formation of future generations of mathematicians. And if, as most believe, raw mathematical talent is randomly distributed, with its larger numbers there is more potential talent in the developing world than in the developed world. Add to that that, at least in monetary terms, supporting a young person to study advanced mathematics costs far less in the developing world. In Cambodia or Cameroon USD 1000 will support a graduate student in mathematics for a year (roughly 1/20-th the cost in the U.S.).

Several agencies, foundations and governments have contributed to the IMU's increased activity over the past 6-8 years. A few of these are Norway through the Abel Fund, the French international mathematical outreach program CIMPA, the Japanese government through JICA, the Japanese International Cooperation Agency, the London Mathematical Society supported by the Nuffield Foundation and the Leverhulme Trust, and a small group of professional societies and foundations in the U.S. But, even with this increased attention in recent years, the task is far larger than the means available. And locally led infrastructure development is perhaps the most difficult kind of development since the work requires more constancy than innovation, and so is often not appealing to institutions or individuals seeking short-term recognition and pay-off.

USNCM respectfully requests the IMU Executive Committee to study the feasibility of convening a Donor's Conference as a satellite to ICM 2014. Preliminary conference planning during 2011-12 would involve identifying long-term success stories and their agents, potential donor foundations, agencies and governments, and professionals capable of organizing such a conference and of framing a persuasive case for the benefit to the profession, and to mankind, of mathematical development in the emerging world."

Resolution on Electronic Voting

The Secretary is requested to explore the possibility of electronic voting by the IMU Adhering Organizations through a secure Web server. On the assumption that the necessary hardware and software are in place and the Executive Committee is convinced of their functionality, the EC shall empower the Secretary to make use of electronic voting where appropriate.

16. Applications for IMU membership

Cambodia's application for Associate Membership



សហគមន៍អ្នកគណិតវិទ្យាកម្ពុជា
CAMBODIAN MATHEMATICAL SOCIETY

Date: 18 March 2009

Prof. Dr. Drs. h.c. Martin Grötschel
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Subject: Request for Associate Membership of International Mathematical Union

I would like to brief the background of Cambodia Mathematical Society (CMS) and the situation related to mathematics in Cambodia as follows.

1. CMS is a non-governmental, neutral, nonprofit organization founded by Cambodian Mathematicians and recognized by the Royal Government of Cambodia according to the letter No 220 ផ.ជ.ណ. dated 04 March 2005. CMS's goals are set to enhance the research of pure and applied mathematics as well as mathematical education for the need of Cambodian society, human being, and the whole world. CMS wants to propose and implement the projects of mathematical research, organize seminar and conference, collect mathematical documents, publish journal of mathematics, and cooperate with organizations or institutions which consist of similar purpose, and work closer with Cambodian and International mathematicians. CMS has also set the action plans to build capacity of mathematics teachers in Cambodia for all levels to meet regional and international standard, to improve mathematical curriculum, to adjust methodology of mathematics' teaching, to prepare relevant documents for studying, teaching, researching and publishing, to promote the use of ICT in mathematical educations and e-learning, to participate in mathematical competitions in the country, region and IMO.

2. The capacity of mathematics teachers in Cambodia is still low and some of them teachers are nominated to give lecture at a class of higher level than their knowledge or the same level. The main cause is that there are fewer students who are good in mathematics choosing their profession as mathematic teachers. In such circumstance, the government has no choice to select most of students with average and week notes of mathematics to train to become mathematics teachers. In higher education, the Royal University of Phnom Penh (RUPP) is the main institution to give the courses of mathematics. However, there are not sufficient courses, numbers of session, curriculum and capacity of teachers for high level. There is no punctual technical meeting, no technical and methodology control, no tangible observation on the result of study and teaching. The National Institute of Education (Faculty of Pedagogy) is the important institute to train the graduates from RUPP on pedagogy for 12 months to be high school teachers. But, most of lecturers have the same level of mathematic knowledge as the students do – a little bit different is that lecturers has longer experience in

teaching. Whereas the mathematical curriculum at primary, secondary and high school which arranged by the Department of Pedagogical Research can be acceptable. However the key factors which should be paid more close attention are to train more mathematical curriculum makers to be competent up to high level. Whereas, the mathematical curriculum at the higher education, which existed, we should adjust and update for some parts. Unfortunately, the curriculum for mater and PhD degree doesn't still exist. Lacking of materials and documents for learning, teaching, doing research and publishing makes difficult for students and teachers in studying and teaching – which definitely incomplete their needs. Up to present, the total number of mathematics teachers throughout the country is approximately of 5,020 persons:

- primary teachers = 1,528 persons
- secondary teachers = 1,675 persons
- higher education teacher with bachelor = 1,855 persons
- teacher with master degree = 58 persons
- Ph. D in mathematics = 4 persons (Mathematical theory 02 persons and applied to computer 02)

And the documents for teaching, doing research and publishing are:

- Student books from grade 1 to 12,
- Teachers books from grade 1 to 12,
- Exercise books for student and teachers from grade 1 to 12
- 20 subjects of note books were translated for teaching materials in higher education.


In order to upgrade the mathematical educational system in Cambodia, any kinds of help from relevant institutions around the world, especially IMU's support are in great need for both human resource and materials.

In this regards, CMS want to participate in IMU's activities and become an associate member of IMU in order to learn good IMU's experience and to push the mathematics' learning and teaching in Cambodia up to standard level; and to show the necessity of science and mathematics education to the public in Cambodia for the development of a sustainable science and mathematics education system for the youths. In particular, we want to integrate Cambodia into the region and the world for the related activities of mathematics.

I am looking forward to hearing your positive response as soon as possible.

Please accept, Miss, the assurance of my highest consideration and my personal esteem.

With best regards,



Dr. Chan Roath,
President of Cambodia Mathematical Society

Moldova's application for Associate Membership

Mathematical Society of the Republic of Moldova

To the General Assembly of IMU

Upon the invitation of Professor [Victor A. Vassiliev](#), *member* of IMU Executive Committee, the Mathematical Society of the Republic of Moldova would like to express its intention to join the International Mathematical Union as Associate Member.

Mathematical Society of the Republic of Moldova was founded in the 50's, XX century, and since then has been the only association gathering mathematicians of Moldova. At present, it has 197 members, most of them have scientific or academic degrees, from all over the country and about 40% of its members are women. It is planned to extend the membership to teachers in mathematics. Since 2001 the Mathematical Society of the Republic of Moldova organizes (once in 3 years) national conferences, many national and international scientific events. Recently our society was accepted as a full member of the European Mathematical Society.

Mathematical community of the Republic of Moldova publishes three international mathematical journals (*Buletinul Academiei de Științe a Republicii Moldova*, *Matematica*, *Computer Science Journal of Moldova* and, in cooperation with polish colleagues, [Quasigroups and Related Systems](#)) and a few university mathematical journals. Also the known edition [Matematičeskie issledovanija](#) of the Institute of Mathematics of the Academy, issued till 1992, was digitalized by Center for Retrospective Digitization, Goettingen (GDZ).

Sincerely yours,

Mitrofan Cioban, Professor
President of the Mathematical Society of the Republic of Moldova

Florin Damian, Dr., assoc. prof.
Secretary of the Mathematical Society of the Republic of
Moldova

Chisinau, 2010, July 2

An overview over the state of the mathematical activities in the Republic of Moldova

History

Mathematical Society of the Republic of Moldova (MSRM) was founded in the 50's, XX century, and since then has been the only association gathering mathematicians of Moldova. During these years the Institute of Mathematics of the Academy of Sciences coordinated the most of mathematical activity in the country. Beginning with 1990 the Mathematical Society was more present and after 2001 it became the most representative organization of the Moldovan mathematical community. At present MSRM has 197 members from all over the country, most of them have scientific or academic degrees, and about 40% of its members are women.

- More than 20 university full Professors, 7 members of Academy of Sciences (Moldova).
- About 60 associate professors and researches, more than 50 young researches and PhD students.

We plan to extend the membership to teachers in mathematics.

Since 1965 till 1990, more than 20 All Soviet Union scientific conferences have been organized in: general topology and its applications (8), algebra (2), rings and modules (2), geometry (2), differential equations (2), artificial intelligence (2), numerical analysis and mechanics (2) and others. During this period, as part of mathematical community of Soviet Union, we were member of IMU. At the same time, the known edition [Matematičeskie issledovanija](#) (127 issues), issued till 1992 by the Institute of Mathematics of the Academy, became visible at international level and at present was digitalized by Center for Retrospective Digitization, Goettingen (GDZ). Roughly 70 monographs were published by the editorial houses Shtiintsa (Chisinau) and 10 in Nauka (Moscow), 20 were published or translated in English by most prestigious international publishing houses, <http://www.math.md/en/publications/monographs>.

Favorable events:

1925, Chişinău – the foundation of “Foia Matematica” – a journal for popularization of mathematics, the first intention to consolidate the mathematical community;
 1930 – the foundation of the Tiraspol State University;
 1933 – the branch of the Agricultural University of Iasi was opened in Chisinau;
 1946 – the branch of the Academy of Science of USSR was founded in Moldova;
 1961 – the national Academy of Sciences was established in Moldova;
 1965 – 1970 -- first councils for doctoral degrees in the areas of theoretical and applied mathematics have been organized in Moldova.

Institutions with activities in mathematics

Universities and Institutions with significant research activities in mathematics:

- ❖ Academy of Sciences of Moldova, Institute of Mathematics & Computer Sciences, <http://www.math.md>
- ❖ State University of Moldova, www.usm.md

❖ *Tiraspol State University*, www.ust.md

Universities in the Republic of Moldova where mathematics is taught:

- "Ion Creanga" Pedagogical State University, www.upsc.md
- Technical University of Moldova, www.utm.md
- Academy of Economic Studies of Moldova, www.ase.md
- State University "A.Russo", Balti, www.usb.md
- Comrat State University, www.kdu.md
- State Agrarian University of Moldova, www.uasm.md
- Academy "Stefan cel Mare" of the Ministry of Internal Affairs, www.academy.police.md
- State University "Bogdan Petriceicu Hasdeu", Cahul, www.usch.md
- University of the Academy of Sciences of Moldova, Chisinau, <http://www.edu.asm.md>

and other private universities (about 10).

Scientific experience in international cooperation

During last 10 years more than 40 international and national projects in mathematics, in particular: 14 - bilateral projects Russia (RFBR) - Moldova; 7 - CRDF-MRDA projects, USA - Moldova; 6 - INTAS projects (2 bilateral); 3 – SCTU grants, 2 - bilateral projects Germany - Moldova; 2 - bilateral projects Romania - Moldova; 1 - bilateral projects Ukraine - Moldova; 1 - bilateral projects Belarus - Moldova; 2 - projects financed by Sweden; 2 - projects financed by Switzerland; 2 – NATO conferences grants; 1- DAAD workshop grant and other.

Mathematicians, known in the world-wide mathematical community

A. Founders of Mathematical Research and Schools:

1. Vladimir A. Andrunachievici
2. Israel Gohberg (from 1973 lived in Israel)
3. Valentin D. Belousov
3. Constantin S. Sibirschi
4. Alexandr M. Zamorzaev
5. Alexandr V. Kuznetsov

B. Active mathematicians at present: P. Soltan, Iu. Reabuhin, M. Choban, V. Arnautov, V.Soltan (now in USA), N. Vulpe, D. Lozovann, V.Voloshin (now in USA), D.Cheban, V.Chepoi (now in France), N.Zhitarashu, V.S.Makarov (now in Russia), M. Ratsa, Gh. Mishcoi, C.Gaindric, G.Beleavscaya, A.F.Palistrant, V.Driuma, V.Ufnarovski (now in Sweden), V.Glavan, A.Perjan, S.Cojocar, P.Cojuhari (now in Poland), M.Ursu (now in Romania), M.Popa, A.Colesnic, A.Shuba and many others.

Mathematical Journals

Mathematical community of the Republic of Moldova publishes 3 international journals:

Buletinul Academiei de Ştiinţe a Republicii Moldova. Matematica (Cover-to-cover reviewing in Zentralblatt MATH, MathSciNet (MR), Ref.Zh.Matematika):

<http://www.math.md/en/publications/basm>

<http://www.mathnet.ru/eng/basm>

Quasigroups and Related Systems (in cooperation with polish colleagues) (Cover-to-cover reviewing in Zentralblatt MATH, MathSciNet (MR). Ref.Zh.Matematika): <http://www.quasigroups.eu>

Computer Science Journal of Moldova (reviewing in Zentralblatt MATH, MR, Ref.Zh.Mat.): <http://www.math.md/en/publications/csjm>

Some university mathematical journals are published as well.

About 200 publications appears each year, including monographs, articles in journals and conference proceedings.

Monographs at prestigious publishing houses (selected):

- ❑ Lozovanu, Dmitrii, Pickl, Stefan; Optimization and Multiobjective Control of Time-Discrete Systems, Dynamic Networks and Multilayered Structures, 2009, XVI, 285 p. 53 illus., Hardcover, ISBN: 978-3-540-85024-3
- ❑ [Cheban, David N.](#) Global attractors of non-autonomous dissipative dynamical systems. [Interdisciplinary Mathematical Sciences, 1.](#) World Scientific Publishing Co. Pte. Ltd., Hackensack, NJ, 2004. xxiv+502 pp. ISBN: 981-256-028-9;
- ❑ [Eidelman, Samuil D.](#); [Zhitashu, Nicolae V.](#) Parabolic boundary value problems. Translated from the Russian original by Gennady Pasechnik and Andrei Iacob. [Operator Theory: Advances and Applications, 101.](#) Birkhäuser Verlag, Basel, 1998. xii+298 pp. ISBN: 3-7643-2972-6;
- ❑ Boltyanski, Vladimir; Martini, Horst; Soltan, Petru S. Excursions into combinatorial geometry. Universitext. Springer-Verlag, Berlin, 1997. xiv+418 pp.
- ❑ [Arnautov V.I.](#), Glavatsky S.T, Mikhalev A.V., Introduction to the theory of topological rings and modules. New York-Basel-Hong Kong: Marcel Dekker, Inc., 1995, 502 pp.
- ❑ Lozovanu D. Multiobjective Control of Time-Discrete Systems and Dynamic games on Networks. Chapter in the Book "Pareto Optimality, Game Theory and Equilibria" (edited by A. Chinchulin, A. Migdalas, P.Pardalas, L Pitssoulis), Springer, 2008, 665-758.

Proceedings:

- ❑ Machines, Computations and Universality. M. Margenstern, Yu. Rogozhin (Editors). Lecture Notes in Computer Science, Springer, vol. 2055, Third International Conference, MCU 2001 Chişinău, Moldavia, May 23-27, 2001, Proceedings, 320 p.
- ❑ Computational Commutative and Non-Commutative Algebraic Geometry. S. Cojocaru, G. Pfister, V. Ufnarovski (Editors). NATO Science Series. Series III: Computer and Systems Sciences – Vol.196, IOS Press, 2005, 325 p.
- ❑ Computer Algebra in Scientific Computing, 9th International Workshop, CASC 2006, Victor G. Ganzha, Ernst W. Mayr, Evgenii V. Vorozhtsov (Eds.): Lecture Notes in Computer Science 4194, Chisinau, Moldova, September 11-15, 2006, Proceedings. ISBN 3-540-45182-X

Articles in ISI journals (selection):

- Joan C. Artés, Jaume Llibre, Nicolae Vulpe; Quadratic systems with a polynomial first integral: A complete classification in the coefficient space , *Journal of Differential Equations*, Volume 246, Issue 9, 2009, Pages 3535-3558
- Caraballo, Tomás; Cheban, David. Almost periodic and almost automorphic solutions of linear differential/difference equations without Favard's separation condition. Part I. *J. Differential Equations* 246 (2009), no. 1, 108--128.; and Part II. *J. Differential Equations* 246 (2009), no. 3, 1164--1186.
- Choban, M. M. On some problems of descriptive set theory in topological spaces. (Russian) *Uspekhi Mat. Nauk* 60 (2005), no. 4(364), 123--144; translation in *Russian Math. Surveys* 60 (2005), no. 4, 699--719
- Choban, Mitrofan M.; Mihaylova, Ekaterina P.; Nedev, Stoyan Y. On selections and classes of spaces. *Topology Appl.* 155 (2008), no. 8, 797--804.
- Lozovanu, Dmitrii; Pickl, Stefan. A constructive algorithm for max-min paths problems on energy networks. *Appl. Math. Comput.* 204 (2008), no. 2, 602--608.
- Mishkoy Gh.K., Rykov V.V., Giordano S., Bejan A. Iu. Multidimensional Analogs of the Kendall Equation for Priority Queueing Systems: Computational Aspects. *Automatic and Remote Control*. Vol. 69, N.6. Pleiades Publishing, USA, pp.980-992, 2008
- Schlomiuk, Dana; Vulpe, Nicolae. Integrals and phase portraits of planar quadratic differential systems with invariant lines of at least five total multiplicity. *Rocky Mountain J. Math.* 38 (2008), no. 6, 2015--2075.
- Chekanu G.P. Independence and quasiregularity in algebras. (Russian) *Dokl. Akad. Nauk* 337 (1994), no. 3, 316--319; translation in *Russian Acad. Sci. Dokl. Math.* 50 (1995), no. 1, 84--89
- Şubă, Alexandru; Cozma, Dumitru. Solution of the problem of the centre for cubic differential system with three invariant straight lines in generic position. *Qual. Theory Dyn. Syst.* 6 (2005), no. 1, 45--58.
- Perjan, A. Limits of solutions to the initial boundary Dirichlet problem for semilinear hyperbolic equation with small parameter. *Applied analysis and differential equations*, 281--294, *World Sci. Publ., Hackensack, NJ*, 2007.
- M. Choban and M.I.Ursul, Applications of the Stone Duality¹ in the theory of precompact Boolean rings, In: D. V.Huzanh and S.R.Lopez-Permouth (Eds), *Advances in Ring Theory*, Birkhauser, New York, 2010, 85-111.
- A.V. Arhangel'skii and M. M. Choban Remainders of rectifiable spaces. *Topology and its Applications*, 157 (2010), 789-799.

International Conferences:

- the XIV-th Conference on Applied and Industrial Mathematics, dedicated to the 60-th anniversary of the foundation of the Faculty of Mathematics and Computer Science of Moldova State University. Satellite of ICM-2006, Chişinău, August 17-19, 2006, <http://usm.md/math/CAIM/> .
- “Algebraic Systems and their Applications in Differential Equations and other Domains of Mathematics” (ASADE), dedicated to the memory of Acad. Vladimir Andrunachievici (1917-1997) and Acad. Constantin Sibirschi (1927-1990), August 21-23, 2007, Chişinău.
- The Second Conference of the Mathematical Society of the Republic of Moldova dedicated to the 40 anniversary of the foundation of the Institute of Mathematics and Computer Science of ASM Moldova (August 17-19, 2004).
- Workshop NATO "Computational commutative and non-commutative algebraic geometry" (June 6-11, 2004, Chisinau).

National conferences:

- Annual sessions of the Seminar „Algebra and Mathematical Logics” dedicated to the memory of Prof. Valentin Belousov (1925-1988).
- “Mathematics & IT: Research and Education (MITRE'2008)”, October 1-4 2008.
- “Mathematics & IT: Research and Education (MITRE'2009)”, October 8-9 2009.
- „Matematice – actual problems and applications”, ASEM, April 8, 2009.
- Conference “Professor P. Osmatescu - 80”, November 19, 2005.
- Conference “Professor V. Ceban - 90”, February 8-9, 2007.

Mathematical seminars

- Permanent seminars are organized in algebra, geometry, differential equations, applied mathematics, computer sciences, functional analysis
- A permanent seminar of MSRM

**International, regional and national
Mathematical Olympiads**

- 51 national Mathematical Olympiads for undergraduate students are organized (each year beginning with 1952)
- three Balkan Mathematical Olympiads (for seniors – 2000 and 2010 <http://www.math.md/bmo2010/> ; for juniors – 2006) have been organized in Chisinau
- RM participates each year at international mathematical Olympiads (beginning with 1993)

Results at international and regional Mathematical Olympiads

	Gold medals	Silver medals	Bronze medals	Mentions
International Mathematical Olympiad (1993-2010)	5	15	34	14
Balkan Mathematical Olympiad (1996-2010), seniors	11	21	37	13
Balkan Mathematical Olympiad (1998-2010), juniors	6	12	42	8

Montenegro's application for IMU Membership

HISTORY AND REVIEW OF THE MAIN ACTIVITIES OF THE SOCIETY OF MATHEMATICIANS AND PHYSICISTS OF MONTENEGRO

The Society of Mathematicians and Physicist of Montenegro exists since 1947 when it was established the Society of Mathematicians, Physicists and Astronomers of Yugoslavia in which our Society was taking an active role. After the splitting of Yugoslavia and establishing the Federal Republic of Serbia and Montenegro our Society became an active member of the Society of Mathematicians, Physicists and Astronomers of Serbia and Montenegro.

When Montenegro became an independent state, it was organized the general assembly of all mathematicians of Montenegro in December 2006., where it was established the Society of Mathematicians and Physicists of Montenegro. It was officially registered as legitimate non-governmental organization of Montenegro. According to its full legitimate status the Society obtained its official stamp.

The President of the Society is Prof. dr Milojica Jacimovic and the vice presidents are Prof. dr Predrag Miranovic and Prof. dr Svjetlana Terzic.

In the framework of the Society the following sections are active: sections for teaching of mathematics, physics and programming, sections for young mathematicians, physicist and programmers and section for scientific research.

In the previous years the membership of our Society in the international organizations was realized through the societies it was the part of. In July 2008. the Society of Mathematicians and Physicists of Montenegro became a member of European mathematical society. In this way our Society has been enabled as a legitimate member to take part in all European educational and scientific activities.

The Society of Mathematicians and Physicists of Montenegro is jointly with Faculty for Natural Sciences and Mathematics of the University of Montenegro, founder of the research journal *Mathematica Montenegro*.

Our Society was earlier very active member of the Society of Mathematicians and Physicists of Yugoslavia, and after that of such Society of Serbia and Montenegro. Some of the activities performed by our Society are: Society organized Congress of Mathematicians, Physicists and Astronomist of Yugoslavia in Bečići, Montenegro; it also twice organized, in 1995. and 2004., the Congress of Mathematicians and Congress of Physicists of Serbia and Montenegro in Petrovac, Montenegro. The Society organized also for several times state competitions in mathematics and physics for the pupils of elementary and secondary school in former Yugoslavia and later in Serbia and Montenegro.

The Society was till 2006., jointly with Faculty of Natural Sciences and Mathematics of the University of Montenegro, responsible for the organization of the competition for the pupils of elementary and secondary school in Montenegro at all levels.

In the last two years the Society also organized the participation of the young mathematicians and physicists from Montenegro in Balkan olympiads and International mathematical olympiads.

AN OVERVIEW OF EDUCATIONAL AND RESEARCH ACTIVITIES IN MATHEMATICS IN MONTENEGRO

- There are three universities where the mathematics is taught : University of Montenegro, University of Mediteran, University of Donja Gorica;
- The main research activities in mathematics are related to University of Montenegro;
- There is one Society of Mathematicians in Montenegro acting as the part of the Society of Mathematicians and Physicists of Montenegro;
- There is about 30 professors in mathematics, about 10 young mathematicians on doctoral studies and about 500 teachers in mathematics in secondary schools; formally, all they are the members of the Society;
- In Montenegro there is about 30 active researchers in the areas of Analysis (the greater part), Topology, Probability, Optimization, Discrete mathematics, Algebra. In the recent years some of their results were published in highly ranked mathematical journals: *Commentari Mathematici Helvetici*, *Transaction of the American Mathematical Society*, *Journal of Mathematical Analysis and Applications*, *Nonlinear Analysis*, *Computational Mathematics and Mathematical Physics*, *Annales of Academie Scientiarium Fennicae Mathematica*, *Differential Equations*
- In the recent years mathematicians living in Montenegro published 5-8 papers in respected mathematical journals and about 10 – 15 in other mathematical journals;
- Mathematical journals published in Montenegro: (1) *Mathematica Montisnigri* and (2) *Proceedings of the Section of Natural Sciences of Montenegrin Academy of Sciences and Arts*.



Montenegro
Ministry of Education and Science

Number: 05-1/5 - 1164
Podgorica, July 22, 2010

**OBJECTIVE: ENDORSEMENT LETTER FOR THE SOCIETY
OF MATHEMATICIANS AND PHYSICISTS OF MONTENEGRO**

The Ministry of Education and Science of Montenegro hereby confirms its full support for the Society of Mathematicians and Physicists of Montenegro as the representative of Montenegro for the membership in International Mathematical Union.

Sincerely yours,


Prof. Dr. Igor Radusinovic, Deputy Minister



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Nepal's application for Associate Membership

Application
for
Associate Membership
of
International Mathematical Union (IMU)
Presented by
Nepal Mathematical Society (NMS)
Nepal

March 2010

History

Mathematics in School

Mathematics is introduced as a compulsory course in school curriculum at all levels and it comprises of Arithmetic, Elementary Algebra and Euclidean Geometry. Plane Trigonometry, introductory Vector Algebra and some plane Coordinate Geometry is also taught as part of optional mathematics.

There are government agencies like Curriculum Development Center, text book and teaching material development center, teacher's training programs and examination board overlooking all aspects of school education including mathematics education. Regular exercises concerning improvement in curriculum, text books and reforms in examination system are also being discussed and changes initiated. But the challenging task of affecting positive and lasting change has not been achieved yet.

Mathematics teachers in school are science or humanities graduates with major mathematics and graduates from colleges of education with major mathematics. Nepal government spends significant amount of money in training of teachers but those who are specially trained as teachers of mathematics have not contributed in the improvement of school mathematics education and have not done much towards bringing changes in the conventional styles of teaching.

Mathematics in University

Teaching of mathematics at Intermediate and graduate level as one of the subjects in the university started at Tri-Chandra College in 1942 AD. Master level program in mathematics was started at Tribhuvan University in 1959 AD.

Present Scenario

At present there are six universities in Nepal:

- Tribhuvan University, established in 1959
- Nepal Sanskrit University, established in 1986
- Kathmandu University, established in 1991
- Purbanchal University, established in 1993
- Pokhara University, established in 1996
- Lumbini Bauddha University, established in 2004

Of the six universities, only Tribhuvan University and Kathmandu University offers academic programs in mathematics. Nepal Sanskrit University offers some courses on Vedic mathematics. Purbanchal and Pokhara universities have some courses of mathematics in the bachelor science and engineering programs.

Tribhuvan University

www.tribhuvan-university.edu.np/

Tribhuvan University (TU) is a public university established in 1959 and is the oldest university in Nepal.

Tribhuvan University offers programs in humanities, teacher education engineering, science and technology where various mathematics courses are offered at bachelor levels, whereas teacher education has mathematics education as major subjects.

A master level course in mathematics is offered at Tribhuvan University since September 1959. At Tribhuvan University the duration of bachelor and master levels study were of two years each for a long time. Now the duration of bachelor level study is of three years.

Tribhuvan university has nearly 50 colleges offering bachelor level program with mathematics major. There are 10 colleges running master level program in Mathematics.

The central department of Mathematics of Tribhuvan University also runs Ph. D. program. Till now it has produced 9 Ph. D. graduates. This department also publishes a biannual mathematical journal titled **The Nepali Mathematical Sciences Report**. The first issue was published on February 19, 1976.

Kathmandu University (KU)

www.ku.edu.np

Kathmandu University is an autonomous, not-for-profit, non - government institution dedicated to maintain high standards of academic excellence. It is committed to develop leaders in professional areas through quality education.

Kathmandu University operates its academic programs through schools: School of Science, School of Engineering, School of Education, School of Management, School of Arts and School of Medical Sciences. The first two schools, School of Science and School of Engineering offer various mathematics courses at its four-year undergraduate programs and two years master programs. School of education has a two-year Master of Education program in Mathematics Education.

School of Science started three-semester M. Phil. Program from 1997 and in the same year enrolled the first Ph. D. candidate. It has already prepared a four-year undergraduate program on Applied Mathematics and plans to launch it from August 2010.

Kathmandu University publishes a biannual on-line journal, Kuset (Kathmandu University Journal of Science, Engineering and Technology) since September 2005.

Nepal Mathematical Society (NMS)

www.nms.org.np

Nepal Mathematical Society was founded on January 19, 1979 with the following objectives:

- To enhance the academic Excellency in studying, teaching, research and applications in Mathematics.
- To preserve and promote the professional ethics and rights and welfare of teachers and researchers of Mathematics.
- To work continuously for promoting Mathematics maintaining good relations with the national and international educational and academic organizations.
- To work for increasing the popularity of Mathematics in local levels.

It has 13 Executive Members and 5 members Advisory Board as follows:

Executive Members for NMS (2009-2012)

President:	Prof. Dr. Bhadra Man Tuladhar
Vice President:	Mrs. Sharada Shrestha
Secretary:	Dr. Chet Raj Bhatta
Joint Secretary:	Dr. Kanhaiya Jha
Treasurer:	Mrs. Kabita Luitel
Member:	Prof. Dr. Siddhi Koirala
Member:	Mr. Rabi Ratna Shakya
Member:	Mr. Ganesh Raj Bhandari
Member:	Mr. Narayan Prasad Pahari
Member:	Mr. Eka Ratna Acharya
Member:	Mr. Puskar Raj Pokharel
Member:	Mr. Arjun Adhikary
Member:	Mr. Kedar Nath Chhatkuli

Advisory Board Members

1. Prof. Dr. Hom Nath Bhattarai
2. Prof. Dr. Santosh Man Maskey
3. Prof. Dr. Shankar Raj Pant
4. Prof. Yadav Prasad Koirala
5. Prof. Prakash Shakya

Honorable Members

1. Prof. Dr. Helmut Neunzert University of Kaiserslautern, Germany
2. Prof. Dr. Stephan Ruscheweyh University of Wuerzburg, Germany

NMS has over 120 life members and same number of ordinary members.

Activities

Some of the regular activities of NMS are:

- organizes monthly talk program
- annul day celebration in April
- honour distinguished mathematicians

NMS have reciprocity agreement with:

1. American Mathematical Society
2. Société Mathématique de France

Number of mathematics professors in Nepal and research activities

There are altogether 44 Ph. D. degree holders in Nepal, out of which 11 received Ph. D. degree in Nepal. Nepali mathematics community consists of 23 Professors, 85 Associate Professors, and about 250 lecturers.

Limited research in mathematics is carried out at Tribhuvan University and so also at Kathmandu University. Most of the reach activities are academic research carried out for fulfillment of Ph. D. and M. Phil. Degree requirements.

Conferences and Seminars

Central department of Mathematics, Tribhuvan University and Kathmandu has been organizing seminars and conferences periodically especially form the last decade.

The first national Mathematics Conference in Nepal was organized by Nepal Mathematical Society and was held on October 15-16, 1982.

World Mathematical Year 2000 was celebrated in Nepal by formation of a national level WMY Celebration Committee under the Ministry of Education and sponsored by UNESCO. It was launched officially by the Prime Minister on June 20, 2000 with several key speakers. It was followed by a two-day National Seminar held on February 8-9, 2001.

First National Mathematics conference outside the capital city was held in Prithvin Narayan Campus, Pokhara from November 11-12, 2004 and was sponsored by Nepal Mathematical Society.

The first international conference in mathematics discipline “International Conference on Teaching Mathematical Modelling and Applications (ICTMA)” was organized by Kathmandu University and was held from June 24-29, 2007.

Events of 2009-2010

Held:

May 26, 2009 – Annual Convention of NMS and election of its new Executive Committee members for 2009-2012.

December 1-6, 2009 – National Workshop on Fuzzy Sets, Fuzzy Logic with Applications, Organized by Tribhuvan University.

December 27, 2009-January 5, 2010 - Winter School on Number Theory and Cryptography organized by Kathmandu University.

January 17-19, 2010 - National Mathematics Conference held in Biratnagar, East Nepal: over 80 participants, 38 papers presented.

Upcoming Events:

- July 19–31, 2010 - Number Theory in Cryptography and Its Applications, CIMPA–UNESCO–NEPAL RESEARCH SCHOOL, Kathmandu University, Nepal. (A Satellite Conference for ICM 2010)
- May 15, 2010 - Nepal Mathematics Day Celebration
- December 30, 2010-
January 7, 2011 - Third International Conference on Lie-Admissible Treatment of Irreversible Processes (ICLATIP-3), Kathmandu University, Nepal

Two organizations related with mathematics issues

1. Nepal Academy of Science & Technology: Nepal Academy of Science and Technology was established in 1982 by a Royal Ordinance as an autonomous apex body for the development and promotion of Science and Technology in the country.
2. Council for Mathematical Education (CME): The Council for Mathematics Education is a non- profit making professional organization established in 1991, dedicated to improve teaching and learning mathematics in school education.

List of Nepali mathematicians considered to be well-known in the world-wide mathematics community

1. Prof. Ram Man Shrestha – Academician, Nepal Academy of Science and Technology
2. Prof. Ganga Shrestha – Academician, Nepal Academy of Science and Technology
3. Prof. Hom Natha Bhattaria – Vice Chnacellor, Nepal Academy of Science and Technology
4. Prof. Santosh Man Maskey – Professor, Tribhuvan University
5. Prof. Shanker Raj Pant – Professor (Retired), Tribhuvan University
6. Prof. Siddhi Koirala – Professor, Tribhuvan University
7. Prof. Bhadra Man Tuladhar – Professor, Kathmandu University
8. Prof. Pushpa Raj Adhikary – Professor, Kathmandu University
9. Prof. Shiva P. Pudasaini – Professor, Kathmandu University

Presented by:
Prof. Dr. Bhadra Man Tuladhar
President
Nepal Mathematical Society
Nepal

March 29, 2010

Oman's application for Associate Membership**Report on the state of mathematics in the Sultanate of Oman (13 September 2009)**

1. *There are 3 universities where mathematics is taught:*

- 1.1 Sultan Qaboos University
- 1.2 The University of Nizwa
- 1.3 The university of Dhofar

There a number of Applied Science and Education college where mathematics is also taught.

* The first on the list is a government University while the others are private universities.

2. *Universities with significant research activity*

Sultan Qaboos University is where most of the research in mathematics is conducted.

3. *The estimated number of professors in mathematics*

University	PhD holders	Master holders	Number of professors
Sultan Qaboos University	53	1	54
Dhofar University	4	1	5
University of Nizwa			
Applied Science Colleges		6	

4. *The estimated number of research mathematicians*

University	Number of research professors
Sultan Qaboos University	52
Dhofar University	4
University of Nizwa	6

5. *Mathematical associations*

There are no mathematics associations in Oman

6. A list of well-known mathematicians in the world-wide mathematics community.

The following are mathematicians who have reached the level of Associate professor or above,(which means that they have been able to publish research deemed by external assessors to be of good quality) or has more than 30 citations on ISI records:

Name	Position	Degrees	Specialisation
Dorvlo, Atsu S. S.	Professor	B.Sc., MA, PhD (Rochester, New York, USA, 1978)	Applied statistics
Eltayeb, Ibrahim A	Professor	B.Sc. (Lond), PhD (Newcastle-upon-Tyne, UK, 1972), FAAS, FRAS, FTWAS.	Differential equations; modelling geophysical and environmental problems
Krishnan, Edamana V	Professor	B.Sc., M.Sc, PhD (Indian Institute of Science, Bangalore, India 1979)	Non- linear waves theory
Veldsman, Stefan	Professor	B.Sc., M.Sc, PhD (Port Elizabeth, South Africa 1981)	Abstract algebra
El-Karamy	Professor	B.Sc., M.Sc., PhD (Moscow state, 1973)	Mathematical theory of elasticity
Abu-Dayyeh, W. A	Associate Professor	B.Sc., M.Sc., PhD (Illinois, Urbana- Champaign, USA 1989)	Mathematical statistics
Aggoun, Lakhdar	Associate Professor	B.Sc., M.Sc., PhD (Alberta, Canada 1994)	Applied probability and stochastic analysis
Ahmed, Mohd Idrees	Associate Professor	B.Sc., M.Sc. (Punjab, Pakistan), PGD (Bucharest, Romania) PhD (St. Andrews, UK 1988)	Statistical modeling
Al-Baali, Mehiddin	Associate Professor	B.Sc., M.Sc., PhD (University of Dundee, UK 1984)	Numerical optimization
Al-Lawati, Mohamed	Associate Professor	B.Sc., M.Sc., PhD (South Carolina, USA 1997)	Computational mathematics
Al-Salman, Ahmed	Associate Professor	B.Sc., M.Sc., PhD (University of Pittsburgh, 1999)	Harmonic Analysis
Al-Soodinay, A. Adheem	Associate Professor	B.Sc., M.Sc., PhD (University of Auckland, New Zeland 1999)	Topology and its applications in analysis
Ali, Majid	Associate Professor	B.Sc. (Al-Mustansiriyah), M.Sc. (Baghdad), PhD (Kaiserslautern, Germany, 1994)	Commutative ring theory
Anchouche, Boudjemaa	Associate Professor	B.Sc. (Algeria), M.Sc., PhD (Paris Sud, Orsay, France, 1994)	Differential geometry
Bakheit, Charles Saki	Associate Professor	B.Sc, M.Math., PhD (University of Durham, UK 1982)	Data analysis
Balakrishnan, Easwaran	Associate Professor	B.Sc., M.Sc., PhD (Massey, New Zealand, 1996)	Mathematics of combustion.
Boulbrachene,	Associate	B.Sc. (Algeria), M.Sc.,	Mathematical and

Messaoud	Professor	PhD (Besancon, France 1987)	numerical analysis
Chandran, Pallath	Associate Professor	B.Sc., M.Sc., PhD (Indian Institute of Technology, New Delhi, India, 1979)	Multi-phase and non-Newtonian fluids
Chentouf, Boumediene	Associate Professor	B.Sc. (Es-senia, Algeria), PhD (Metz, France, 1998)	Control of PDE's
Covachev, Valery	Associate Professor	B.Sc., M.Sc., PhD (Belarus State, Belarus, 1985)	Impulsive and delay differential equations
Karaa, Samir	Associate Professor	B.Sc., M.Sc., PhD (Paul Sabatier, Toulouse, France 1996).	Iterative methods for solving large sparse systems and applications
Kamal, Aref	Associate Professor	B.Sc., M.Sc., PhD (University of Newcastle, Upon Tyne, UK 1983)	Function analysis and abstract approximation theory
Khan, Mohamad. S	Associate Professor	B.Sc., M.Sc., PhD (La Trobe, Melbourne, Australia 1982).	Fixed point theory
Khan, Qamar Jalil A.	Associate Professor	B.Sc., M.Sc., PhD (Indian Institute of Technology, Kanpur, India 1980).	Bio-mathematics
Purnama, Anton	Associate Professor	B.A, MA, PhD, (Cambridge, UK, 1988)	Sediment transport and pollutant transport
Sacheti, Nirmal Chand	Associate Professor	B.Sc., M.Sc., PhD (Rajasthan, India 1976)	Rheological and magnetohydro-dynamical flows
Umar, Abdullahi	Associate Professor	B.Sc. M.Sc. PhD (St. Andrews, Scotland, UK 1992)	Combinatorics
Abdelbasit, Khidir	Assistant Professor	B.Sc., M.Sc., PhD (Newcastle-Upon-Tyne , UK 1980)	Medical statistics and design of experiments

7. *An estimation of the number of mathematical publications that have been produced by mathematicians working in Oman and that have appeared in respected mathematics journals in the last 10 years.*

Year	number of publications	no. of presentations at international conferences
1999	37	24
2000	43	26
2001	60	29
2002	57	27
2003	56	28
2004	52	43
2005	53	45

2006	43	31
2007	57	31
2008		

8. *Mathematics journals in Oman*

There are no journals in Oman specifically for original research in mathematics, but Sultan Qaboos University publishes a journal for Science and this includes original papers in mathematics. The journal is freely available on the internet at: <http://web.squ.edu.om/squjs/index.html>

9. *A brief overview of educational activities*

Despite the fact that education across the country has been available only since 1970, the syllabi of the schools are revised regularly to keep pace with the development in teaching methodology as well as in the introduction of new areas. Mathematics is always at the centre of these activities simply because the country considers it to be basic to all science based studies.

The first university in the country is the Sultan Qaboos University which was established in 1986. It is the only government university in the country but there are a number of higher education institutions of the type of Education colleges for the training of school teachers and Applied science Colleges for training various technical professions. Over the last 10 years a number of private universities and colleges of higher education have been established.

Most of the research activity in mathematics is found at the Sultan Qaboos University. This university has a well-structured funding scheme for research and support of attendance at international conferences. The university has one department of mathematics and statistics which is responsible for teaching of mathematics in the whole university. It has 55 posts for PhD holders in mathematics and statistics. Conducting research is mandatory for all faculty members. The department encourages attendance of international conferences and also holds international conferences in different areas of mathematics. The conferences and workshops held over the last few years are:

Title of activity	Time	Invited speakers	Attendance from outside Oman
First SQU Workshop on Topology and its Applications	29 Dec 2004 - 01 Jan 2005	4	30
First workshop on Algebra and its applications	December 2nd, 2006	8.	8
International conference on Numerical Analysis and Optimization	April 6-8, 2008	12	40
Second workshop on Algebra and its applications	December 14th, 2008	8	8
International conference on mathematical modelling	23-26 February 2009	8	34

It is now the policy of the department to hold an international conference every year. The international conference planned for 2010 is titled " International Conference on Analysis and Applications", to be held during the period 24 Jan 2010 - 26 Jan 2010. It is expected that there will be about 4 invited speakers and a further attendance of about 80 from outside Oman.

10. General information about Oman

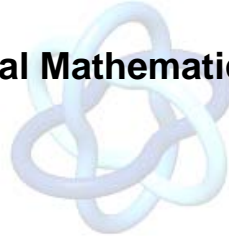
Oman lies in the Arabian Peninsula facing the Arabian Sea. It has an area of 309,500 km², with coastline of about 2000 km and a population of about 3 million. The capital is Muscat and the currency is Omani Riyal (OMR). (1 OMR is equivalent to 2.58 US dollars). The official language is Arabic but English is widely spoken.

----- END -----

17. Circular Letters of the IMU Secretary to the Adhering Organizations with relevance to the IMU General Assembly

IMU AO Circular Letter 1/2010

International Mathematical Union



February 22, 2010
IMU AO Circular Letter 1/2010

To: IMU Adhering Organizations
From: Martin Grötschel, IMU Secretary

IMU General Assembly (GA) in Bangalore, India

Dear colleagues,

This is an announcement about the next IMU General Assembly including some technical details in order to give you information about what to expect and what to do.

1. Time and Location

The next General Assembly of the International Mathematical Union will take place

on August 16-17, 2010

in Bangalore, India.

The venue of the General Assembly will be the hotel Chancery Pavilion in Bangalore see <http://www.chancerypavilion.com/pavilion/>.

The local organizers have reserved 150 rooms in this hotel for the delegates of the General Assembly. A second hotel which is close to the GA hotel, the Chancery, see <http://www.chancerypavilion.com/chancery>, will also be available for the delegates, see the attached document with the room rates.

Delegates are expected to arrive on August 15. The GA ends in the evening of August 17. For those delegates who attend ICM 2010, the local organizers will arrange for transport from Bangalore to Hyderabad on August 18, 2010. Thus, the delegates of the General Assembly attending also the ICM 2010 in Hyderabad should not worry about the Bangalore-Hyderabad transfer and make their flight arrangements to Bangalore and back home from Hyderabad.

2. The General Assembly (basic information)

The role of the GA is described in the IMU Statutes, see <http://www.mathunion.org/fileadmin/IMU/Statutes2006.pdf> in particular in the articles 18 to 24, and 41.

3. Delegations

For each General Assembly, each IMU Member Adhering Organization shall appoint and certify to the Secretary of the Union a delegation, which shall have the number of votes corresponding to the Group in which it adheres, see <http://www.mathunion.org/members/countries> for information about the groups.

Affiliate and Associate Members have the right to participate in the GA by an observer without voting rights.

IMU asks all Adhering Organizations to start selecting their delegates for the IMU General Assembly in Bangalore. A Web registration procedure for the GA delegates is under construction. All Adhering Organizations will receive in the near future detailed information about the GA delegate registration system and about the data needed from each delegate.

4. Web server and registration

The local organizing committee in Bangalore has set up a Web server with information about the GA:

<http://www.icm2010.org.in/imu-general-assembly-2010>

This server contains travel and visa information, maps, and many further details. It will be updated regularly and will be employed to keep all delegates informed.

5. Agenda topics and next steps

I would like to remind all Adhering Organizations of articles 38, 39, and 42 of the By-Laws:

"The Adhering Organizations, and the Commissions of the Union may propose business to be transacted at meetings of the General Assembly. Such proposals shall reach the Secretary at least four months before the meeting at which they are to be considered."

"The agenda for a meeting of the General Assembly shall be dispatched by the Executive Committee to the Adhering Organizations at least three months before the meeting at which they are to be considered. A question which has not been put upon the agenda may be discussed, but shall not be put to the vote unless a proposal to that effect be approved by a majority of the total number of votes assigned to the Members."

"The Executive Committee shall present an annual report on its activities and those of the Union to each Adhering Organization and shall also report on its activities and those of the Union at each ordinary meeting of the General Assembly. The report to the General Assembly shall be dispatched by the Secretary to the Adhering Organizations at least two months before the meeting at which it is to be received."

Summarizing:

- If you want to propose a GA agenda topic, please send your request to me by April 15, 2010, if possible, via e-mail to secretary@mathunion.org.
- Expect to receive the GA agenda by May 15, 2010.
- Expect to receive the EC report (IMU Bulletin 58) by June 15, 2010.

6. Local contact in Bangalore

If you have any questions about the local arrangements for the General Assembly at Bangalore, please contact

- Gadadhar Misra <gm@math.iisc.ernet.in> or
- G. Rangarajan <rangaraj@math.iisc.ernet.in>

who chair the local GA organizing committee.

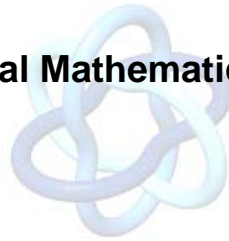
Sincerely,

Martin Grötschel
IMU Secretary

Encl.: GA hotel room rates

IMU AO Circular Letter 2/2010

International Mathematical Union



March 26, 2010
IMU AO Circular Letter 2/2010

To: IMU Adhering Organizations
Delegates and Observers of the IMU General Assembly
From: Martin Grötschel, IMU Secretary

Details about the General Assembly (GA) in Bangalore, India

Dear colleagues,

Here comes the additional information that I promised in my circular letter of February 22, 2010, concerning the details of the registration process for the IMU General Assembly in Bangalore, India, to take place on August 16-17, 2010. I will not repeat here the contents of IMU AO CL 1/2010. Please consult <http://www.mathunion.org/Publications/CircularLetters/2010-01.pdf> for that purpose.

1. GA Delegates

According to the IMU Statutes (see Article 19):

"..., each IMU Member Adhering Organization shall appoint and certify to the Secretary of the Union a delegation, which shall have the number of votes corresponding to the Group in which it adheres".

I would like to ask all Adhering Organizations to nominate the delegations in a letter (by e-mail please) to me (secretary@mathunion.org). This request applies to

- all IMU Members,
- all IMU Associate Members and
- and all IMU Affiliate Members.

Please note that only the Delegates of IMU Members have voting rights at the GA, however.

In my capacity as Secretary, I will maintain the list of Delegates (together with the nomination letters) so that there is proof of which persons have the right to vote at the GA.

At this moment in time I ask you to refrain from nominating substitutes. In case it turns out that a formally nominated Delegate will be unable to participate in the GA, the Adhering Organization is asked to contact me by e-mail or phone as soon as possible. We will try to handle the replacement as smoothly as possible.

Gender distribution at the GA

I would like to remind the Adhering Organizations about a matter noted by observers of the last General Assembly. The gender distribution at the General Assembly in Santiago de Compostela was not "ideal". It would be excellent if the Adhering Organizations could take gender distribution as one criterion into account when they choose the composition of Delegates for the General Assembly in Bangalore.

2. GA Observers, IMU Representatives

The IMU EC will invite further persons to the General Assembly. Among these are

- IMU Officers (this group includes the IMU EC members, and Chairs/Presidents/Secretaries of IMU Commissions and Committees who will provide reports about their activities for IMU)
- Observers (this group includes representatives of countries that will present their application for IMU (Associate) Membership and, moreover, representatives of ICSU, ICIAM, and possibly other IMU related organizations)
- Members of the local GA organization in Bangalore

No person in one of the three categories mentioned here has a voting right at the GA.

Note: No person will be allowed to participate in the GA without a formal approval or invitation from me.

3. Formal registration process and hotel booking

After the nomination of the Delegates by the Adhering Organizations (in a letter to me) and the approved nomination/invitation of the persons mentioned under item 2., all Delegates, IMU Officers, Observers and Members of the local organization are requested to register for the GA in detail on

"The Online Registration and Hotel Room Request Website for IMU General Assembly 2010":

http://events.kwconferences.com/ei/imuga/IMU%20GA%20Online%20Registration%20Landing%20Page.htm?Current_rec_ID=7

provided by the local GA organization in Bangalore.

On this Web site all GA participants are asked to provide certain information about themselves such as address, contact phone numbers, e-mail and the like, and a number of further items of information needed for visa purposes and invitation letters.

Also accompanying persons have to be registered here.

Here is a guide through the registration Website:

- Click on "New Registration & Hotel Accommodation"
- You will now be asked for "the password that was sent to you in an email from the IMU Secretariat"
- This password is BANGALORE
- Clicking on "Enter" brings you to the registration pages for the IMU General Assembly. They will also allow you to book your hotel accommodation for your stay during the IMU General Assembly in Bangalore. (Remember: the local GA organizers have reserved rooms in the Chancery Pavilion hotel, where the General Assembly will take place, and in The Chancery close by.)

On the page

<http://events.kwconferences.com/ei/democapture.ei?s=3OW0QS7VF&id=58&EiRegistration=36O1C42QE> please identify yourself as a Delegate, IMU Officer, Observer, or Local Organizer, and please check the box in case someone is accompanying you.

On the next Page you may be surprised to be asked for Father's/Husband's Name, but these are unavoidable government requirements.

You will then come to the page

http://events.kwconferences.com/ei/submitform.ei?s=3OW0QS7VF&id=58&p=P_1U40LNCXH&EiRegistration=36O1C42QE where you will be asked for your preferences concerning the transfer from Bangalore to Hyderabad. The IMU is grateful to the Indian hosts for providing free transport (by plane) to the ICM 2010 location. Please check when you want to travel. The local organizers will buy a ticket for you. Note also that the local organizers are ready to buy plane tickets from Bangalore to Hyderabad for accompanying persons, but

these are not free. They have to be paid by the persons registering the accompanying persons. On this page you may also ask to receive your ICM 2010 badge at the IMU-GA in Bangalore.

After completing your first visit to the GA registration page you will immediately get an "access key" with which you can enter the registration pages in the future to complete or change your data. Please don't forget to record this access key.

If you need assistance concerning this matter please write to imuga10@kwconferences.com.

4. Hot topics at the GA

4.1 Next IMU President

IMU's nomination committee has already decided on the nomination of the next IMU president and proposes to elect Ingrid Daubechies (Princeton University) as IMU president for the period 2011-2014. Ingrid would be the first woman to become IMU president.

4.2 IMU Stable Office

One of the most important decisions at the IMU GA will be the vote on the future IMU office. Resolution 11 of the 2006 GA stated: "The General Assembly recommends that the incoming Executive Committee of the IMU studies the establishment of stable administrative structure and funding mechanisms, including possible fund-raising, for the support of the expanding IMU activities, and report to the 2010 General Assembly with concrete proposals."

The IMU EC has set up a site selection committee that has investigated this issue. The site selection committee will recommend to establish a "stable office" (that will not move with the IMU secretary) so that the administrative activities of the IMU are concentrated at one location in the world, and an organizational memory is established for a longer period of time. The stable office committee has invited 3 candidate institutions (Fields Institute, Toronto, Canada; Instituto Nacional de Matematica Pura e Aplicada, Rio de Janeiro, Brazil; Weierstrass-Institut für Angewandte Analysis und Stochastik, Berlin, Germany) to present their bids for the establishment of the IMU stable office at their location. This is a very important decision for the future of IMU. Bid details will (most likely) be distributed to the delegates with the GA agenda in mid May.

5. Visa issues

The Indian government has recently changed its visa issuing policy. It turns out that the fee for congress visas is about twice that of tourist visas. The visa issuing policy is difficult and depends on the country from which a person comes. It may be necessary for a delegate or observer to the IMU General Assembly to have an invitation letter from the local organizers in order to obtain a visa. The organizers will send such an invitation letter, if requested. IMU would like to point out that for participating in the General Assembly or the International Congress it is not necessary to apply for congress visas; from IMU's point of view tourist visas suffice.

Sincerely,

Martin Grötschel
IMU Secretary

IMU AO Circular Letter 3/2010

International Mathematical Union



May 14, 2010
IMU AO Circular Letter 3/2010

To: IMU Adhering Organizations
and all registered delegates and observers of the IMU General Assembly

From: Martin Grötschel, IMU Secretary

GA Agenda and GA further information

Dear colleagues,

This letter covers the following topics:

1. GA Agenda
2. Password Protected GA Server
3. Stable IMU Office
4. IMU Statutes
5. Slates for IMU Offices
6. Nomination of Delegates and GA Registration

Below is important information for the General Assembly. Please read with care.

1. GA Agenda

According to item 39. of the By-Laws of the IMU Statutes, the agenda for the meeting of the General Assembly has to be dispatched to the Adhering Organizations at least three months before the meeting. The Statutes are at:

<http://www.mathunion.org/fileadmin/IMU/Statutes2006.pdf>.

This item of the By-Laws also stresses that "a question which has not been put on the agenda may be discussed, but shall not be put to the vote unless a proposal to that effect be approved by the majority of the total number of votes assigned to the members." Thus, any further issue that an Adhering Organization wants to be put up for vote needs special treatment at the GA agenda.

In the attachment, please find the proposal of the Executive Committee for the agenda for our meeting in Bangalore. We will have a very tight schedule, so there is not much room for "ad-hoc topics" proposed at the GA meeting itself. Please keep this in mind.

2. Password Protected GA Server

The IMU Office in Berlin has established a further password-protected Web site at which all documents that are relevant for the General Assembly will be available for download. The URL is the following:

<http://www.mathunion.org/GA2010/>.

The user name and the password can be obtained from the IMU Secretary.

We will upload GA relevant documents to this GA Agenda Server as soon as such material becomes available.

If you access the password protected Bangalore GA Server http://events.kwconferences.com/ei/imuga/IMU%20GA%20Online%20Registration%20Landi ng%20Page.htm?Current_rec_ID=7 using the password for new registrations or your access key you can enter this new GA Agenda Server without being asked again for a password, since the Indian colleagues have set links to the Agenda server.

No Printed Documents for the GA

No printed material will be distributed to the delegates at the General Assembly. We expect all delegates and observers to select from the material on this Web page those documents that they find necessary to have at the General Assembly itself, to print them, and to bring them to Bangalore. Please also bring a printed copy of the (latest version of the) GA agenda along.

3. Stable IMU Office

One extremely important vote will be on the establishment of a stable office for the International Mathematical Union. The Stable Office Committee has selected three candidate institutions that are ready and willing to serve IMU in the future. These are:

- The Fields Institute, Toronto, Canada
- IMPA, Rio de Janeiro, Brazil
- WIAS, Berlin, Germany

The Stable Office Committee, consisting of IMU President L. Lovasz, IMU Past President J. Ball, and EC members S. Baouendi and R. Piene, will report at the General Assembly about the whole selection process.

The three finalists will each make 10-minute presentations of their proposals. To give the delegates sufficient lead time to investigate the proposals, each candidate institution has prepared a 2-page summary of its bid. Please find the three summaries in the attachment. Each summary contains a link to a Web site where the candidates are providing additional information about their offer.

4. IMU Statutes

As usual, there will be some changes to our Statutes:

- Treasurer
In case the General Assembly decides that a permanent IMU office will be established, the Executive Committee will recommend that the office of an IMU treasurer be installed. The treasurer should, in the future, be a person closely linked to the stable office and would be responsible for all financial transactions. At present, the IMU Secretary acts as the treasurer, see items 28. and 45. of the Statutes.
- Electronic voting
The EC will suggest that votes of the IMU Members may be executed via a password protected Web server. (This has been requested by some Adhering Organizations.) There is a footnote on page 2 of the statutes concerning this matter. It may be reasonable to amend that footnote slightly, if the GA delegates agree.
- The "Procedures for Election" (important, but not part of the Statutes, see <http://www.mathunion.org/organization/ec/procedures-for-election/>) need an update. The transition process for the new ICMI EC nomination and election model is almost over, and the description can be deleted. Moreover, the CDE and DCSG have been merged into CDC. All references to CDE in the current "Procedures for Election" have to be replaced by CDC.

5. Slates for IMU Offices

I have already mentioned in a previous Circular Letter that Ingrid Daubechies (Princeton University) will be the candidate proposed by the IMU Nominating Committee for the office of IMU President. Slates for all other IMU officers are currently prepared by the Nominating Committee - chaired by former IMU President David Mumford. The slates will be distributed, according to our "Procedures for Election", see <http://www.mathunion.org/organization/ec/procedures-for-election/> by June 15, 2010..

6. Nomination of Delegates and GA Registration

To all IMU Adhering Organizations:

So far, only one half of the members of the IMU have nominated their delegates for the GA. IMU urges you to act as soon as possible. Please nominate your delegates to the IMU Secretary and ask your delegates to register formally at the GA Web site, see

<http://www.mathunion.org/Publications/CircularLetters/2010-01.pdf>
<http://www.mathunion.org/Publications/CircularLetters/2010-02.pdf>

for details. The local GA organization needs to estimate the number of participants of the GA precisely. Our colleagues in Bangalore have to buy tickets (flight from Bangalore to Hyderabad) for the GA delegates, observers, and also all accompanying persons. This has to happen very soon to avoid unpleasant surprises.

Recall: August 15, arrival day
 August 16 & 17, General Assembly
 August 18, transfer from Bangalore to Hyderabad for the ICM participants

Visa Issues

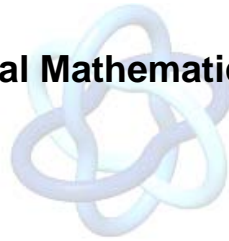
The local organizers have informed me that India's external affairs ministry has a list of eight countries which get somewhat special treatment as far as visas are concerned - they are Pakistan, Bangladesh, Iran, Iraq, Afghanistan, Nepal, Sri Lanka and China. The ministry insists that individuals wanting visas from these countries need to get individual clearance which must be obtained at least SIX WEEKS prior to their intended date of entry to India. The local organizers must seek clearance for the person a month and a half in advance to avoid a potentially embarrassing situation.

Best regards

Martin Grötschel

IMU AO Circular Letter 4/2010

International Mathematical Union



June 11, 2010
IMU AO Circular Letter 4/2010

To: IMU Adhering Organizations
Delegates and Observers of the IMU General Assembly in Bangalore

From: Martin Grötschel, IMU Secretary

2010 IMU General Assembly Slates

Dear colleagues,

According to the IMU Statutes, the Adhering Organizations and Delegates of the General Assembly have to be informed about all candidates for positions within IMU committees and commissions to be elected at the next General Assembly two months in advance of the meeting of the GA. This letter provides complete information about the persons running for the various IMU offices.

According to the "Procedures for Election", see <http://www.mathunion.org/organization/ec/procedures-for-election/>, the IMU Nominating Committee has the task to select from all persons nominated, see my Circular Letter 11/2009 <http://www.mathunion.org/Publications/CircularLetters/2009-11.pdf>, the slates to be considered at the GA. The IMU Nominating Committee consists of

- David Mumford (chair)
- Laszlo Lovasz
- Anthony Afuwape
- Nigel Hitchin
- C.S. Seshadri
- Ian Sloan
- Frances Yao

This Nominating Committee has selected (from all nominations received and taking into account regional distribution, adequate representation of mathematical fields, etc.) slates for the IMU Executive Committee (EC), the Commission for Developing Countries (CDC), and the International Commission on the History of Mathematics (ICHM), following the rules defined in the Procedures for Election.

You find the lists of nominated persons in the appendix below and as a PDF file in the attachment. At the end of each slate, persons who have been nominated but have not been chosen by the Nominating Committee are listed. These persons, if the General Assembly wishes so, can be added to the slates at the General Assembly according to item 5.b. in the Procedures for Election.

All candidates have declared their willingness to serve on the commissions or committees for which they have been nominated. All candidates have also provided a two pages curriculum vitae (CV). In order not to overload this e-mail with attachments, we have made the CVs available on the IMU GA Web site at

<http://www.mathunion.org/GA2010/>

with the user name and password distributed to all GA participants and all IMU Adhering Organizations.

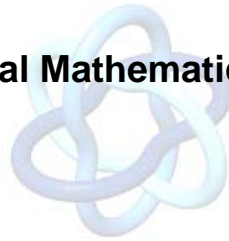
We urge all Delegates of the General Assembly to make themselves familiar with the candidates and their CVs. Only very few of the candidates will actually be present at the GA for personal discussion. Considering the large number of candidates, the time available at the GA will not suffice to discuss the qualifications of all the persons in too much detail. So, please try to make up your mind about the candidates before the GA. If you feel you need additional information you are, of course, free to contact the candidates directly.

Best regards

Martin Grötschel

IMU AO Circular Letter 6/2010

International Mathematical Union



June 11, 2010
IMU AO Circular Letter 6/2010

To: IMU Adhering Organizations
and to all participants of the IMU General Assembly 2010

From: Martin Grötschel, IMU Secretary

IMU Booklet

Dear colleagues,

The Executive Committee of the International Mathematical Union has produced an information brochure with a survey of most of the current IMU activities. This booklet contains, in particular, overviews of the work done for developing countries (via CDC/CDE/DCSG) and mathematical education (via ICMI). It is meant to inform IMU's membership (and other institutions and individuals) on the broad spectrum of topics IMU handles and to update the GA delegates on the various functions IMU is performing. A pdf version of the booklet is attached.

The printed version of this booklet will be distributed to all participants of the International Congress of Mathematicians 2010 in Hyderabad. The booklet can be downloaded from http://www.mathunion.org/fileadmin/IMU/ICM2010/hyderabad_booklet.pdf

Best regards

Martin Grötschel
IMU Secretary

IMU AO Circular Letter 7/2010

International Mathematical Union



July 18, 2010

IMU AO Circular Letter 7/2010

To: To all participants of the IMU General Assembly 2010
and IMU Adhering Organizations
From: Martin Grötschel, IMU Secretary

Visa problems

Dear colleagues,

The International Mathematical Union is aware that the Indian visa issuing process is not running as smoothly as hoped. For example, some Indian Embassies did not accept the visa application forms or even rejected visa for delegates to the IMU General Assembly; about one quarter of the awardees of IMU travel grants reported that the Indian Embassy will not issue them a visa before August, making it extremely difficult for them (and more expensive for IMU) to book their flights to Hyderabad.

These problems seem to be due to the fact that the Indian government has tightened the visa processing because of security perceptions, and the enforcement of the new rules seems to be causing these problems.

As soon as the organizers of the ICM 2010 in Hyderabad and the General Assembly in Bangalore became aware of these issues, they took immediate action. M.S. Raghunathan and Rajat Tandon, for instance, took the issue up to the highest level. There was a meeting in Delhi with the senior secretary in the ministry of home affairs. A week ago, Raghunathan had a meeting with the Indian Prime Minister where he brought up these visa issues.

The reactions of the highest officials were very positive. They assure that all delegates will be given visas. The current deadline is that all clearances will be sent before the end of July. The Indian colleagues, however, ask not to press the embassies as these will not give a positive reply unless they get the clearance from Delhi for the persons applying.

The ICM Web server now has a special page, see

<http://www.icm2010.org.in/about-icm-2010/practical-information/visa-related-issues>

where visa problems can be reported to the organizers and where they promise assistance.

IMU regrets that these visa problems have come up. This is due to political issues beyond our control and not the fault of the mathematical colleagues. They have "moved heaven and earth" at the highest levels of the government. Their efforts resulted in a positive outcome, IMU is confident that the embassies will execute the orders in the way mentioned above.

Best regards

Martin Grötschel

IMU AO Circular Letter 8/2010

International Mathematical Union



July 21, 2010
IMU AO Circular Letter 8/2010

To: To all participants of the
IMU General Assembly 2010 and all
IMU Adhering Organizations
From: Martin Grötschel, IMU Secretary

Dear colleagues,

This letter provides some practical information about the General Assembly of the International Mathematical Union in Bangalore. I would like to ask all participants of the GA to go through the items. They will help you “survive” the GA.

Here are the topics:

1. Hotel Booking, Arrival and Departure: Transport
2. Local Transport in Bangalore
3. Local Registration, GA Office
4. Exact Location of the GA Meeting, Lunch and Tea/Coffee
5. Room Plan, Seating Arrangements, Name Tags, Photo Session, “Round Tables”
6. Audio Recording
7. Social Events in Bangalore
8. WiFi, Laptops, and Electricity
9. Contact Data in Case of Emergencies

and here the details:

1. Hotel Booking, Arrival and Departure: Transport

Hotel Booking:

If you have not yet reserved a room, you may reserve one in the Chancery Pavilion at

http://events.kwconferences.com/ei/imuga/IMU%20GA%20Online%20Registration%20Landing%20Page.htm?Current_rec_ID=7

using your Access Key. The extended deadline is August 1.

Arrival:

The Local Organizing Committee (LOC) of the IMU General Assembly has made arrangements for complimentary transfer from Bangalore airport. Volunteers will receive delegates arriving at the Bangalore International Airport. The volunteers will have the IMU GA placard. Delegates are advised to look for the IMU GA Paging Boards on exiting the

airport terminal. Volunteers will guide the delegates to cabs/coaches depending on the arrival times.

All delegates should make sure that they have announced their arrival times to the LOC in Bangalore. It is best to do that on the Conference web-site

http://events.kwconferences.com/ei/imuga/IMU%20GA%20Online%20Registration%20Landing%20Page.htm?Current_rec_ID=7

using your Access Key.

If you have not done so yet, please do it now. If you have difficulty in completing the online form, please send an email message to Gadadhar Misra gadadhar.misra@gmail.com with a copy to Mamta mamta@kwconferences.com

Departure:

On August 18, coaches will be stationed at specified times at the Chancery Pavilion Hotel for group transfer to the airport for the flights to Hyderabad. (The LOC has booked the flights for you according to your preferences.) Details will be announced during the GA.

2. Local Transport in Bangalore

For those GA participants staying in the Chancery Pavilion no local transport is necessary. Transfers in the morning and in the evening between the Chancery Hotel and the venue of the GA (Chancery Pavilion) have been arranged at specific times which will be announced and displayed in the hotel.

3. Local Registration, GA Office

It is necessary that every participant of the GA registers locally. The organizers have to know who actually has arrived and need to document which of the persons attending the GA have voting rights, and for which countries. A registration desk will be set up, from 7:30 a.m. to 7:00 p.m. in the Chancery Pavilion Hotel lobby near the reception area on August 15-16. The participants can easily register at the time of check-in into the hotel. Participants arriving after 7:00 p.m. can register next morning.

KW Conferences, the event organization company who has been appointed as the events manager of the IMU GA by the LOC will be available on-site in the Chancery Pavilion Hotel from August 14 at the registration desk.

Contact: Ms. Prasoon, KW Conferences, Mobile: + 91 9444992208.

So, please, do not forget to register upon arrival.

4. Exact Location of the GA Meeting, Lunch and Tea/Coffee

The venue of the General Assembly is the Grand Ballroom in the Chancery Pavilion Hotel. This room is two levels below the lobby level (Press the B-button of the elevator). Lunch and tea/coffee have been arranged by the LOC for the two days of the General Assembly. Tea, coffee and lunch will be served in the conference venue.

5. Room Plan, Seating Arrangements, Name Tags, Photo Session, "Round Tables"

The room plan of the Grand Ballroom is attached. As usual, the seating will be in alphabetic order of the member countries of IMU (including the Associate Members). The seating for the

other GA participants will be worked out at the beginning of the GA when the final number of participants is known.

Every participant will get an individual name tag, the seats for the delegations will be marked by a name tag carrying the name of the country the delegation is representing.

Please do not forget that there will be a photo session in the morning of the first day before the beginning of the GA. I would like to ask everybody to show up at 8:15 h at the Chancery Pavilion porch.

This is where the group photo will be taken. The photographer asks all persons to come in time in order to arrange the seating/standing order.

For the convenience of the GA participants a cluster of round tables will be provided in the Esquire Hall of the Chancery Pavilion for small group discussions on August 16 and 17.

6. Audio Recording

I would like to announce that we will take audio recordings of the GA meeting in order to be able to provide a faithful documentation of the presentations and discussions at the General Assembly.

7. Social Events in Bangalore

There is no special program for the evenings of August 15 and 16. Both hotels, the Chancery Pavilion and the Chancery, have restaurants. Both hotels are located near MG road, the commercial hub of Bangalore. In this neighborhood are several shops and restaurants. The concierge desks at the hotels will assist delegates to make reservations at a restaurant of their choice.

On August 17, at 19:00 h there will be a dance performance "OJAS" by Abhinava Dance Academy artists followed by a dinner at the Grand Ballroom of the Chancery Pavilion. This dinner will be hosted by the Local Organization Committee. The IMU thanks the LOC for its generosity.

8. WiFi, Laptops, and Electricity

There is complementary WiFi connection in the rooms of both hotels.

Photocopy and fax are available at the Chancery Pavilion reception area on a payment basis.

For bulk photocopy there is a photocopy shop near the hotel.

The GA participants can bring their laptops to the venue of the General Assembly. There is sufficient space, and the organizers have made provision for a number of plug points.

Please note that the electricity supply in India is 220 VA and the electrical sockets will take 2/3-pin plugs (round pins). Therefore, suitable electrical adapters will be required.

9. Contact Data in Case of Emergencies

In case of an emergency (someone gets stuck on its way to Bangalore, gets lost in the city, has an accident or sudden health problems, etc.), here are phone numbers that can be called and e-mail addresses that are frequently checked so that help can be provided/arranged or information forwarded:

Ms Prasoon, KW CONFERENCES (Event Managers)
Mobile : +91 9444992208
[Email: prasoon@kwconferences.com](mailto:prasoon@kwconferences.com)

Mr. G. Madhavan
+91 98440 79282
madhavan@ias.ernet.in

Hotel Chancery Pavilion

The Chancery Hotels
135, Residency road
Bangalore 560025
Tel: +91-80-41414141
Lobby Manager– mobile +91 9845414141.
Email: lobbymanager.cp@chanceryhotels.com
www.chanceryhotels.com

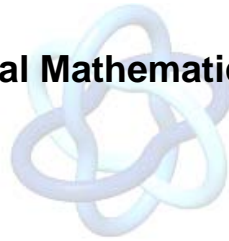
The Chancery
Lavelle Road,
Bangalore
Tel: +91-80-22276767, 41188888
Lobby Manager Mobile +91 9845022767
Email: lm@chanceryhotel.net

Best regards

Martin Grötschel

IMU AO Circular Letter 9/2010

International Mathematical Union



July 26, 2010
IMU AO Circular Letter 9/2010

To: To IMU Adhering Organizations
and to all participants of the
IMU General Assembly 2010
From: Martin Grötschel, IMU Secretary

Dear colleagues,

As you all know, one of the "really big events" in mathematics is the quadrennial International Congress of Mathematicians, and its most important event is the Opening Ceremony. In 2010 this takes place in Hyderabad, India, where, on August 19 between 9:30 and 12:30 Indian time, Her Excellency Shrimati Pratibha Patil, the Honourable President of India, will open the ICM and present the IMU awards (a medal and a cheque for each of the prize winners). All recipients will attend the ceremony, their names remain - as usual - secret until August 19.

IMU is grateful to the selection committees who have done a great job by selecting outstanding mathematicians for the Fields Medal (recognizing outstanding mathematical achievement), the Rolf Nevanlinna Prize (honoring distinguished achievements in mathematical aspects of information science), the Carl Friedrich Gauss Prize (for outstanding mathematical contributions with significant impact outside of mathematics), and the new Chern Medal (awarded to an individual whose accomplishments warrant the highest level of recognition for outstanding achievements in the field of mathematics). For the Fields Medal and the Nevanlinna Prize an "age rule" applies: the 40th birthday of a recipient must not have occurred before January 1, 2010.

The Web page with detailed information about the IMU Prizes has been updated and contains new photos of the medals as well as information about the physical properties of the medals (they are all made of gold) and the cash values of the awards. This is information I have often been requested to provide for journalists.

If you are interested check

<http://www.mathunion.org/general/prizes>

<http://www.mathunion.org/general/prizes/physical-medals-and-cash-awards>

and the links on these Web pages. And please forward these details to journalists in case you are approached.

Details about the Prize winners and their mathematical achievements will appear shortly after the end of the Opening Ceremony on the IMU Web site and the Web site of the 2010 Congress, see <http://www.icm2010.org.in/>

Best regards

Martin Grötschel
IMU Secretary

IMU AO Circular Letter 10/2010

International Mathematical Union



July 27, 2010
**IMU AO Circular Letter
10/2010**

To: To IMU Adhering Organizations
and to all participants of the
IMU General Assembly 2010
From: Martin Grötschel, IMU Secretary

Dear colleagues,

This circular letter is meant to prepare the GA Delegates for four important GA Agenda items:

1. Proposed changes of the IMU Statutes
2. Proposed changes of the "Procedures for Election"
3. Duties of the GA Committees
4. GA Resolutions.

And here are the details:

1. Proposed changes of the IMU Statutes

The current version of the Statutes can be downloaded from
<http://www.mathunion.org/fileadmin/IMU/Statutes2006.pdf>

The proposed new version "clean" is attached. A version where all changes in the Statutes are marked in red is also attached.

Here are the reasons for the changes (purely editorial corrections are not discussed in detail):

Article 11. We propose to mention the rights Associate Members have and that were not explicitly stated so far.

Article 19. We suggest to add in this article explicitly that also the Associate Members and Affiliate Members are entitled to send representatives to the GA, and the term "Representative" is introduced for these persons. This new term makes it possible to distinguish between voting and non-voting participants of the GA. "Delegates" represent Members and have voting rights, "Representatives" represent Associate Members and Affiliate Members and have no voting rights.

There are some trivial editorial changes in Articles 20, 22, 23, 25, and 41.

The changes in Articles 28 and 29 are suggested by the stable office committee to allow the appointment of a treasurer who is not an EC Member, and to redefine the legal IMU domicile. (This change will only be put up for vote in case the GA votes for the establishment of a stable office.) The treasurer is supposed to act as a liaison between the permanent office and the EC. This is necessary since the IMU Secretary is not supposed to come permanently

from the location of the future IMU office. The Stable Office Committee will explain all this in more detail at the GA.

In Article 40, the term "Observer" (that has been used for a very long time) is formally introduced.

2. Proposed changes of the "Procedures for Election"

Due to the formation of the CDC, the "Procedures for Election" have to be rewritten. In discussion with members of the Nominating Committee a few other items came up that the EC thought should be added or changed.

In the attachment you will find the draft of the new "Procedures for Election", one version with all the changes visible, and a "clean" version. The current version is downloadable from <http://www.mathunion.org/organization/ec/procedures-for-election/>.

Except for the changes due to CDC, the main new item is the introduction of the Election Committee, see 5.a. of the new version. It turns out that only two members of the Nominating Committee will be at the GA, which is too small a number to form a committee. We expect such a presence to be similar at future GAs, and thus, thought that there should be a committee that handles every question/problem that arises at the GA concerning elections. The EC is not a "good" committee for that since usually half of the current EC members are up for reelection and should not handle election matters. Members of the Election Committee should have significant IMU experience.

Another important change are the additional sentences in 2.b. (new version) concerning equal representation, a suggestion of the Nominating Committee.

These changes are up for vote in the very beginning of the GA, so that the GA committees can be elected properly.

3. Duties of the GA Committees

It is a tradition to set up, at the beginning of every meeting of the GA, several committees supporting the GA in various ways. These committees and their tasks are described in an attached document for your information:

- Credentials Committee (~3 persons): M. de Leon
- Tellers Committee (~6 persons): R. Piene
- Finance and Dues Committee (~6 persons): M. Groetschel
- Resolutions Committee (~6 persons): M. Viana
and also the
- Election Committee (see item 2. above): L. Lovasz

For each committee, an EC member (mentioned behind the committee name) has been appointed by the EC who will approach GA participants in the evening of August 15 or morning of August 16 to ask them to serve on such a committee. The approximate number of committee members is indicated above in the brackets.

4. GA Resolutions

During the GA, and in particular at its end, typically several resolutions are passed. Lists of resolutions approved by former GAs can be found at

<http://www.mathunion.org/organization/general-assembly/>

The current status of proposals is as follows.

a. Donors' Conference

So far I have obtained only one proposal of a GA resolution from an Adhering Organization. The United States ask the EC to study the feasibility of convening a Donors' Conference as a satellite conference to ICM 2014, see attachment. This suggestion is supported by the UK, France, Italy, and Norway and a number of individuals, including former IMU Secretary Phil Griffiths.

b. Electronic Voting

The second resolution comes from the EC and is a consequence of questions asked by several IMU members who are unhappy about the paper ballots. The current Statutes allow the introduction of electronic voting via a secure Web server. Article 41.(g) gives the General Assembly the possibility to prescribe the rules of postal ballots which - in Article 6. - are described to include ordinary mail, e-mail, fax, or any other way of communication. In that sense the EC can establish electronic voting via a secure Web server. However, the EC would like to be explicitly empowered by the General Assembly to establish this voting process. This is formulated in the resolution attached.

c. Budget Structure

The GA is supposed to decide on the IMU budget for the next four years. This is a difficult issue this time, since - depending on whether or not a permanent office is established and depending on what financial and other support the chosen location will be able to offer - the budget structure may vary. I will present at the GA a "conservative budget", the details will be in Bulletin 58, which is basically an adapted update of the current budget structure. I will ask, after consulting the Finance and Dues Committee, the GA to pass a resolution that will allow the EC to come up in 2011, after the agreement with the institution hosting the stable office has been signed, with a new budget that will take the "new situation" into account. Of course, the new 2011-2014 budget will be subject to approval by the IMU members.

d. Budget Increase

Taking into account that the IMU budget is only balanced because of very significant financial and in kind contributions from a large number of institutions (I will detail these at my presentation at the GA) and considering the increased IMU activities for developing and economically disadvantaged countries (put into practice through CDC, up to 2010 by CDE and DCSG), and observing the considerable worldwide efforts of ICMI (that the ICMI President will describe at the GA and which require additional funding), I will propose a moderate increase of IMU's membership dues by 2% annually for the next four years. I hope that the Finance and Dues Committee will convert my request into a resolution that the Resolutions Committee and the GA can accept.

e. Further resolutions

Further resolutions will come up during the GA. E.g., the Stable Office Committee plans to propose its suggestions to the GA in the form of resolutions. The resolutions Committee will collect resolutions during the first GA day.

Best regards

Martin Grötschel
IMU Secretary

18. Report of the IMU Executive Committee

Report of the IMU EC for the period 2007 – 2010 by Martin Grötschel

Union membership

Applications to change group adherence have been forwarded by postal ballot to the Adhering Organizations with the Executive Committee's recommendation to approve the applications. The group changes were: Rep. of Korea from II to IV, Iran from II to III, Norway from II to III, Finland from II to III.

IMU took up membership of Colombia. Ecuador, Kyrgyzstan, Kenya, and Thailand have become Associate Members of IMU. This category of membership has been approved by the 2006 General Assembly. The African Mathematical Union has become an Affiliate Member of IMU.

As of January 2010, the IMU has 72 Members, of which are 4 Associate Members. Three organizations are affiliated with IMU.

Membership dues

The great majority of the Union members have been paying their membership dues properly. Concerning dues payment till the year 2009, at present 4 countries are in arrears amounting to a total of 6,614 Swiss Francs, a record low.

Commissions and Committees

The Executive Committee (EC) of IMU, the Commission on Development and Exchanges (CDE), the International Commission on Mathematical Instruction (ICMI), the IMU representatives to the International Commission on the History of Mathematics (ICHM), and the Committee on Electronic Information and Communication (CEIC), which have been elected at the General Assembly in Santiago de Compostela in 2006, started work in January 2007. The term of the ICMI officers ended in December 2009, the ICMI General Assembly has elected a new ICMI EC that started work in January 2010, which was in accordance with a change in ICMI's election model, see Procedures for Election of ICMI <http://www.mathunion.org/organization/ec/procedures-for-election/>. CEIC membership has changed as of July 2008 after some members have decided to terminate their work as CEIC activists.

EC meetings

76th meeting in Oslo, Norway, May 20-22, 2007
77th meeting in Budapest, Hungary, April 20-21, 2008
78th meeting in Fuzhou, China, April 18-19, 2009

79th meeting in Rome, Italy, February 27-28, 2010

The IMU EC expresses its gratitude to the hosts of the EC meetings which were the Norwegian Academy of Science and Letters together with the Board of the Niels Henrik Abel Memorial Fund, the Department of Mathematics of the University of Oslo, and the Centre of Mathematics for Applications of the University of Oslo; the Hungarian Academy of Sciences; the Center for Discrete Mathematics of Fuzhou University in China; and the Dipartimento di Matematica, Sapienza Università di Roma.

The 80th IMU EC Meeting will take place in Bangalore, India, August 15, 2010 and will be hosted by the Department of Mathematics of the Indian Institute of Science, Bangalore.

EC members took part in various meetings / conferences of ICMI, ICSU and ICSU Regional Offices, ICIAM, CIMPA, PACOM.

The Executive Committee has endorsed slight editorial changes of the Statutes. The currently valid version is that of September 7, 2007.

The Executive Committee has endorsed the revised version of the PC/OC guidelines.

Scientific activities / Conference subvention

With one exception (icmp 2009 in Prague, subvention had to be spent for conference participants from developing countries) the EC has affirmed to stop financially supporting conferences that regularly take place, especially in countries which are not developing countries and in this context referred to Resolution 9 of the General Assembly in Shanghai, 2002 that states

“The General Assembly recommends the guidelines for receiving Colloquia support from IMU be further developed and available on the IMU website. These scarce funds should go primarily to supporting mathematicians from developing countries and high quality international conferences that take place in developing countries.”

In line with this recommendation, IMU’s commission for developing countries (CDE/DCSG) awarded a major part of its grants to conferences in developing countries (see the reports of CDE).

Subventions have been granted to ICMI for its International Congress on Mathematical Education (ICME11), for its Pipeline and Klein projects.

Reports and Recommendations

- Citation Statistics

The International Mathematical Union has released, in cooperation with the International Council of Industrial and Applied Mathematics (ICIAM) and the Institute of Mathematical Statistics (IMS), the report "Citation Statistics" which analyzes the use and misuse of citation data in the assessment of scientific research. The report discusses, in particular, the impact factor, the h-index, and variants of these that are often employed to rank not only journals but also individuals, departments, or whole institutions.

- Mathematics in Africa: Challenges and Opportunities

The International Mathematical Union, together with the John Templeton Foundation, has released a report "Mathematics in Africa: Challenges and Opportunities" on the current state of mathematics in Africa and on opportunities for new initiatives to support mathematical development. The study was prepared by IMU's Developing Strategies Group (DCSG) and financed by the John Templeton Foundation.

IMU Web page / electronic life

The IMU homepage has intensely been worked on, a content management system has been introduced.

Great efforts have been made to compile a database of all ICM plenary and invited speakers since 1950 and to display it on IMU's homepage.

The project to digitize all old ICM proceedings is near completion.

An electronic IMU newsletter – IMU-Net – has been installed which is published bimonthly.

IMU Prizes

- Chern Medal Award

A major new prize has been established in memory of the outstanding mathematician Shiing-Shen Chern that will be awarded, jointly with the Chern Medal Foundation (CMF), for the first time at the opening ceremony of ICM 2010 to an individual whose lifelong outstanding achievements in the field of mathematics warrant the highest level of recognition.

- Ramanujan Prize

The IMU and the Abdus Salam International Centre for Theoretical Physics (ICTP) agreed to continue their memorandum of agreement assuring the award of the "Ramanujan Prize for Young Mathematicians from Developing Countries" established at the ICTP and with the awardees being chosen together with the IMU and the prize money being donated by the Niels Henrik Abel Memorial Fund.

- Fields Medal

Negotiations with a potential donor for an upgrade of the financial value of the Fields Medal were close to completion, but unsuccessful in the end.

Resolution 11 of the 2006 General Assembly, stable IMU office

Following this recommendation, the EC has initiated the process of considering the establishment of a stable IMU office. All Adhering Organizations, many mathematical societies and institutions have been invited to make proposals/bids to host such a permanent office. More than ten institutions have made generous offers to host the future IMU secretariat. This office is supposed to stay at one place (for a long period of time) and will not move with each new IMU Secretary to a new location. The "Stable Office Committee" has visited several proposed locations and will present, after discussion within the IMU Executive Committee, its findings at the GA meeting.

Commission for Developing Countries

The 15th General Assembly of the International Mathematical Union charged the IMU EC in August 2006 with the task to restructure its activities for developing and economically disadvantaged countries and to merge the current Commission on Development and Exchanges (CDE) and the Developing Countries Strategy Group (DCSG) into a new commission to be called Commission for Developing Countries (CDC). The IMU members approved the proposal for the structure and the Terms of Reference of this IMU Commission. The new CDC membership is up for vote by the forthcoming GA.

ICM 2010

All activities necessary have been launched.

The ICM 2010 Program Committee has been duly appointed and carried out its work successfully. It has defined the program structure of ICM 2010, decided on the number/descriptions of sections and the number of lectures and decided on the list of plenary and sectional invited speakers at ICM 2010.

The IMU Executive Committee has appointed the selection committees for the IMU prizes to be awarded in August 2010 during the Opening Ceremony of ICM 2010 in Hyderabad, India. The prize committees have selected the awardees for the Fields Medals, Nevanlinna Prize, Gauss Prize, and Chern Medal.

The IMU Nominating Committee has been set up and has successfully completed its work. It has collected, from the IMU Adhering Organizations, proposals for the offices of the IMU President, IMU Secretary, IMU Vice-Presidents, and IMU Members-at-Large, as well as for the offices of the CDC President, CDC Secretaries, and CDC Members, and for IMU Representatives to the ICHM, who will have to be elected at the GA.

The ICM 2010 Organizing Committee has set up all processes necessary for the organization of the congress. There is a functioning ICM Web page providing information on the important issues in connection with the ICM and enabling the registration for the congress.

The ICM Travel Grant Committee has been set up. Evaluation panels have been formed to rank the applications in the two categories Young and Senior in the 5 geographic regions. About 120 grants will be distributed.

ICM 2014

The IMU has received 3 excellent offers to host the ICM 2014. Bidders were Montreal (Canada), Rio de Janeiro (Brazil), and Seoul (Republic of Korea). The IMU EC has formed an "ICM Site Selection Committee" that visited the three places. Having discussed the three bids the EC decided to recommend Seoul as the location of ICM 2014 to the IMU General Assembly. The Korean colleagues will propose a site for the 2014 General Assembly at the Bangalore GA.

19. International Commission on Mathematical Instruction (ICMI)

<http://www.mathunion.org/icmi/home/>

4 year Report on ICMI activities in the period 2006-2010 prepared by Jaime Carvalho e Silva, Bill Barton, Michèle Artigue, and Bernard R. Hodgson

16 July, 2010

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1. Organisation

In the period 2006-2010, three Executive Committees of the International Commission on Mathematical Instruction were in office: the 2003-2006 ICMI Executive Committee (ICMI EC), the 2007-2009 ICMI EC and the 2010-2012 ICMI EC. These last two ECs were elected for a three-year term of office, instead of the usual four, because of the new procedure for the election of the ICMI EC adopted by the 2006 IMU General Assembly (GA) and bringing a shift for the election from the IMU GA to the ICMI GA (more on this new procedure below).

The **2003-2006 ICMI Executive Committee (ICMI EC)** had its sixth and final meeting in Cartagena de las Indias, Colombia, on November 18-21, 2006. This meeting was mainly devoted to the preparation of the transition to the next ICMI EC. The members of the ICMI EC took part in a Forum on the theme “Mathematical Competencies in Higher Education” organized by the Colombian Ministry of Higher Education on November 22-24 in Bogotá.

Following the agreement made in 2000 with the IMU EC, the President and Secretary-General of ICMI were invited as *ex officio* observers to the **General Assembly of IMU** held in Santiago de Compostela, Spain, in August 2006. This allowed them to present to the delegates the background and detailed content of the new procedure for the election of the Executive Committee of ICMI. The new procedure provoked some discussion but was finally adopted by the IMU Assembly. An important consequence of the new procedure is that the election of the ICMI EC from now on takes place at the General Assembly of ICMI (the first such election was held in 2008 in Monterrey, when the 2010-2012 ICMI EC was elected). The principles of the new election procedure had been agreed upon by the IMU and ICMI ECs in 2004, and fine-tuned in 2006. During these latter discussions, a new rule was then introduced stipulating, in accordance with the IMU tradition, that the President of ICMI should serve for only one term (plus a term as Past President). The Terms of Reference of ICMI were amended accordingly — the new Terms were adopted by the IMU EC early in 2007.

The Chair of the ICMI Nominating Committee for the 2006 election, Mogens Niss, also attended the IMU General Assembly in order to present the slate of candidates proposed by the Committee. The members of the **2007-2009 ICMI Executive Committee** elected by the IMU Assembly were:

President:	Michèle Artigue	(France)
Vice-Presidents:	Jill Adler	(South Africa)
	William (Bill) Barton	(New Zealand)
Secretary-General:	Bernard R. Hodgson	(Canada)
Members at Large:	Maria G. (Mariolina) Bartolini Bussi	(Italy)
	Jaime Carvalho e Silva	(Portugal)
	Celia Hoyles	(UK)
	S. Kumaresan	(India)
	Alexei Semenov	(Russia)

The Terms of Reference of ICMI allowing the co-option of up to two additional members on the EC “in order to provide for missing coverage or representation”, Frederick Koon-shing Leung (Hong Kong) was later co-opted as an additional member of the EC. The Past ICMI President, Hyman Bass (USA), as well as the President and Secretary of IMU, László Lovász (Hungary) and Martin Grötschel (Germany), were *ex officio* members of the 2007-2009 ICMI EC.

The **2007-2009 ICMI Executive Committee** took charge as of January 1, 2007. It had its first meeting at the London Knowledge Lab (London, UK) on June 13-16, 2007, with the participation of the President of the International Mathematical Union (IMU), László Lovász. The meeting was launched by a discussion of the mission of ICMI. Themes included: the importance of retaining strong links with the mother organisation of ICMI, the IMU; the international nature of ICMI and a recognition of different challenges in different countries; the importance of the “Pipeline” project (see item 8 below); the need to work on a regional basis; the value of ICMI Studies; and the need to establish sound administrative and financial foundations for the organisation. As the workload incumbent to the Executive had considerably increased, the EC made substantial efforts towards a greater sharing of the duties among the committee.

The invitation to the IMU Adhering Organisations, Committees for Mathematics, and ICMI Representatives, to nominate candidates to the **ICMI Nominating Committee** and to the 2010-2012 ICMI Executive Committee, was sent in January 2007. This ICMI Nominating Committee was originally composed of Jeremy Kilpatrick (USA), chair, Michèle Artigue (France), László Lovász (Hungary), Attia Ashour (Egypt), Lee Peng Yee (Singapore), Elon

Lima (Brazil) and Evgenia Sendova (Bulgaria). But Elon Lima later withdrew from the Committee.

The **2007-2009 ICMI Executive Committee** had its second and third meetings in 2008. The EC met in Rome on March 4 and 9 on the occasion of the symposium celebrating the ICMI Centennial. On the first day of the meeting, László Lovász and Claudio Procesi, respectively President and Vice-President of the International Mathematical Union (IMU), were present. The EC also met in Monterrey on the occasion of ICME-11, on July 4-5 and 13. Two members of the IMU EC, Manuel de León and Cheryl Praeger, attended the first two days of that meeting. The regular presence of members of the IMU EC at the ICMI EC meetings is a clear reflection of the strengthening of the links between the two bodies.

The **General Assembly of ICMI** was held in Monterrey on July 6, 2008, on the day prior to the opening of ICME-11. The costs for hosting the General Assembly were generously supported by the ICME-11 organisers. For the first time, this General Assembly was responsible for the election of the ICMI Executive Committee. The Chair of the ICMI Nominating Committee for this election, Jeremy Kilpatrick, also attended the General Assembly in order to present the slate of candidates proposed by the Committee. The **2010-2012 ICMI Executive Committee** then elected is composed of:

President:	William (Bill) Barton	(New Zealand)
Vice-Presidents:	Angel Ruiz	(Costa Rica)
	Mina Teicher	(Israel)
Secretary-General:	Jaime Carvalho e Silva	(Portugal)
Members at Large:	Maria G. (Mariolina) Bartolini Bussi	(Italy)
	Sung Je Cho	(Korea)
	Roger Howe	(USA)
	Renuka Vithal	(South Africa)
	Zhang Yingbo	(China)

Again as a consequence of the shift in the ICMI EC election from the IMU GA to the ICMI GA, the term of this next EC is for three years, starting on January 1, 2010 and ending on December 31, 2012. (Starting with the next ICMI EC election, to be held in 2012, the term of office will go back to the usual four-year span.)

The **2007-2009 ICMI Executive Committee** had its fourth and final meeting in Saint-Petersburg on September 7-10, 2009. IMU was represented on this occasion by one of its ICMI liaison persons, Manuel de León. This meeting, whose local arrangements were taken in charge by the Moscow Institute of Open Education, was also the occasion of a colloquium organised by EC member Alexei Semenov and devoted to the theme “Russian School Math and Unified State Examination in an International Perspective”.

The President and Secretary-General of ICMI were invited for part of the meeting of the **Executive Committee of IMU** held in Fuzhou, China, on April 18-19, 2009. In addition to allowing the IMU EC members to receive a direct report on ICMI and its activities, this meeting was the occasion of discussing specific issues of interest to ICMI, in particular as regards ICMI regional actions and initiative towards developing countries (see item 13 below). It also allowed the examination of joint IMU/ICMI projects, (see 8 and 9 below), and to discuss the development of the ICMI Digital Library — for which IMU offers to ICMI a crucial logistic support. ICMI presented an analysis of its financial situation and made some requests in connection with the IMU 2011-2014 budget.

Since 2007, the 2007-2009 ICMI EC had had frequent discussions with the IMU EC concerning the evolution in the governance of ICMI, and the necessity to consequently revise the ICMI **Terms of Reference**. This work was completed during the last months of 2009, the revised Terms were formally adopted by the EC of IMU on December 31, 2009, while the ICMI EC adopted on the same day Guidelines pertaining to these Terms. Besides using this opportunity for making minor corrections to the Terms essentially of a cosmetic nature, this round of revision was the occasion for introducing some substantial changes in the definition of the duties and rights of those involved in ICMI. Under this new version, the ICMI Terms are now split into two parts, the first part being (as previously) under the jurisdiction of the IMU EC, while the new second part (*Guidelines for the ICMI Terms of Reference*) is under the jurisdiction of the ICMI EC. Other changes include a statement related to importance of the presence of the ICMI representatives at the ICMI General Assembly (under Clause 2), and the fact that the only members of the ICMI GA having voting rights are the representatives of Full Member countries of IMU (under Clause 3). An important new notion of *Affiliate Organization* was added to the Terms, of which the current notion of *Affiliated Study Group* is becoming one “cas de figure”. Affiliation is now possible not only for groups devoted to specific fields of interest in mathematics education, like the current five ICMI Affiliated Study Groups, but also to multi-national organizations with interest in mathematics education. (See Section 12 below.)

The **2007-2009 ICMI EC** was succeeded on January 1, 2010, by the 2010-2012 EC, elected at the ICMI General Assembly held in July 2008 on the occasion of ICME-11. In order to facilitate the passage from one EC to the next, a transition working meeting between the outgoing and incoming secretaries-general took place in Coimbra in October 2009, thus allowing for a scrutinized review of the many dossiers incumbent to the ICMI Secretary-General.

The **2010-2012 ICMI EC** had its first meeting in Auckland on 5-8 April, 2010, with IMU represented by Cheryl Praeger. Administrative results of this meeting were the splitting of the Secretary-General’s duties to make it more manageable, with Mina Teicher being appointed Financial Officer. The possibility of the President being supported by his university with a half-time administrative assistant also arose. The need for close cooperation with IMU was reaffirmed, and the continued expansion of ICMI development activities agreed upon.

2. ICMI members

In 2006, ICMI had 81 member countries, 67 of which were also members of the International Mathematical Union (IMU). The number of **countries members of ICMI** at the end of 2009 was 85, including 13 countries that are not members of IMU.

Ecuador and Kyrgyzstan have acquired in 2007 the newly created status of “Associate members” of IMU, and Kenya acquired this status as of October 2008. As of January 2008, Colombia became a full member of IMU.. Having joined IMU, these countries thus became *de facto* members of ICMI. During 2007, as a consequence of the end of the union between the republics of Serbia and of Montenegro, the corresponding membership in the IMU (and thus in ICMI) was changed from *Serbia and Montenegro* to *Serbia*. Finally, the statute of Thailand, previously a member of ICMI that was not a member of IMU, was changed to that of “Associate member” of IMU as of August 2009.

Of the 85 member countries of ICMI, 14 had at the end of 2009 no appointed **Representative to ICMI**: *Bosnia and Herzegovina, Brunei Darussalam, Colombia, Ghana, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Pakistan, Peru, Saudi Arabia, Turkey, Uruguay, Zambia.*

Still, the efforts to reinforce the links and improve communication between ICMI and its member countries, with each EC member being directly responsible for a few countries, have begun to bear fruit. A major progress in the appointment of **ICMI representatives** should be noted: close to 50 new ICMI Representatives have been appointed in recent years. 30 of these were replacements during the years 2008 and 2009, in respect of the so-called “Kobe Rule” — i.e. Resolution 5 adopted at the IMU General Assembly held in Kobe in 1990 and stipulating that ICMI representatives should normally not serve for more than two consecutive terms. (This rule is integrated in the revised version of the ICMI Terms of Reference.) This new vitality is important, since the representatives form the ICMI General Assembly which has an increased legislative role.

3. ICMEs

Due to a defect in the content of the CD accompanying the book of Proceedings of **ICME-9**, it was announced in the *ICMI Bulletin 55* that the Japanese colleagues in charge of the congress had decided to issue a revised and expanded version of the CD, to be sent to all ICME-9 participants. The shipping of the new CD took place by the end of June 2006.

Progress on the Proceedings of **ICME-10** was delayed due to health problems of a key member of the editorial team, but the publication finally appeared in 2008. It was sent to all ICME-10 participants and also made available on line on the website of the congress.

The 11th International Congress on Mathematical Education, **ICME-11**, was held in Monterrey, México, from July 6 to 13, 2008. The International Program Committee and the Local Organising Committee were respectively chaired by Marcela Santillán and Carlos Signoret. The local preparation of ICME-11 benefited from the strong support of the Sociedad Matemática Mexicana. The International Programme Committee (IPC) had its second and final meeting in Monterrey on January 27-30, 2007. Information about the congress is still available on the website <http://icme11.org/>.

ICME-11 was attended by 2526 participants from 88 different countries, plus 180 accompanying persons. As the tradition has it since ICME-8, the ICME-11 organisers had made the commitment of devoting at least 10% of the registration fees to the ICME Solidarity Fund. This provided for an amount of 177 300 USD which, combined to a grant of 35 000 USD received from NCTM (USA), allowed to offer partial support to more than 150 participants from 41 non-affluent countries. The distribution of the money generated for the Fund was made by a Grant Committee, jointly appointed by the congress organisers and the ICMI Executive Committee, which worked autonomously and anonymously in order to minimize potential problems of pressure. The ICME-11 Congress, held for the first time in Latin America and in a country from the periphery, was a very successful event both from a scientific and social point of view.

At the opening ceremony of ICME-11, the 2005 and 2007 Felix Klein and Hans Freudenthal Medals were presented to the awardees: Ubiratan D’Ambrosio (Brazil) and Jeremy Kilpatrick (USA) — Felix Klein Medal; Paul Cobb (USA) and Anna Sfard (Israel) — Hans Freudenthal Medal.

The preparation of the Proceedings of **ICME-11** has met with substantial delay with respect to the planned schedule, and the past-ICMI EC met some difficulties at maintaining communication with those in charge of the preparation in Mexico, but as of May, 2010, the process has been re-established by the new ICMI EC and publication should occur around the end of 2010 or early 2011, as initially planned.

A call for bids to host **ICME-12** in 2012 was made in July 2004, and published in the *ICMI Bulletin* (No. 55, December 2004). Three official bids were received by the deadline of November 2006, from China (Shanghai), Korea (Seoul) and South Africa (Durban). Visits to the three sites by President Michèle Artigue, Vice-President Bill Barton and Secretary-General Bernard R. Hodgson, took place in March 2007 (Shanghai and Seoul) and May 2007 (Durban). The bids were discussed by the ICMI EC at its meeting in London in June 2007, and a final decision was made in December 2007. The high quality of the three proposed bids made the EC decision task especially difficult. As two members of the 2007-2009 ICMI EC (Jill Adler and Frederick Leung) were from countries submitting a bid for ICME-12, so the following two principles were agreed upon by the EC: (i) at no point should an EC member from a bidding country participate in any discussion relating to evaluation of the bids, or have access to information about the competing bids; (ii) no EC member may be a member of the committee that formally presents a bid to ICMI (although an EC member could be involved in the reflection leading to the decision by a country to submit or not a bid).

The ICMI Executive Committee announced by the end of 2007 its decision to accept the invitation from Korea to host ICME-12 in 2012. The congress will take place in the COEX Convention Centre, in Seoul, on July 8-15, 2012. A Korean delegation was present at ICME-11 to provide information on the 2012 ICME. The ICMI Executive Committee has expressed its deepest gratitude to the mathematics education and mathematics communities in the three bidding countries, and especially to the three persons who chaired the committees that prepared the bids, namely Professors Jianpan Wang (China), Sung Je Cho (Korea) and Renuka Vithal (South Africa).

The International Programme Committee of **ICME-12** is chaired by Professor Sung Je Cho, of Seoul National University. This IPC, whose composition is announced the *ICMI Bulletin No. 63*, had its first meeting in Seoul on June 14-17, 2009. A first set of decisions was made during the meeting, regarding in particular the plenary activities of the congress as well as the list of Topic Study Groups. It was also decided to reorganise the functioning of some of the activities, such as the Discussion Groups. The second IPC meeting will be held in February 2011. Up to date information about the congress and the First Announcement is available at <http://www.icme12.org>. Registration fees will be of 400 USD, which brings a welcome substantial reduction to these fees as compared to recent ICMEs.

A call for bids for **ICME-13**, to be held in 2016, was made by the Secretary-General at the closing ceremony of ICME-11 and in the *ICMI Bulletin (No. 63)*. Potential bidders were invited to announce their intention by November 1, 2009, and three countries did so. Formal bids are due by November 1, 2010, with the decision for ICME-13 to be announced by the end of 2011.

4. ICMI Studies

Two new ICMI Studies were launched in 2006-2009. By mid 2010 the situation is as follows.

- **ICMI Study 13:** *Mathematics Education in Different Cultural Traditions: A Comparative Study of East-Asia and the West*
 The ICMI Study volume has appeared early in 2006 in the New ICMI Study Series; eds: Klaus-Dieter Graf, Frederick K.S. Leung and Francis Lopez-Real. (NISS 9)
- **ICMI Study 14:** *Applications and Modelling in Mathematics Education*
 The Study volume appeared in 2007 in the **New ICMI Study Series** under the editorship of Werner Blum, Peter Galbraith, Hans-Wolfgang Hehn and Mogens Niss. (NISS 10)
- **ICMI Study 15:** *The Professional Education and Development of Teachers of Mathematics*
 The Study volume appeared in 2009 in the **New ICMI Study Series** under the editorship of the two co-chairs, Deborah Ball and Ruhama Even. (NISS 11)
- **ICMI Study 16:** *Challenging Mathematics in and beyond the Classroom*
 The Study Conference was held at the Norwegian University of Science and Technology, in Trondheim, Norway, on June 27 to July 3, 2006. It was attended by 44 participants from 22 different countries. The Study volume appeared in 2009 in the **New ICMI Study Series** under the editorship of the Study co-chairs Edward J. Barbeau and Peter J. Taylor. (NISS 12)
- **ICMI Study 17:** *Digital Technologies and Mathematics Teaching and Learning: Rethinking the Terrain*
 The 17th ICMI Study conference, held at Hanoi University of Technology, Viet Nam, on December 3-8, 2006, was attended by 130 participants from 34 different countries, including 36 Vietnamese participants. A workshop associated with the conference and intended for local and regional teachers was attended by 44 teachers from Viet Nam, 3 teachers from Cambodia and 2 teachers from Thailand. The Study conference and the workshop were financially supported by the ICMI Solidarity Fund (2 000 USD), IMU Developing Countries Strategy Group — DCSG (5 000 USD) and UNESCO (3 000 USD), as well as by five private sponsors involved in the workshop (9 000 USD altogether). Moreover CIMPA contributed to the participation of the Cambodian and Thai teachers to the workshop.
 The Study 17 conference was saddened by a tragic traffic accident to the opening keynote speaker, Seymour Papert, who was severely injured when hit by a motorcycle while crossing a street on his way to Hanoi University of Technology.
 The Study co-chairs Celia Hoyles and Jean-Baptiste Lagrange were responsible for the editorial work on the NISS Study volume. The ICMI Study volume, dated 2010, appeared late in 2009 in the New ICMI Study Series. (NISS 13)
- **ICMI Study 18:** *Statistics Education in School Mathematics: Challenges for Teaching and Teacher Education*
 This Study is organised jointly with the International Association for Statistical Education (IASE), and its International Programme Committee is chaired by Carmen Batanero. The IPC had a meeting on the occasion of the ICOTS-7 conference in Salvador da Bahia, Brazil, in July 2006 and the Discussion Document for the Study was posted on the Study website by mid-September 2006. The Study Conference, which was merged with an IASE Round Table Conference, took place on June 30-July 4, 2008, at the Instituto Tecnológico y de Estudios Superiores, in Monterrey, México, as a satellite conference to ICME-11. The conference was attended by more than 100 participants from 25 different countries.

The NISS volume is in preparation under the editorship of Carmen Batanero, chair of the International Programme Committee, together with Gail Burrill and Chris Reading. It is expected to appear in 2011. (NISS 14)

- **ICMI Study 19:** *The Role of Mathematical Reasoning and Proving in Mathematics Education*

The International Programme Committee for the 19th ICMI Study is co-chaired by Gila Hanna and Michael de Villiers. The appointment of the IPC was finalised early in 2007 and the Committee met at the Universität Duisburg-Essen in November 2007. The Discussion Document for this Study was disseminated by the end of 2007. The International Programme Committee met for a second time in November 2008 to finalise the programme of the Study conference. This conference was held at the National Taiwan Normal University, in Taipei, Taiwan, on May 10-15, 2009. It was attended by 131 participants coming from more than 30 different countries. The NISS volume is currently in preparation under the editorship of the two co-chairs, Gila Hanna and Michael de Villiers, with publication expected in 2011 as well. (NISS 15)

The 2007-2009 Executive Committee decided in 2008 to launch two new Studies. The **20th ICMI Study:** *Educational Interfaces between Mathematics and Industry* is organised jointly with the International Council for Industrial and Applied Mathematics (ICIAM). The IPC is co-chaired by Alain Damlamian (Université Paris-Est) and Rudolf Sträßer (Justus-Liebig-Universität Gießen). The IPC met in October 2008 and the Discussion Document was available early in 2009. José Francisco Rodrigues (Universidade de Lisboa) is the Local Organiser for the Study Conference, originally planned for Lisbon in April 2010, but, since the Icelandic ash cloud prevented this, now scheduled to take place on 11-15 October, 2010. The aim is to launch the Study volume during the 7th International Congress on Industrial and Applied Mathematics (ICIAM 2011), to be held in July 2011, in Vancouver, Canada.

The **21st Study**, entitled *Mathematics Education and Language Diversity*, has co-chairs Mamokgethi Setati (University of Pretoria) and Maria do Carmo Domite (Universidade de São Paulo). The first meeting of the IPC was held in February 2009 and the Discussion Document was available early in 2010. The website is www.icmi-21.co.za, and the Study Conference is planned for Águas de Lindóia, São Paulo, Brazil, on 16-20 September, 2011.

The 2010-2012 Executive Committee will be launching a new Study late in 2010 on Task Design, and another on a Primary Mathematics topic in 2011.

At its November 2006 meeting, the ICMI EC considered the report prepared by Steve Lerman about the ICMI Study programme and its accomplishments since its inception in the mid 1980s. EC member Peter Galbraith wrote a paper summarising the recommendations of the EC for the benefit of co-chairs of future Studies. This document appeared in *ICMI Bulletin No. 59*.

The ICMI EC completed successfully in 2008 negotiation with Springer for the renewal of the **contract for the NISS series**, the previous contract going back to 2000. Besides maintaining current conditions such as the 60 % discount available to members of the ICMI community for personal purchases of NISS volumes and the number of free copies provided to ICMI (81), the contract contains an increase in the royalties and posting the content of the NISS volumes freely accessible on ICMI website, after 3 years.. An amendment to the contract is currently being negotiated to take care of legal complications around non-English language rights.

Considering the global difficult financial situation of ICMI, it had been decided at the December 2005 meeting of the ICMI EC that the royalties on the sales of volumes of the NISS series should from then on be payable to ICMI. As a consequence of this policy, royalties of 1146,61 USD were received by ICMI from Springer in 2009 and 1619,79 USD in 2010.

5. ICMI Regional Conferences

Several Regional Conferences to which the ICMI EC has granted the status of ICMI Regional Conference were held in the period 2006-2010.

- **EMF 2006** (*Espace mathématique francophone 2006*) took place at the University of Sherbrooke, Québec, Canada, on May 27-31, 2006. It was the third in this series, the first two having been held in Grenoble, France (2000) and Tozeur, Tunisia (2003). EMF 2006 gathered 258 participants from 17 different countries, including 8 African and 6 European countries. It was scheduled close to the annual meetings of two teachers' associations from the province of Québec, with one day common to the three conferences that brought together nearly 800 participants. A report on EMF 2006 appears in the *ICMI Bulletin* 59 (December 2006).
- **AFRICME 2** (the *Second Africa Regional Congress of ICMI on Mathematical Education*) took place at the Catholic University of Eastern Africa, Nairobi, Kenya, on May 23-26, 2007. It was the second in this series that aims at offering a forum for mathematics educators throughout Africa, the previous one having been held in Johannesburg, South Africa, in 2005. AFRICME 2 gathered 87 participants from 14 different countries, including the following African countries: Botswana, Burkina Faso, Kenya, Malawi, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Uganda and Zimbabwe. A report on AFRICME 2 appears in the *ICMI Bulletin* 60 (June 2007).
- **ICMI-EARCOME-4** (the *Fourth ICMI East Asia Regional Conference in Mathematics Education*) was held in Penang, Malaysia, on June 16-22, 2007. It was organised by the University Sains Malaysia and attracted a total of 409 participants, including 156 foreign participants from 22 countries, 169 local mathematics educators and teachers, and 25 foreign and 28 local postgraduate students. A report on EARCOME-4 appears in the *ICMI Bulletin* 61 (December 2007).
- **XII CIAEM** (the *Twelfth Inter-American Conference on Mathematical Education — Conferencia interamericana de educación matemática*) took place in Querétaro, México, on July 15-18, 2007. The congress, whose main theme was *Educación matemática: historia y prospectiva*, was attended by more than 600 participants. A report appears in the *ICMI Bulletin* 61 (December 2007).
- **EMF 2009** (*Espace mathématique francophone 2009*) took place in Dakar, Senegal, on April 6-10, 2009. It gathered more than three hundred teachers and researchers coming from twenty countries, among which twelve from Africa. The importance given to this Conference by the Senegalese authorities can be seen through the presence at a special opening session of the president of Senegal, Abdoulaye Wade, who stressed to the participants the crucial role played by mathematics and its teaching in preparing the future of his country and region. Himself trained as a mathematician, the president offered to each participant a copy of his book on the mathematics of economic analysis. The EMF 2009 conference was organised with a financial support from UNESCO which allowed to

cover part of the expenses of nine participants. A report on EMF 2009 appears in the *ICMI Bulletin* no. 64 (June 2009).

- **AFRICME 3** (the *Third Africa Regional Congress of ICMI on Mathematical Education*) took place at the University of Botswana, Gaborone, Botswana, on May 17-21, 2010. AFRICME 3 gathered 121 participants from 14 different countries, including 15 teachers.

The ICMI EC has granted the status of ICMI Regional Conference to the following coming conferences:

- **ICMI-EARCOME-5** conference (the *Fifth ICMI East Asia Regional Conference in Mathematics Education*), to be held in Tokyo in August 2010. The ICMI EC is represented on the International Programme Committee of this conference by Frederick Leung.
- **XIII CIAEM** (Conferencia interamericana de educación matemática), to take place in Recife, Brasil, on June 26-30, 2011. This meeting will coincide with the 50th anniversary of the *Comité Interamericano de Educación Matemática* (CIAEM), an organisation recently affiliated to ICMI (see section 12 below). The ICMI EC is represented on the International Programme Committee by Michèle Artigue and Bernard R. Hodgson.
- **EMF 2012** (Espace mathématique francophone), to be held in Geneva, Switzerland, in 2012. The ICMI EC is represented on the International Programme Committee of EMF 2012 by Bernard R. Hodgson and Jaime Carvalho e Silva.

The ICMI EC sees very positively the development of mathematics education networks both in the English and French-speaking countries of Africa, Asia and the Americas.

6. ICMI Centennial

The year 2008 marked the **centennial of ICMI**, as the Commission was established during the Fourth International Congress on Mathematical Education. An international symposium, entitled “The First Century of the International Commission on Mathematical Instruction: Reflecting and Shaping the World of Mathematics Education”, was held in Rome, on March 5-8, 2008 (see <http://www.unige.ch/math/EnsMath/Rome2008/>) supported by special grants from UNESCO and IMU. The International Programme Committee was chaired by Ferdinando Arzarello, while Marta Menghini represented the Organising Committee within the IPC. Palazzo Corsini, home of the Accademia Nazionale dei Lincei and the birth place of ICMI, and Palazzo Mattei di Paganica, home of the Enciclopedia Italiana, were the splendid venues for the symposium. Some 200 participants from 43 countries took part.

Taking as a point of departure the themes connected to ICMI activities over the course of its hundred year history (reforms in teaching of the sciences, preparation of teachers, relationships between mathematicians and researchers in mathematics education, etc.), the symposium sought to identify the future directions of research in didactics and possible initiatives for improving the level of mathematical culture in the various countries. The symposium was subdivided into ten plenary talks, eight parallel talks, five working groups, and an afternoon reserved for Italian teachers, with lectures by scholars from Italy and abroad. The talks on the “Italian afternoon” were broadcast via videoconference to fifty schools throughout Italy. The symposium ended with an excursion which, like a hundred years ago,

took participants to visit the Villa d'Este at Tivoli and Hadrian's Villa, both rich in historical grandeur.

On the occasion of the congress a website dedicated to the history of ICMI was created under the direction of Fulvia Furinghetti and Livia Giacardi. It delineates the most significant events and key figures through documents, images and interviews. The symposium proceedings *The first century of the International Commission on Mathematical Instruction (1908-2008). Reflecting and shaping the world of mathematics education* have appeared in the "Collana Scienze e Filosofia" of the Istituto della Enciclopedia Italiana, (Roma, 2008). These proceedings will be made freely accessible on line no later than by the end of 2011. The talks of the Italian afternoon have been published in the journal *Progetto Alice*. Furthermore, the *International Journal for the History of Mathematics Education*, edited by Gert Schubring, has published as its vol. 3 no. 2 (2008) a special issue on the history of ICMI, inspired by the work carried out for celebrating ICMI Centennial. More information on this publication can be obtained on the [IJHME website](#).

The development of the website dedicated to the history of ICMI and launched on the occasion of the ICMI centennial celebration was pursued in 2009 under the direction of Fulvia Furinghetti and Livia Giacardi. ICMI has provided a grant of 1000 € to support this work <<http://www.icmihistory.unito.it/>>

7. UNESCO/ICMI Exhibition

Over the last years, ICMI has been sponsoring, jointly with UNESCO and other bodies, the development of a mathematical exhibition entitled "**Experiencing mathematics**", whose aim is to improve the image of mathematics among the general public. Three copies of the exhibition are now available and are being circulated internationally under UNESCO and ICMI auspices. Specific support for its presentation in various regions has been given in recent years by IMU (1500 USD in 2007 and 3000 USD in 2008) and by ICMI (2500 USD in 2009). Support for the exhibition has also been provided by CIMPA and the French Ministry of Foreign Affairs.

The 2006 programme of travel included Namibia (15 towns, including Windhoek) — this marked the end of a one-year Austral Africa tour —, Thailand (Bangkok), Laos (Vientiane, Pakse et Luang Prabang), Viet Nam (Danang and Ho Chi Minh City), Spain (Madrid), where it was shown during and after the International Congress of Mathematicians in the Centro cultural Conde Duque (more than 30 000 visitors), and France (Lyon). The 2007 programme of travel included Cambodia (4 cities), Singapore (35 000 visitors), Viet Nam (two cities), Santiago de Chile, Lebanon (Beirut and Saida), India (Dehli, Kolkata, Bangalore, Mumbai), France, Portugal, Poland (Warsaw and Kraków) and Switzerland (Basel) in connection with the celebration of the 300th anniversary of Euler.

During 2008, the first set of the exhibition travelled in Latin America. The travel started in Chile in October 2007, and pursued with Colombia (Bogotá), México (Mexico City and Monterrey, including the period of ICME-11), Paraguay (San Lorenzo, Villarica, Asunción) and Argentina (Buenos Aires, Tandil, Rosario, Tucuman). The number of visitors is estimated at 150 000 for this travel. In 2009, it was presented in Argentina (Buenos Aires, Tandil, Rosario et Tucuman) until March, and then, from April to November, in ten cities in Brasil, from Recife to Belo Horizonte. The presentations in Brasil were carried out in cooperation with CONSECTI-CONFAP (the National Council of Ministers for Science,

Technology and Innovation, and the National Council of State Foundations for Support to Research), as well as the Brazilian Association of Science Centres and Museums (ABCMC). The exhibition finished its circulation in Latin America by returning to Santiago of Chile (Santiago University) for the first quarter of 2010. It will then be in Cordoba (Spain) in September-October on the occasion of the XIII Congreso de Enseñanza y Aprendizaje de las Matemáticas of the THALES society (Sociedad Andaluza de Educación Matemática THALES).

The second set travelled in Asia, including India, Pakistan, and the Philippines in 2008, and these presentations were pursued with a 18-month travel in Korea, with the support of NateSystem and KIDP (Korean Institute of Design Promotion). The exhibition was first in Seoul from June to October 2009, and then presented in five other cities. The Korean journey will end in October 2010.

The third set of the exhibition travelled in 2008 for six months in Portugal. The exhibition also travelled in Turkey on the occasion of the fiftieth anniversary of Anadolu University, and with its support. It was presented in Eskisehir, Izmir and Ankara. The exhibit was then brought to West Africa, on the occasion of EMF 2009 held in April in Senegal. It has circulated in four cities in Senegal, after which it was brought to Benin (Cotonou) in October-November. Travel plans inside Africa for 2010 include Burkina Faso, where it will be visiting three cities in three months, with the support of local mathematicians and mathematics educators, and Niger.

To this must be added the development of a virtual exhibition in four different languages, connected to the one existing physically and aimed at secondary school mathematics teachers. This development was completed during the first months of 2008 and the official opening of this additional component took place in Angola in March 2008, with a specific training workshop for teachers sponsored by UNESCO and the Ministry of Education (see <www.ExperiencingMaths.org>). It was used again in Angola for a session of preparation of trainers who themselves, in turn, trained 80 mathematics teachers from four regions in the country in 2009. Each of the teachers received a CDrom.

On the whole, during 2009, the exhibition was presented in eighteen cities within five countries and has been seen by more than 140 000 visitors, 80% of school or student public. Since its first presentation in 2004, the exhibition has been presented in some 100 cities from 30 different countries, and has welcomed more than one million visitors, including 75% of school or student public. The year 2009 is the second best year of attendance since the launching of the exhibition.

8. Pipeline Project

The “**Pipeline Project**” was launched jointly in 2004 by IMU and ICMI in reaction to the perceived decline in the numbers and quality of students who are choosing to pursue mathematics study at the university level, as well as the inadequate supply of mathematically qualified students choosing to become mathematics teachers in the schools. The task force appointed to run this project, chaired by 2003-2009 ICMI EC member Frederick Leung, had a meeting in April 2007 at the Headquarters of the American Mathematics Society (AMS) in Providence, US. The work on the Pipeline project was connected to that of the Survey Team for ICME-11, chaired by Derek Holton (New Zealand), on the topic of “Recruitment, entrance and retention of students to university mathematical studies in different countries”. A meeting

of a project team (including Derek Holton, in charge of the ICME-11 Survey Team) was held in Rome in March 2008. It was then agreed that a Case Study approach was the only one feasible, and it was decided to focus around four transition points using data from eight pilot countries. The Survey Team not only reported at Monterrey in July, but most of its findings were collected together into a Special Issue of the *International Journal of Mathematical Education in Science and Technology* 40(1), published in January, 2009, devoted to the theme “Recruitment, Entrance and Retention of Students to University Mathematics Studies in Different Countries”, under the guest editorship of Derek Holton.

The main problem for the Pipeline Project is the size of the task. The data mining that is necessary to obtain consistent, long-term data of a standard that enables it to be analysed for trends even within one country, let alone internationally, requires a very large investment of time. Each of the participating pilot countries was requested to find people who would be able to work on the project. It was only in August 2008 that any full-time person became available. Louise Sheryn, a post-doctoral researcher at the University of Auckland, was employed to work on the New Zealand Pipeline data. No other countries have managed to find or fund a Pipeline Researcher. As a result, the directorship of the project shifted to New Zealand, where Bill Barton agreed to direct the project to the end of its Pilot Phase, involving the eight pilot countries: Australia, Finland, France, Korea, New Zealand, Portugal, United Kingdom and USA. A Moodle site for contributors was established, and complementary searches for relevant data for the pilot countries undertaken. In October 2009, a presentation was made to the conference on *Paradigms in Mathematics Education for the XXI Century* in Valencia.

The pilot phase of the Pipeline Project ended at the end of 2009, and a report for IMU and ICMI is under preparation. The emerging picture is that, worldwide, there may not be a crisis in the numbers of mathematically qualified students, but that there is a crisis in some of the pilot countries. It is evident that the numbers of such students in universities is susceptible to changes in school curricula and examination systems.

9. The Klein Project

The Klein Project was first mentioned during the June 2007 Executive Meeting of ICMI in the context of a discussion about worthwhile projects that would bind the mathematicians and mathematics educators communities. The idea of this project is to revisit the vision of Felix Klein presented in his book *Elementary Mathematics from an Advanced Standpoint*, first published a century ago. Klein’s aim was to provide prospective senior secondary teachers with a book that would lay out the connections between the curricula they would be teaching and research mathematics. It was intended as a stimulus for new teachers, to help them connect their university mathematics education with school mathematics.

The reflections of the ICMI EC on this project were pursued in conjunction with the IMU EC. It was decided to form a Design Team of 8 people who would be responsible for the project. The composition of this team, chaired by Bill Barton, was decided by the end of 2008.

The project will have three outputs: a book simultaneously published in several languages, a resource DVD for teachers, and a website. The book will be a presentation of the field of mathematics in relation to school curricula and its intended audience is senior secondary teachers. It will be accessibly written, stimulating, and have a wide coverage (“mathematics” in this context is to be broadly conceived to include statistics, applied mathematics, aspects of

computer science and engineering science). Finally the website is intended to be a vehicle for the many people who wish to contribute to the project in an on-going way. It will be wiki-based so that it may be continually updated.

The first meeting of the Design Group took place in Paris, in May 2009. The second meeting was in Auckland in April 2010, and a third in Spain in May, 2010. Several Klein conferences have already taken place: in Madeira, Portugal (October, 2009), in Castro-Urdales, Spain (June 2010), and in Belo Horizonte, Brasil (July 2010). Additionally, a UK Klein Workshop has been held at Oxford University in June 2010, and a special Klein session will be organized at Mathfest 2010 in Pittsburg (USA) in August.

The wiki site has been launched, and more information on the project and its evolution can be found there. It can be accessed at <www.kleinproject.org>.

10. Collaboration with UNESCO

A nice evolution in the ICMI context for action in recent years is the renewal and strengthening of the relationships with **UNESCO**, which had been identified as an important objective by the 1999-2002 ICMI EC. A major component of this renewed collaboration is of course the exhibition “Experiencing mathematics” mentioned above. Also UNESCO has recently been sponsoring several ICMI actions, especially as they concern the developing world — for instance grants have been given directly to ICMI to facilitate the attendance from non-affluent countries to the ICMI Study 17 conference held in Hanoi in 2006, or the ICMI Centennial Symposium held in Rome in 2008. In 2009, a grant of 5000 USD was provided by UNESCO for the conference of the Francophone network for mathematics education (EMF) held in Dakar.

In 2009, ICMI President Michèle Artigue was invited to be part of a meeting of experts organized by UNESCO in Paris at the end of March about the policies of mathematics and science education. She was asked to contribute to a document on “The challenges of mathematics and science basic education”, to be published and disseminated by UNESCO in French, English and Spanish, by taking responsibility for the section on mathematics education. The document — 34 pages plus 14 appendices — has been delivered to UNESCO at the end of July, 2009, and translation assistance into English also provided. It is due to be published later in 2010. The ICMI EC has affirmed this document as a position statement on Mathematics Education for its own purposes.

Arising from this interaction, further negotiations are currently under way for a project to enhance mathematics capacity in developing regions.

11. ICMI Affiliate Organizations

As indicated in section 1 above, the Terms of Reference of ICMI were amended in 2009 to allow affiliation to ICMI not only of study groups focussing on a specific field of interest in mathematics education, as has been the case since 1976, but also of multi-national mathematical education societies, or of multi-national societies having a formal mathematical education subgroup. The **CIAEM** (Comité Interamericano de Educación Matemática / Inter-American Committee on Mathematical Education) became the first organisation to make use of this new mode of affiliation to ICMI, approved in December 2009 by the 2007-2009 ICMI

EC and the Executive Committee of CIAEM. The 2010-2012 Executive Committee approved affiliation in April 2010 with two other multi-national organisations: **CIEAEM** (*Commission Internationale pour l'Étude et l'Amélioration de l'Enseignement des Mathématiques / International Commission for the Study and Improvement of Mathematics Teaching*) and **ERME** (*European Society for Research in Mathematics Education*).

CIAEM, CIEAEM and ERME thus join the five other organisations that were already affiliated to ICMI (under the umbrella of “Study Groups”), namely (in the chronological order of their affiliation to ICMI) **HPM** (The International Study Group on the Relations Between the History and Pedagogy of Mathematics) and **PME** (The International Group for the Psychology of Mathematics Education) — 1976, **IOWME** (The International Organization of Women and Mathematics Education) — 1987, **WFNMC** (The World Federation of National Mathematics Competitions) — 1994 and **ICTMA** (The International Study Group for Mathematical Modelling and Applications) — 2003.

The five ICMI Study Groups appeared on the programme of ICME-11. The President and Secretary-General of ICMI were invited to one of the WFNMC sessions, where the Paul Erdős Medal awarded by this Affiliated Study Group were delivered by the ICMI President to Hans-Dietrich Gronau from Germany, Bruce Henry from Australia, Leou Shian from Taiwan, and Ali Rejali from Iran.

HPM and PME held conferences as satellite meetings of ICME-11. HPM 2008 took place in the Centro Cultural del México Contemporáneo, Mexico City, México, on July 14-18, while PME 32 was held jointly with PME-NA XXX in Morelia, México, on July 17-21. These two conferences welcomed respectively about 150 and 450 participants.

More information about the activities of the ICMI Affiliated Study Groups can be found in the reports they produced for the ICMI GA in 2008, published in the *ICMI Bulletin 62* (June 2008) and in their respective websites.

12. ICMI Solidarity actions

ICMI maintained in 2006 its actions for developing countries, in particular in collaboration with IMU **Developing Countries Strategy Group (DCSG)** which aimed at increasing, guiding and coordinating IMU's activities in support of mathematics and mathematics education in the developing world. ICMI was then represented in the DCSG by Vice-President Michèle Artigue. At its June 2007 meeting, the 2007-2009 ICMI EC decided that Vice-President Jill Adler would replace Michèle Artigue as the ICMI representative on the IMU DCSG and later, once created, on the new IMU structure, namely the Committee for Developing Countries (CDC).

Activities related to ICMI have received financial support from IMU, through the DCSG and CDE. The DCSG provided a grant of 5 000 USD for the teachers' workshop organised in Hanoi on the occasion of ICMI Study 17. The ICMI Regional Conference AFRICME-2, held in Nairobi, Kenya, was given 4000 USD and AFRICME-3 (Botswana, 2010) received 5000 USD from IMU CDC. As mentioned above, the presentation of the mathematical exhibition “Experiencing Mathematics” in Latin America was supported by a grant of 3000 USD, and its travel to Cambodia, by a grant of 1500 USD (this support was for the organization of a one-day workshop on the theme “The Usefulness of Mathematics”, that took place in Battambang, on 9 March 2007. Two Vietnamese teachers who had taken part in the

ICMI Study 17 Conference in Hanoi, in December 2006, were invited to the 2007 International Seminar of the Park City Mathematics Institute organized by the Institute for Advanced Study (Princeton USA).

In 2007, complementing the work undertaken within the frame of the ICMI Regional Conference AFRICME-1, a report regarding the situation of teacher education in twelve African countries was published under the supervision of Vice-President Jill Adler (*Mathematics Teacher Education : Trends Across Twelve African Countries*, Jill Adler *et al.*, Eds, Marang Centre for Mathematics and Science Education, Wits University, Johannesburg, 2007).

In 2008, ICMI contributed to the work undertaken by the Developing Countries Strategy Group of IMU in order to identify mathematical resources in Africa. ICMI participated, with the collaboration of Vice-President Adler, to a report on *Mathematics in Africa: Challenges and Opportunities* prepared by the DCSG and submitted in February 2009 to the John Templeton Foundation. Together with colleagues from the Marang Centre at Wits University, she produced, a report on the state of mathematics education in some selected countries with particular interest in possibilities for identifying and supporting talented or gifted mathematics students in the 10-18 years age group. The countries involved were Burkina Faso, the Democratic Republic of the Congo, Ghana, Kenya, Lesotho, Malawi, Mozambique, Nigeria, Rwanda, South Africa, Swaziland, Tanzania, Tunisia, Uganda, Zambia, and Zimbabwe.

Together with its French sub-commission (CFEM), ICMI was involved in the fourth Conference of the Francophone Mathematics Space (*Espace mathématique francophone — EMF 2009*) held in Dakar in April 2009 (see section 5 above). On this occasion, eleven participants representing eight countries met twice during the conference to launch the basis of a network of researchers in mathematics education among Francophone African countries. Further discussions on the establishment of the RADMA (*Réseau africain de didactique des mathématiques*) were held on two occasions later in 2009: in August in Yamoussoukro, during the 7th PACOM (see below) and in October in Abidjan, during a conference on research in mathematics and science education. ICMI was represented at both these meetings.

Following the invitation made to the President of ICMI to give a lecture at the second Pan African Space on Mathematics conference, devoted to mathematics education in African countries and held in Hammamet, Tunisia, in November 2008, the Executive of the African Mathematical Union (AMU) was, at the invitation of ICMI, represented at the EMF 2009 conference. Lectures were given by Nouzha El Yacoubi, Secretary of AMU, and Daouda Sangaré, editor of *Afrika Matematika*, the journal of the AMU. Reciprocally, the Secretary-General of ICMI was invited to give a lecture about ICMI and its activities during the 7th Pan African Congress of Mathematicians (PACOM), held in Yamoussoukro, Ivory Coast, on August 3-8, 2009.

A report to the 2007-2009 ICMI EC was presented by Vice-Presidents Jill Adler and Bill Barton at the meeting held in Saint-Petersburg, with the aim of reviving the activities of the **ICMI Solidarity Fund**. It was stressed that the original idea of the Fund, when established at the suggestion of President Miguel de Guzmán in 1992, was not to support individual attendance to ICMI events of people who otherwise found it difficult, but rather to promote the furtherance of networking by facilitating visits to developing countries to run various programmes associated with mathematics and mathematics education. Connections were made with the past actions of the Funds and with the recommendations prepared in 2004 by Alan Bishop at the ICMI EC request. It was also noted that a major component of the

Solidarity Program of ICMI is happening via the support given at each ICME, since ICME-8 in 1996, to participants from non-affluent countries (this support is now well over 100 000 USD), as well as the support provided at each Study conference.

It was proposed in the report to continue the Fund within the broad terms of supporting mathematics education activities in developing countries, but to relaunch it and use the existing funds (of the order of 40 000 USD) with some given specific focus. The funding of activities that involve networking was seen as liable to have good long-term benefits and should be prioritised. In particular, anything that supports associate or lapsed membership of ICMI of developing countries into becoming strong and participating members should be favoured. The rationale is that this will maximise the individual benefits by making it possible for a large number of people to participate in, and gain benefit from, wider ICMI activities. The 2010-2012 Executive Committee has determined that the development of the Solidarity Fund must be considered in the more global context of a deeper discussion about the global long-term financing of ICMI and of its activities.

13. The ICMI Awards

The two recipients of the **ICMI Awards in mathematics education research** for the year 2005 were announced in a press release issued on April 3, 2006 (see *ICMI Bulletin* No. 58, June 2006, pp. 6-10). The awardees are Ubiratan D'Ambrosio for the 2005 Felix Klein Medal, and Paul Cobb for the 2005 Hans Freudenthal Medal.

ICMI Vice-President Michèle Artigue ended in 2006 her term as the first chair the **ICMI Award Committee**, responsible for selecting the recipients of the Awards. In addition, Richard Noss and Anna Sfard also completed their term on the Committee. A report from the Award Committee about the functioning of the selection process for the first two sets of awards was submitted to the 2003-2006 ICMI EC at its last meeting in November 2006. It should be noted that the Award Committee agreed on the following ethical rule: once the Committee decides to include in its lists of nominees an individual close to one of its members, that member is then excluded from all exchanges and discussions regarding the corresponding award. This was the case for Richard Noss with respect the 2003 Freudenthal award, finally given to Celia Hoyles.

Mogens Niss has been appointed in 2007 as the chair of the ICMI Award Committee and new members have been added to bring its membership to six (three members completing the second half of their eight-year term and three beginning a new term, for eight years as well).

The two recipients of the ICMI Awards for the year 2007 were announced in a press release issued on April 1, 2008 (see *ICMI Bulletin* No. 62, June 2008, pp. 6-11). The awardees are Jeremy Kilpatrick for the 2007 Felix Klein Medal, and Anna Sfard for the 2007 Hans Freudenthal Medal. During the opening ceremony of ICME-11, held in Monterrey in July 2008, the 2005 and 2007 ICMI Awards were formally presented to Ubiratan D'Ambrosio (Klein 2005), Jeremy Kilpatrick (Klein 2007), Paul Cobb (Freudenthal 2005) and Anna Sfard (Freudenthal 2007). As a tangible token of recognition, each awardee received a certificate and a medal. Moreover regular lectures by the awardees were on the programme of ICME-11.

A call for nominations for the fourth cycle of the ICMI Awards was made in June 2009 by the chair of the ICMI Award Committee, Mogens Niss. The announcement of the 2009 ICMI

Awards was made in February, 2010. The 2009 Felix Klein Medal is awarded to Gilah Leder, and the Hans Freudenthal Medal to Yves Chevallard. The awards will be presented to the recipients in 2012 at the opening ceremony of ICME-12 in Seoul, together with the 2011 ICMI Awards.

14. IMU/ICMI Digitisation Programme

In the context of IMU programme of open access to IMU publications, ICMI was offered support from the IMU Committee on Electronic Information and Communication (CEIC) for a similar project as regards ICMI publications. The aim is that the **ICMI Digital Library** would eventually make available freely online all the ICMI material. The ICMI EC is grateful to IMU for its exceptional support in this endeavour.

During 2008, the digitisation of all issues of the *ICMI Bulletin* was completed and work on the ICMI Study volumes began. Simultaneously negotiations were pursued with the copyright owners on that material so to obtain permission of making the material freely available. The case of the more recent Study volumes was positively resolved during the negotiations for the renewal of the NISS series contract with Springer (see section 4 above).

The **ICMI Digital Library** was officially launched on July 1, 2009, with the posting online of the Proceedings of the symposium organised in 2000 on the occasion of the centennial of *L'Enseignement Mathématique*, the official organ of ICMI. This was made possible by the permission generously granted by the editors of *L'EM*.

Negotiations were pursued in 2009 with ICMI publishers of past years, Springer and Cambridge University Press (CUP). A contract was signed with CUP in June, 2010 to make this material available and negotiations with Springer are still in progress.

15. Information and Communication

Besides direct e-mail contact with the ICMI Representatives or other members of the international mathematics education community, the dissemination of information about the Commission and its activities is generally accessible through the *ICMI Bulletin* and the **ICMI website**, both under the editorship of the Secretary-General of ICMI.

At its June 2007 meeting, the 2007-2009 ICMI EC finalised the decision to launch an electronic newsletter. This project of establishing a means of prompt, efficient and brief communication had been under discussion for a certain time and the first issue of ICMI News has finally appeared in December 2007. The aim of this newsletter is to improve communication between ICMI and the worldwide community interested in mathematics education by regularly providing information about actions and recommendations of ICMI, highlighting issues that are under discussion and reporting about ongoing activities. The Editor of *ICMI News* is Jaime Carvalho e Silva, Secretary-General of the current ICMI Executive. *ICMI News* appears every two months, alternating with *IMU-Net*. The launching of **ICMI News** met with considerable success, as it has passed the barrier of 1000 subscriptions in 2008 — including more than 200 to the Portuguese version of *ICMI News*. A French version is also now available.

The project of redesigning and updating the **ICMI website** was done from 2007 to 2009. The new website, still hosted on the IMU server, was launched in May 2009. ICMI has adopted the recent policy of IMU to use a Content Management System (CMS). This modification brings the website design up to more recent standards as regards the size and format of the window in which the webpages are shown, <<http://www.mathunion.org/icmi/>>

16. Other Activities

The 2007-2009 ICMI EC pursued the work started by the previous Executive about the assessment of the quality of research in mathematics education as reflected in the inclusion (or non-inclusion) of mathematics education research journals in **scientific indexes** such as the SSCI (Social Sciences Citation Index) of ISI Thompson, the index most widely in use. A position statement of the ICMI EC on this issue was posted on the ICMI website in October 2007.

The ICMI President was invited to a conference on higher education and research in developing countries organised in Oslo in February 2008 by the Niels Henrik Abel Memorial Fund and the Oslo Center for Peace and Human Rights.

The 2007-2009 Secretary-General was invited to make a presentation of the history, structure and mission of ICMI in a lecture given at the International Congress of Science Education held in Cartagena, Colombia, on July 15-18, 2009, in relation with the 10th anniversary of the *Journal of Science Education*.

At the invitation of the President of IMU, the ICMI President and Secretary-General took part in a meeting organised in Budapest in November on the occasion of the World Science Forum. The purpose of the meeting was to prepare a proposal for a “**Joint UNESCO Intergovernmental International Mathematical Program**” project to be submitted to UNESCO, so to have it adopted officially a mathematics programme aiming at improving the image of mathematics. Such a programme must of course have a mathematics education component. The meeting organised by IMU involved, in addition to the ICMI representatives and some members of the IMU EC, representatives from ICIAM (International Council for Industrial and Applied Mathematics), CIMPA (*Centre international de mathématiques pures et appliquées*), ICTP (Abdus Salam International Centre for Theoretical Physics) and the Hungarian Committee for UNESCO.

A few days after the Budapest meeting, a proposal was submitted to UNESCO so to have it considered at the next session (36th) of the General Conference of UNESCO, to be held in the Fall 2011. The bodies formally signing the proposal are IMU, ICMI and ICIAM.

An update on this report will be presented at the IMU General Assembly in Bangalore in August, 2010.

ICMI Financial Report 2006 - 2009
prepared by Bernard R. Hodgson, Secretary-General

ACCOUNTS

For the years ended December 31
2006, 2007, 2008 and 2009

ICMI Accounts 2006

1 January – 31 December

BALANCE AS OF JANUARY 1:

ICMI	• Canadian Dollars	77 770,10
	• US Dollars	50 899,62
Solidarity Fund (US Dollars)		37 324,43

Canadian Dollars Account:

Income:

balance 2005	77 770,10
IMU (Schedule A: Administration — 15 000,00 CHF) ¹⁾	13 536,43
IMU (Schedule B: Scientific Activities — 27 000,00 CHF) ¹⁾	24 365,57
interest	706,36
total	<u>116 378,46</u>

Expenditure:

ICMI Study 17: IPC meeting, Paris (March 2006) ²⁾	2 728,34
ICMI Study 17: Study Conference, Hanoi (December 2006) ³⁾	3 057,11
ICMI Study 18: IPC meeting, Salvador de Bahia (July 2006)	6 073,04
ICMI EC meeting, Cartagena de las Indias (November 2006) ⁴⁾	9 528,45
ICM06: participation of the President and Secretary-General to IMU General Assembly ⁵⁾	1
108,19	

ICMI Centennial: IPC meeting, Rome (February 2006)	8 020,56
ICME-11: meeting of subset of IPC, México (November 2006)	234,30
EMF 2006, Sherbrooke, travel and local expenses of Secretary-General and IPC member	2 962,60
AFRICME 2, Nairobi, travel of EC member to IPC meetings	1 442,30
grant to UNESCO/ICMI math exhibition “Experiencing Mathematics” (1 000 EUR) ⁶⁾	1 543,10
design work on a new website for ICMI	2 403,28
transfer to USD account (corresponding to 1 000,00 USD)	1 130,00
bank charges (checks and foreign transfers)	87,40

ICMI balance 2006 **76 059,79**

total 116 378,46

US Dollars Account:

Income:

ICMI balance 2005	50 899,62
ICMI Study 17: grants and sponsorships ³⁾	17 000,00
transfer from CAD account (corresponding to 1 130,00 CAD)	1 000,00
ICMI interest	2 179,68

Solidarity Fund balance 2005 ⁷⁾ **37 324,43**
Solidarity Fund interest **1 564,56**

total 109 968,29

Expenditure:

ICMI Study 15: lunch for editorial team, Prague (July 2006) ⁸⁾	75,62
ICMI Study 17: IPC meeting, Paris (March 2006) ²⁾	1 980,00
ICMI Study 17: Study Conference, Hanoi (December 2006) — ICMI Funds ³⁾	14 810,00
ICMI Study 17: Study Conference, Hanoi (December 2006) — Solidarity Funds ³⁾	2 000,00
ICMI Study 18: IPC meeting, Salvador de Bahia (July 2006)	1 500,00
ICMI EC meeting, Cartagena de las Indias (November 2006) ⁴⁾	2 150,00
ICMI Centennial: IPC meeting, Rome (February 2006)	1 300,00
grant to AFRICME 2 (ICMI Regional Conference)	1 000,00
bank charges (foreign transfers)	160,97

ICMI balance 2006 **48 102,71**

Solidarity Fund balance 2006 **36 888,99**

total 109 968,29

Average exchange rate, 2006 *1 USD = 1,13 CAD*

Notes:

1. Considering the fact that the value of the US dollar has in recent years substantially diminished with respect to many currencies, the decision made in 2004 to have the annual grant of IMU given to ICMI in Canadian dollars was maintained in 2006, as this is the currency through which a majority of ICMI expenses are paid.
2. Part of the local costs for this meeting was covered by the IREM of Université de Paris 7.
3. On the occasion of the 17th ICMI Study conference, held at Hanoi University of Technology, Viet Nam, a workshop was organised specifically for local and regional teachers. The participation to both the Study conference and the workshop of researchers and teachers from the host country and other less affluent countries was directly supported by grants received from IMU Developing Countries Strategy Group — DCSG (5 000 USD) and UNESCO (3 000 USD), as well as from the ICMI Solidarity Fund (2 000 USD). Additional funds were received from five private sponsors involved in the workshop: Aplusix, Autograph, Cabrilog, Key Curriculum Press and TI (9 000 USD altogether), thus totalising 19 000 USD (including the amount from the ICMI Solidarity Fund) as special support raised around Study 17.

Part of this sum was used to provide grants to close to 30 participants from less affluent countries to the Study conference and the workshop, while part was given to the Local Organising Committee to support the infrastructure of the conference/workshop and as well as the participation of Vietnamese colleagues. Moreover as a humanitarian gesture to alleviate part of the heavy financial impact of the tragic traffic accident suffered by a keynote speaker to the conference, the Commission, within its limited means, contributed an amount 5 000 USD to cover related travel costs.
4. The costs of the 2006 annual meeting of the ICMI Executive Committee were substantially reduced thanks to the local support raised by our host, ICMI EC Member Maria de Losada, in connection with the participation of the ICMI EC members to a Forum on the theme “Mathematical Competencies in Higher Education” organized by the Colombian Ministry of Higher Education.
5. Following the agreement made in 2000 with IMU, the President and Secretary-General of ICMI are *ex officio* invited observers to the General Assembly of IMU.
6. This second grant of ICMI to the mathematical exhibition “Experiencing Mathematics” — a first grant of 10 000 USD had been given in 2004 for the mounting of the exhibition — was used to facilitate the travel of one copy of the exhibition among Asiatic countries.
7. The assets of the **ICMI Solidarity Fund**, established in 1992, are kept, on the ICMI accounts, separately from ICMI’s general resources.
8. The editorial board in charge of the preparation of the Study 15 volume (NISS 11) had a working lunch in Prague during PME 30.

9. In addition to the IMU annual grant, three activities of ICMI in 2006 were financially supported by generous donations: the ICMI Study 17 IPC meeting and conference/workshop, and the ICMI EC meeting. However the financial situation of the Commission is such that it could not face its duties without an important support received from various bodies and institutions. In particular the Secretary-General's home institution, Université Laval, has contributed in 2006 a substantial support to ICMI's work of the order of 11 500 USD (e.g. through the printing and distribution costs of the *ICMI Bulletin*, plus a partially reduced teaching load). The same is true of other members of the Executive Committee as well as many of the individuals involved in the programme committees of ICMI activities, their home institutions partially covering the expenses related to their participation in organisational meetings. The ICMI Executive Committee expresses its gratitude for this generous support.

However, as repeatedly stressed in previous ICMI financial reports, this type of "invisible" support has become much fragile over the last decade or so, possibly due to the financial situation of several higher education institutions around the world. This has resulted in severe constraints on ICMI financial health, an issue to which the ICMI EC is trying to find a solution. Any suggestion or comment on that account is most welcome.

ICMI Accounts 2007

1 January – 31 December

BALANCE AS OF JANUARY 1:

ICMI	<ul style="list-style-type: none"> • Canadian Dollars • US Dollars • Euros¹⁾ 	76 059,79 48 102,71 0,00
Solidarity Fund (US Dollars)		36 888,99

Canadian Dollars Account:

Income:

balance 2006	76 059,79
interest	3 937,97
total	<u>79 997,76</u>

Expenditure:

ICMI Study 19: IPC meeting, Essen (November 2007) ²⁾	2 637,41
ICMI EC meeting, London (June 2007)	9 750,58
ICMI Centennial: interviews	2 941,42
ICME-11: meeting of IPC, Monterrey (January 2007)	1 073,50
site visits for ICME-12 ³⁾	5 298,54

EMF 2009: IPC meeting, Orléans, travel of Secretary-General and local expenses	2 319,71
AFRICME 2, Nairobi, travel of Secretary-General and local expenses	1 154,93
edition of documents for the ICMI website	318,00
postage	87,55
secretariat expenses	1 185,43
bank charges (checks and foreign transfers)	45,20

ICMI balance 2007 (CAD account) 53 185,49

total 79 997,76

US Dollars Account:

Income:

ICMI balance 2006	48 102,71
grant from IMU: "Pipeline" Study ⁴⁾	10 000,00
grant from IMU: ICME-11 ⁵⁾	9 000,00
grant from IMU: ICMI Centennial Symposium	8 000,00
ICMI interest	1 836,37

Solidarity Fund balance 2006 ⁶⁾ 36 888,99
Solidarity Fund interest 1 286,27

total 115 114,34

Expenditure:

ICMI Study 19: IPC meeting, Essen (November 2007) ²⁾	1 155,51
"Pipeline" Study: Committee meeting, Providence (April 2007)	1 078,00
ICMI EC meeting, London (June 2007)	3 949,00
transfer to ICMI Centennial of IMU grant	8 000,00
grant and loan to ICMI Centennial ⁷⁾	10 000,00
transfer to EUR account (corresponding to 7 265,00 EUR) ⁴⁾	10 000,00
bank charges (foreign transfers)	16,36

ICMI balance 2007 (USD account) 42 740,21

Solidarity Fund balance 2007 (USD account) 38 175,26

total 115 114,34

Euros Account:

Income:

balance 2006	0,00
IMU (Schedule A: Administration — 15 450,00 CHF) ⁸⁾	9 444,64
IMU (Schedule B: Scientific Activities — 27 810,00 CHF) ⁸⁾	17 000,36
transfer from USD account (corresponding to 10 000,00 USD) ⁴⁾	7 265,00
interest	221,15
total	<u>33 931,15</u>

Expenditure:

0,00

ICMI balance 2007 (EUR account) **33 931,15**

total 33 931,15

Average exchange rate, 2007 $1\text{ USD} = 1,07\text{ CAD}$
 $= 0,73\text{ EUR}$

Notes:

1. Considering the ICMI assets already available in Canadian and US dollars and the important fluctuation of various currencies, it was felt appropriate to have the 2007 annual grant of IMU transferred to ICMI in euros. A EUR bank account was opened during 2007 at the HSBC Bank of Canada (2795 boul. Laurier, Québec, account no. 23-0126-X). The CAD and USD bank accounts of ICMI remain at the Caisse Populaire de l'Université Laval (Cité universitaire, Québec, accounts nos. 68033 and 800394).

2. The International Programme Committee for the nineteenth ICMI Study on *Proof and proving in mathematics education* met at the Campus Essen of the Universität Duisburg-Essen in November 2007. The costs of this meeting were substantially reduced by a generous grant of 3860 € from the Fachbereich Mathematik, Universität Duisburg-Essen to cover local accommodations, meals and meeting rooms.

3. The Executive Committee has organised site visits to the three countries that submitted a bid to host ICME-12: China, Korea and South Africa. The ICMI EC was represented on each occasion by three of its members. These visits were supported by the host countries as regards the local expenses of the visitors, and travel as well in the case of the visit to South Africa.

4. The financial support of 10 000 USD from IMU for the so-called "Pipeline" Study (devoted to the decline of mathematics students) was transferred to ICMI in totality in 2007. The amount was received in euros, thus corresponding to a transfer between the USD and the EUR accounts.

5. The grant of IMU to ICME-11 was received in 2007 but transferred to the Mexican organisers at the beginning of 2008. It will appear in the expenditure for the financial year 2008.

6. The assets of the **ICMI Solidarity Fund**, established in 1992, are kept, on the ICMI accounts, separately from ICMI's general resources.

7. Financial support to the organisation of the ICMI Centennial Symposium in Rome (March 2008): grant of 5 000 USD and interest-free loan of 5 000 USD.

8. At the General Assembly of the International Mathematical Union held in Santiago de Compostela in August 2006, it was voted to increase by 3 % the annual support given by IMU to ICMI for the period 2007-2010. The previous amounts were respectively 15 000 CHF for Schedule A and 27 000 CHF for Schedule B.

9. This annual financial report provides information on the assets of ICMI, as well as on the income and expenditure of the Commission during the year 2007 as reflected in its bank accounts. But it does not represent the whole financial situation of ICMI. As indicated above, in addition to the IMU annual grant, other substantial supports for specific activities were received from IMU and, on one occasion, from the Fachbereich Mathematik of the Universität Duisburg-Essen (see Note 2). But the ICMI Executive Committee wishes to stress other sources of "invisible" support which are essential to the financial health of the Commission and without which it could not face its duties. In particular the Secretary-General's home institution, Université Laval, has contributed in 2007 a substantial support to ICMI's work of the order of 11 500 USD (e.g. through telephone and fax, email facilities, postage, the printing and distribution of the *ICMI Bulletin*, occasional secretarial help, plus a partially reduced teaching load for the Secretary-General).

Substantial external support was also obtained on an individual basis by other members of the Executive Committee as well as by many individuals involved in the programme committees of ICMI activities, their home institutions (partially) covering the expenses related to their participation in organisational meetings so that they did not need to claim full reimbursement from ICMI. For example, during the year 2007, the following events and actions greatly benefited from an important support received from the many institutions to which the members of the committees belong (the amounts are approximate and in USD):

• <i>ICMI Executive Committee meeting, London, June 2007</i>	
travel of six EC members	5000,00
accommodations for four members	2000,00
• <i>Centennial interviews</i>	
travel and accommodations	1500,00
• <i>EMF 2009 IPC meeting, Orléans, September 2007</i>	
travel of ten EC members	5500,00
accommodations and meals for eleven members	1550,00
• <i>ICMI Study IPC meeting, Essen, November 2007</i>	
travel of eight EC members	6500,00

The soundness of the financial situation of ICMI depends to a large extent on this external "invisible" support to the individuals involved in the organisational work of the Commission. But the difficult financial situation of several higher education institutions around the world makes this type of support rather fragile.

ICMI Accounts 2008

1 January – 31 December

BALANCE AS OF JANUARY 1:

ICMI	• Canadian Dollars	53 185,49
	• US Dollars	42 740,21
	• Euros	33 931,15
Solidarity Fund (US Dollars)		38 175,26

Canadian Dollars Account:

Income:

balance 2007	53 185,49
interest	2 060,26
transfer from USD account (corresponding to 20 000,00 USD) ¹⁾	25 200,00
total	<u>80 445,75</u>

Expenditure:

ICMI Study 18: conference, Monterrey (June 2008)	175,08
ICMI Study 19: IPC meeting, Paris (November 2008) ²⁾	3 515,07
ICMI Study 20: IPC meeting, Obidos (October 2008) ³⁾	3 883,49
ICMI EC meeting, Rome (March 2008)	4 209,69
ICMI EC meeting, Monterrey (July 2008)	13 629,59
ICMI Centennial: interviews	1 183,71
ICMI Centennial symposium	5 978,09
travel expenses of ICMI President ⁴⁾	1 429,84
EMF 2009: meeting with organisers in Dakar, travel and expenses of Secretary-General	1 822,29
ICMI website (programming and migration to TYPO3)	4 000,00
Klein and Freudenthal ICMI Awards: certificates and medals	538,98
secretariat expenses	190,16
transfer to USD account (corresponding to 1 083,00 USD)	1 113,00
transfer to EUR account (corresponding to 50,64 EUR)	72,00
bank charges (checks and foreign transfers)	57,00

ICMI balance 2008 (CAD account)	38 647,76
total	<u>80 445,75</u>

US Dollars Account:**Income:**

ICMI balance 2007	42 740,21
grant from UNESCO: ICMI Centennial Symposium	5 000,00
reimbursement of loan from the ICMI Centennial Symposium ⁵⁾	5 000,00
transfer from CAD account (corresponding to 1 113,00 CAD)	1 083,00
ICMI interest	1 323,72
Solidarity Fund balance 2007⁶⁾	38 175,26
Solidarity Fund interest	1 026,94
total	<u>94 349,13</u>

Expenditure:

ICMI Study 17: editorial work ⁷⁾	5 500,00
ICMI Study 18: conference, Monterrey (June 2008)	960,00
ICMI Study 19: IPC meeting, Paris (November 2008) ²⁾	1 911,03
ICMI EC meeting, Rome (March 2008)	1 825,11
ICMI EC meeting, Monterrey (July 2008)	1 560,00
ICMI Centennial symposium	6 384,00
grant to UNESCO/ICMI math exhibition "Experiencing Mathematics" ⁸⁾	1 500,00
grant to EMF 2009 (ICMI Regional Conference)	3 000,00
grant to ICME-11 ⁹⁾	7 500,00
transfer to ICME-11 of IMU grant ¹⁰⁾	9 000,00
transfer to CAD account (corresponding to 25 200,00 CAD) ¹⁾	20 000,00
bank charges (foreign transfers)	18,64
ICMI balance 2008 (USD account)	(4 011,85)
Solidarity Fund balance 2008 (USD account)	39 202,20
total	<u>94 349,13</u>

Euros Account:**Income:**

balance 2007	33 931,15
IMU (Schedule A: Administration — 15 450,00 CHF)	9 575,71
IMU (Schedule B: Scientific Activities — 27 810,00 CHF)	17 236,29
royalties on ICMI Study volumes from Cambridge University Press (11,93 GBP)	14,46
transfer from CAD account (corresponding to 72,00 CAD)	50,64
interest	2 980,60
total	<u>63 788,85</u>

Expenditure:	0,00
ICMI balance 2008 (EUR account)	63 788,85
total	<u>63 788,85</u>

Average exchange rate, 2008

1 USD	=	1,07 CAD
	=	0,68 EUR

Notes:

1. As the CAD is the currency through which a majority of ICMI expenses are paid, an amount of 20 000 USD was transferred from the USD account to the CAD account at a time when the USD to CAD exchange rate was favourable (1 USD = 1,26 CAD, instead of the 2008 official average rate of 1,07 CAD).
2. The second meeting of the International Programme Committee for the nineteenth ICMI Study on *Proof and proving in mathematics education* took place at the Centre International d'Études Pédagogiques in Sèvres, France, in November 2008. This meeting was supported by two grants received from French institutions (350 €from the Laboratoire d'Étude du Phénomène Scientifique (LEPS – EA4148), Université de Lyon, and 150 €from the IREM of Université Paris 7) to cover part of the local accommodations, meals and meeting rooms.
3. The International Programme Committee for the twentieth ICMI Study on *Education Interfaces between Mathematics and Industry* met in Óbidos, Portugal, in October 2008. The costs of this meeting were substantially reduced by a generous grant of 2 519,50 €from the CIM (*Centro Internacional de Matemática*) to cover local accommodations, meals and meeting rooms. Moreover ICMI and ICIAM shared the costs of part of the meals.
4. This amount corresponds to two invitations received in 2008 by the President of ICMI to represent the Commission for which ICMI had to cover part of the expenses: a conference on higher education and research in developing countries organised in Oslo in February 2008 by the Niels Henrik Abel Memorial Fund and the Oslo Center for Peace and Human Rights; and the second *Pan African Space on Mathematics* conference, devoted to education, held in Hammamet, Tunisia, in November 2008.
5. Reimbursement of an interest-free loan of 5 000 USD made in 2007 to the organising committee of ICMI Centennial Symposium, held in Rome in March 2008.
6. The assets of the **ICMI Solidarity Fund**, established in 1992, are kept, on the ICMI accounts, separately from ICMI's general resources.
7. From the private sponsorships received for Study 17 (see the ICMI 2006 financial report), a sum of 5 500 USD had been set aside for covering part of the costs of the editorial work, done

under contract at the Freudenthal Institute for Science and Mathematics Education in Utrecht, Netherlands.

8. Support to cover part of the travel and local costs of the person in charge of the presentation of the UNESCO/ICMI mathematics exhibition during ICME-11.

9. Financial support to the organization of ICME-11: grant of 7 500 USD. The Mexican organisers did not request the interest-free loan of 7 500 USD also made available to them.

10. Transfer to ICME-11 of the IMU grant (received in 2007).

11. This annual financial report provides information on the assets of ICMI, as well as on the income and expenditure of the Commission during the year 2008 as reflected in its bank accounts. But it does not represent the whole financial situation of ICMI.

For instance, as indicated above, in addition to the IMU annual grant, other substantial supports for specific activities were received from UNESCO, from the LEPS laboratory, Université de Lyon, and from the IREM of Université Paris 7 (see Note 2), as well as from the CIM (see Note 3). Also, the organisers of the ICME-11 congress held in Monterrey generously supported the costs (rooms and meals) for hosting the ICMI General Assembly (5 500 USD) as well as the costs of meeting rooms for the ICMI EC (810 USD).

The ICMI Executive Committee wishes to stress other sources of support which are essential to the financial health of the Commission and without which it could not face its duties. Substantial external support was obtained on an individual basis by members of the Executive Committee as well as by many individuals involved in the programme committees of ICMI activities, their home institutions (partially) covering the expenses related to their participation in organisational meetings so that they did not need to claim full reimbursement from ICMI. For example, during the year 2008, the following events and actions greatly benefited from an important support received from the many institutions to which the members of the committees belong (the amounts are approximate and in USD):

- *ICMI Executive Committee meeting, Rome, March 2008*
 travel of nine EC members 7 500,00
 accommodations for ten members 3 000,00
- *ICMI Executive Committee meeting, Monterrey, July 2008*
 travel of nine EC members 7 500,00
 accommodations for six members 1 500,00
- *ICMI Study 19 IPC meeting, Paris, November 2008*
 travel of nine EC members 5 800,00
- *ICMI Study 20 IPC meeting, Obidos, October 2008*
 travel of eleven EC members 7 200,00
- *EMF 2009, meeting with organisers in Dakar, October 2009*
 travel of the chair of the Scientific Committee 1 050,00

Moreover the Secretary-General's home institution, Université Laval, has contributed in 2008 a support to ICMI's work of the order of 11 500 USD (e.g. through telephone and fax, email facilities, postage, the costs of the *ICMI Bulletin*, occasional secretarial help, plus a partially reduced teaching load for the Secretary-General).

The soundness of the financial situation of ICMI depends to a large extent on such external "invisible" support to the individuals involved in the organisational work of the Commission.

But the difficult financial situation of several higher education institutions around the world makes this type of support rather fragile.

ICMI Accounts 2009

1 January – 31 December

BALANCE AS OF JANUARY 1:

ICMI	• Canadian Dollars	38 647,76
	• US Dollars	(4 011,85)
	• Euros	63 788,85
Solidarity Fund (US Dollars)		39 202,20

Canadian Dollars Account:

Income:

balance 2008	38 647,76
IMU (Schedule A: Administration — 15 450,00 CHF)	16 438,21
IMU (Schedule B: Scientific Activities — 27 810,00 CHF)	29 588,79
interest	526,40
total	<u>85 201,16</u>

Expenditure:

ICMI Study 19: conference, Taipei (May 2009)	7 723,38
ICMI Study 20: IPC meeting, Paris (November 2009) ¹⁾	1 414,23
ICMI Study 21: IPC meeting, Pretoria (February 2009)	16 315,12
ICMI EC meeting, Saint-Petersburg (September 2009) ²⁾	11 681,13
meeting organised by IMU President, Budapest (November 2009): travel of ICMI President and Secretary-General ³⁾	609,90
ICME-11 IPC meeting (January 2007): travel of ICMI President ⁴⁾	1 655,33
EMF 2009: conference, Dakar (April 2009)	4 930,84
EMF 2012: IPC meeting, Geneva (January 2010): expenses of ICMI Secretary-General ⁵⁾	1 453,91
PME-33, Thessaloniki: travel and expenses of ICMI President	1 080,18
Int. Congress of Science Education, Cartagena: expenses of ICMI Secretary-General ⁶⁾	380,98
7th PACOM, Yamoussoukro: travel expenses of ICMI Secretary-General ⁷⁾	1 731,74
working meeting of ICMI President and Secretary-General, Paris (February 2009)	1 952,82
transition meeting of outgoing and incoming ICMI Secretaries-general, Coimbra (October 2009)	1 782,68
Klein Project Design Team meeting, Paris (May 2009)	5 718,28
Klein Project Design Team meeting, Paris: expenses of ICMI Secretary-General	879,50
grant to UNESCO/ICMI math exhibition “Experiencing Mathematics” (2 500,00 USD) ⁸⁾	2 958,54
grant to the ICMI history website (1 000,00 EUR)	1 698,80
ICMI Centennial symposium: purchase of 30 copies of the Proceedings	1 782,55

ICMI website programming	840,92
<i>ICMI Bulletin</i> : editing and translation of articles	366,00
secretariat expenses	151,74
transfer to USD account (corresponding to 4 807,00 USD) ⁹⁾	5 390,19
bank charges (checks and foreign transfers)	164,66

ICMI balance 2009 (CAD account) 12 537,74

total 85 201,16

US Dollars Account:

Income:

ICMI balance 2008	(4 011,85)
grant from UNESCO: EMF 2009 symposium ¹⁰⁾	5 000,00
ICMI EC meeting, Saint-Petersburg (September 2009): support from Moscow Institute of Open Education ²⁾	5 000,00
royalties on ICMI Study volumes (Springer)	1 146,61
transfer from CAD account (corresponding to 5 390,19 CAD) ⁹⁾	4 807,00
ICMI interest	0,00

Solidarity Fund balance 2008¹¹⁾ 39 202,20
Solidarity Fund interest 424,09

total 51 568,05

Expenditure:

ICMI Study 19: conference, Taipei (May 2009)	1 063,00
ICMI EC meeting, Saint-Petersburg (September 2009): travel of EC members ²⁾	2 000,00
PME-33, Thessaloniki: travel and expenses of ICMI President	884,00
EMF 2009: conference, Dakar (April 2009) ¹⁰⁾	5 000,00
grant to AFRICME-3 (ICMI Regional Conference)	3 000,00
bank charges (checks and foreign transfers)	101,72
Solidarity Fund support to EMF 2009¹⁰⁾ 200,00	

ICMI balance 2009 (USD account) (106,96)

Solidarity Fund balance 2009 (USD account) 39 426,29

total 51 568,05

6. ICMI was invited to be represented at the International Congress of Science Education organised in Cartagena, Colombia, on July 15-18, 2009, to celebrate the 10th anniversary of the *Journal of Science Education*. The main part of the expenses was covered by the congress organisers.

7. ICMI was invited by the African Mathematical Union to be officially represented at the 7th Pan-African Congress of Mathematicians, held in Yamoussoukro, Ivory Coast, on August 3-8, 2009. Part of the expenses was covered by the congress organisers.

8. Amount in CAD for the purchase of a bank draft in EUR corresponding to 2 500 USD.

9. Expenses originally paid by ICMI in Canadian dollars (total of 5 390,19 CAD) but reimbursed to ICMI in US dollars (4 807,00 USD), thus corresponding to a transfer from the CAD account to the USD account.

10. The organisation of the regional conference *Espace mathématique francophone 2009*, held in Dakar, Senegal, was supported by a generous grant of 5 000 USD received from UNESCO in order to provide support to some participants from less affluent countries. It had also been decided to eventually use additional sums from the ICMI Solidarity Fund for such purposes, but the amount finally used (200 USD) was less than expected, as some of the grants allocated to participants were given back to ICMI. (The EMF 2009 conference was also supported by ICMI through a grant of 3 000 USD, given during the year 2008.)

11. The assets of the **ICMI Solidarity Fund**, established in 1992, are kept, on the ICMI accounts, separately from ICMI's general resources.

12. This annual financial report provides information on the assets of ICMI, as well as on the income and expenditure of the Commission during the year 2009 as reflected in its bank accounts. But it does not represent the whole financial situation of ICMI.

For instance, as indicated above, in addition to the IMU annual grant, other substantial supports for specific activities were received from UNESCO, from the IREM of Université Paris 7 (see Note 1), as well as from the Moscow Institute of Open Education (see Note 2).

The ICMI Executive Committee wishes to stress other sources of support which are essential to the financial health of the Commission and without which it could not face its duties. Substantial external support was obtained on an individual basis by members of the Executive Committee as well as by many individuals involved in the programme committees of ICMI activities, their home institutions (partially) covering the expenses related to their participation in organisational meetings so that they did not need to claim full reimbursement from ICMI. For example, during the year 2009, the following events and actions greatly benefited from an important support received from the various institutions to which the members of the committees belong (the amounts are approximate and in USD):

- *ICMI Study 21 IPC meeting, Pretoria, February 2009*
travel of nine IPC members 10 500,00
- *ICMI Study 19 Conference, Taipei, May 2009*
travel of seven IPC members 8 500,00
accommodations for eight IPC members 3 500,00
- *Meeting of the Klein Project Design Team, Paris, May 2009*
travel of seven members 7 500,00

- *ICMI Study 20 IPC meeting, Paris, November 2009*
travel and accommodations of six IPC members 5 000,00

Moreover the Secretary-General's home institution, Université Laval, has contributed in 2009 a support to ICMI's work of the order of 11 500 USD (e.g. through telephone and fax, email facilities, postage, the costs of the *ICMI Bulletin*, occasional secretarial help, plus a partially reduced teaching load for the Secretary-General).

The soundness of the financial situation of ICMI depends to a large extent on such external "invisible" support to the individuals involved in the organisational work of the Commission. But today more than ever, the difficult financial situation of several higher education institutions around the world makes this type of support rather fragile.

20. Commission on Development and Exchanges (CDE)

<http://www.math.ohio-state.edu/~imu.cdc/cde/>

Report on the activities of the Commission on Development and Exchanges (CDE)

1 January 2006 - 31 December 2009

Janhavi Joshi, Administrative Secretary, IMU/CDE

(May 2009)

During the interval 1 January 2006 - 31 December 2009, CDE received a total of **257 applications for financial support**, in the three existing categories:

- (i) conferences in developing countries
- (ii) conferences in developed countries¹
- (iii) individual research travel support

¹ funding for conferences in developed countries was dedicated to the participation of mathematicians from developing countries in those conferences.

The following table demonstrates the number of applications received each year from 2006 through 2009, the number of applications circulated to the commission for review after initial routine screening by the Administrative Secretary to ensure that requests fell within IMU program guidelines and the number of awards made each year.

Year	Applications Received	Applications Circulated	Awards Made
2006	83	70	43
2007	60	54	53
2008	58	55	45
2009	56	56	55
Total	257	235	196

Support or partial support was granted in **119 cases** for conferences taking place in the **developing countries**. Following is the list of conference awards made each year and the countries these conferences were held at:

Conference awards in Developing countries:
2006

Country	No. awards	Total value of awards (USD)
Algeria	1	1,000
Cameroon	1	1,000
Chile	1	1,000
China	1	750
Colombia	2	1,750
Egypt	1	1,000
Gaza Strip	1	1,000
India	3	3,000
Iran	1	750
Malaysia	1	1,000
Mongolia	1	1,000
Morocco	3	2,850
Nicaragua	1	1,000
Niger	2	1,850
Pakistan	1	850
Peru	2	2,500
Senegal	1	1,000
South Africa	1	1,000
Tanzania	1	1,000
Tunisia	1	500

Conference awards in Developing countries:
2007

Country	No. awards	Total value of awards (USD)
Armenia	1	1,000
Argentina	1	1,000
Brazil	2	2,000
Burkina Faso	1	1,000
Cambodia	1	1,500
Cameroon	1	1,000
China	2	2,000
Colombia	2	2,000
India	3	3,000
Madagascar	1	1,000
Morocco	4	4,000
Namibia	1	500
Nepal	1	1,000
Nigeria	1	500
Peru	1	1,000
Philippines	1	1,000
Russian Federation	1	1,000
South Africa	1	1,000
Tunisia	3	3,000
Turkey	1	1,000

Turkey	1	1,000
Ukraine	1	1,000
Vietnam	2	2,000
Total	31	29,800

Uzbekistan	1	1,000
Total	31	30,500

Conference awards in Developing countries:
2008

Country	No. awards	Total value of awards (USD)
Argentina	5	5,000
Armenia	1	1,000
Brazil	1	2,500
Burkina Faso	1	1,000
Colombia	1	1,500
Cuba	2	1,500
Ecuador	1	800
Egypt	1	1,500
Guatemala	1	1,000
India	3	4,000
Indonesia	1	1,500
Iran	1	1,500
Morocco	3	3,100
Mozambique	1	1,000
Russian Federation	1	1,500
Tunisia	1	1,500
Ukraine	1	1,000
Uzbekistan	1	3,000
Total	27	33,900

Conference awards in Developing countries:
2009

Country	No. awards	Total value of awards (USD)
Argentina	4	4,000
Bangladesh	1	1,500
Benin	1	3000
Cameroon	1	1,000
Colombia	1	1,500
India	4	4,000
Indonesia	1	3,000
Iran	1	1500
Morocco	2	4,000
Nepal	1	1,000
Niger	1	1,500
Nigeria	1	2,000
Pakistan	2	5,000
Senegal	1	1,000
Tanzania	1	2,000
Tunisia	3	4,000
Uruguay	1	2,000
Uzbekistan	1	3,000
Vietnam	2	4,000
Total	30	49,000

Following tables show the distribution of the 19 conference awards in cases where the conferences were held in developed countries:

Developed countries conferences 2006

Country	No. awards	Total value of awards (USD)
Mexico	1	1,000
Switzerland	1	1,500
Total	2	2,500

Developed countries conferences 2007

Country	No. awards	Total value of awards (USD)
Germany	1	600
Mexico	1	1,000
Total	2	1600

Developed countries conferences 2008

Country	No. awards	Total value of awards (USD)
---------	------------	-----------------------------

Developed countries conferences 2009

Country	No. awards	Total value of awards (USD)
---------	------------	-----------------------------

Spain	1	900
The Netherlands	1	1,000
Turkey	2	3,000
United Kingdom	1	1,500
Total	5	6,400

Belgium	1	2,000
Brazil	2	4,500
Chile	2	3,000
Greece	1	1,500
Italy	1	2,000
Lebanon	1	1,500
U.K.	1	1,500
U.S.A	1	3,000
Total	10	19,000

Following tables demonstrates the country-wise distribution of 58 individual travel supports awarded during January 1, 2006 to December 31, 2009:

Individual travel supports: 2006

Country	No. awards	Total value of awards (US\$)
Bangladesh	1	1,000
China	1	750
Cambodia	1	1,000
Cameroon	1	750
India	2	1,100
Iran	1	250
Nigeria	1	750
Serbia & Montenegro	1	350
Uzbekistan	1	750
Total	10	6,700

Individual travel supports: 2007

Country	No. awards	Total value of awards (US\$)
Belarus	1	500
Benin	2	1,700
Cameroon	1	400
Cuba	1	600
Egypt	1	530
India	5	4000
Iran	2	1,000
Nigeria	1	1,000
Tunisia	2	1,500
Uzbekistan	3	2400
Vietnam	1	1,000
Total	20	14,630

Individual travel supports: 2008

Country	No. awards	Total value of awards (USD)
Armenia	1	1,000
Ecuador	1	800
Gabon	1	800
Georgia	1	900
India	2	1600
Iran	1	700
Nigeria	1	1,000
Philippines	1	800
Portugal (travel to Argentina)	1	900
Tajikistan	1	900
Tunisia	1	500

Individual travel supports: 2009

Country	No. awards	Total value of awards (USD)
Botswana	1	1,000
Cameroon	1	400
China	2	2,000
Egypt	1	800
India	1	850
Jordan	1	820.25
Nigeria	1	800
Benin	1	800
Romania (to India)	1	1,000
Serbia	2	1,000
Tunisia	1	800

Uruguay	1	1,000
Total	13	10,900

Uzbekistan	1	1,000
Vietnam	1	1,000
Total	15	12,270.25

Following tables demonstrate the income for each year during the period 2006 – 2010.

Income 1 January - 31 December 2006

Source	Amount (US\$)
IMU Schedule A	5,788.00
IMU Schedule B	30,000.00
Mathematical Society of Japan	1,272.05
Total	37,060.05

Income 1 January - 31 December 2007

Source	Amount (US\$)
IMU Schedule A	2,500.00
IMU Schedule B	45,000.00
Reimbursement of an unused 2006 grant	983.29
IMU/DCSG	6,500.00
Mathematical Society of Japan	1,293.54
Total	56,276.83

Income 1 January - 31 December 2008

Source	Amount (USD)
IMU Schedule A	2,797.36
IMU Schedule B	52,054.35
Donation from Swiss Mathematical Society	760.68
Donation from Mathematical Society of Japan	1,575.96
Total	57,188.35

Income 1 January - 31 December 2009

Source	Amount (USD)
IMU Schedule A (balance from 2008)	2,696.12
IMU Schedule B (balance from 2008)	26,933.21
IMU Schedule B	49,320.00
DCSG funds	10,000.00
Total	88,949.33

Donations from the Swiss Mathematical Society (USD 716.82) and from the Mathematical Society of Japan (USD 1,643.72) have been received at the end of 2009 which will be included in the 2010 income statement.

Attached is the excel file containing all the detailed records transactions during each of the year 2006 through 2010.

CDE REPORT 2006							
Transaction	Date	Type	Schedule (Admin.)	Schedule B (\$ to Ind.)	Balances Schedule A	Schedule B	Account
		CS=Conf. Support RT=Ind. Res. Trav. Proj=Project					
Beginning Balance	01.01.2006				\$7,434.34	\$7,250.38	\$14,684.72
IMU Schedule A & B 2006			(\$5,788.00)	(\$30,000.00)	\$13,222.34	\$37,250.38	\$50,472.72
Zhou	17.01.2006	RT China -> Italy (SNS Pisa)		\$500.00	\$13,222.34	\$36,750.38	\$49,972.72
Djebali	17.01.2006	CS Algeria		\$1,000.00	\$13,222.34	\$35,750.38	\$48,972.72
Trimeche	17.01.2006	CS Tunisia		\$1,000.00	\$13,222.34	\$34,750.38	\$47,972.72
Khosrovshahi	07.02.2006	CS Iran		\$1,000.00	\$13,222.34	\$33,750.38	\$46,972.72
AMS Dec. 05 fees	08.02.2006		\$79.20		\$13,143.14	\$33,750.38	\$46,893.52
Yousif	21.02.2006	CS Egypt		\$1,000.00	\$13,143.14	\$32,750.38	\$45,893.52
AMS Jan. 06 fees	01.03.2006		\$87.02		\$13,056.12	\$32,750.38	\$45,806.50
Tonga	01.03.2006	CS Cameroon		\$1,500.00	\$13,056.12	\$31,250.38	\$44,306.50
Lilly	10.03.2006	CS India		\$1,000.00	\$13,056.12	\$30,250.38	\$43,306.50
Salehi	13.03.2006	RT Iran -> Spain		\$250.00	\$13,056.12	\$30,000.38	\$43,056.50
Khan	13.03.2006	RT India -> Italy		\$500.00	\$13,056.12	\$29,500.38	\$42,556.50
Hislop	30.03.2006	CS Chile		\$1,000.00	\$13,056.12	\$28,500.38	\$41,556.50
Sahadevan	31.03.2006	RT India -> Japan		\$600.00	\$13,056.12	\$27,900.38	\$40,956.50
Zerouali	03.04.2006	CS Morocco		\$850.00	\$13,056.12	\$27,050.38	\$40,106.50
AMS Feb. 06 fees	11.04.2006		\$52.20		\$13,003.92	\$27,050.38	\$40,054.30
AMS Mar. 06 fees	26.04.2006		\$196.40		\$12,807.52	\$27,050.38	\$39,857.90
Nguyen Quoc Thang	28.04.2006	CS Vietnam		\$1,000.00	\$12,807.52	\$26,050.38	\$38,857.90
Bekolle	02.05.2006	CS Cameroon		\$1,000.00	\$12,807.52	\$25,050.38	\$37,857.90
Asghar	16.05.2006	CS Pakistan		\$850.00	\$12,807.52	\$24,200.38	\$37,007.90
Njoku	18.05.2006	RT Nigeria -> Italy (ICTP)		\$750.00	\$12,807.52	\$23,450.38	\$36,257.90
AMS Apr. 06 fees	25.05.2006		\$88.40		\$12,719.12	\$23,450.38	\$36,169.50
Le Thi Thanh Nhan	30.05.2006	RT Vietnam -> Italy		\$1,000.00	\$12,719.12	\$22,450.38	\$35,169.50
Okasha	05.06.2006	CS Gaza Strip		\$1,000.00	\$12,719.12	\$21,450.38	\$34,169.50
Andruskiewitsch	07.06.2006	CS Argentina		\$1,000.00	\$12,719.12	\$20,450.38	\$33,169.50
Iusem	08.06.2006	CS Nicaragua		\$1,000.00	\$12,719.12	\$19,450.38	\$32,169.50
Usha	15.06.2006	CS India		\$1,000.00	\$12,719.12	\$18,450.38	\$31,169.50
Kholboev	19.06.2006	RT Uzbekistan -> Italy		\$750.00	\$12,719.12	\$17,700.38	\$30,419.50
Boursier	21.06.2006	CS Malaysia		\$1,000.00	\$12,719.12	\$16,700.38	\$29,419.50
AMS May 06 fees	27.06.2006		\$144.60		\$12,574.52	\$16,700.38	\$29,274.90
Saley	14.07.2006	CS Niger		\$850.00	\$12,574.52	\$15,850.38	\$28,424.90
Return of Saley 14/7 wire net of \$30 bank fee	17.07.2006			(\$820.00)	\$12,574.52	\$16,670.38	\$29,244.90
Saley	07.08.2006	CS Niger		\$850.00	\$12,574.52	\$15,820.38	\$28,394.90
DCSG 23/8/06 mtg (cost =d 178.81, of which 164.54 covered by DCSG residue at AMS, so only difference being charged to CDE here)	11.08.2006		\$14.27		\$12,560.25	\$15,820.38	\$28,380.63
Clemens X Roath's tkt	15.08.2006	RT Cambodia -> USA		\$1,000.00	\$12,560.25	\$14,820.38	\$27,380.63
Return of Saley 7/8 wire net of \$45 bank fee	22.08.2006			(\$805.00)	\$12,560.25	\$15,625.38	\$28,185.63
Mahaman	07.09.2006	CS Niger		\$1,000.00	\$12,560.25	\$14,625.38	\$27,185.63
Return of Mahaman 7/9 wire net of \$35 bank fee	08.09.2006			(\$965.00)	\$12,560.25	\$15,590.38	\$28,150.63
Wang Xiantao	12.09.2006	RT China -> India		\$750.00	\$12,560.25	\$14,840.38	\$27,400.63
Enkhbat	12.09.2006	CS Mongolia		\$1,000.00	\$12,560.25	\$13,840.38	\$26,400.63
Sch. A funds transferred to Sch. B to meet 2006 awards (Herb's mail 11/09)			\$10,000.00	(\$10,000.00)	\$2,560.25	\$23,840.38	\$26,400.63
AMS June & July bank fees	12.09.2006		\$295.40		\$2,264.85	\$23,840.38	\$26,105.23
Ekhaguere	21.09.2006	RT Nigeria -> Italy (ICTP)		\$750.00	\$2,264.85	\$23,090.38	\$25,355.23
Zili	21.09.2006	CS Tunisia		\$500.00	\$2,264.85	\$22,590.38	\$24,855.23
Saley	22.09.2006	CS Niger		\$850.00	\$2,264.85	\$21,740.38	\$24,005.23
AMS August bank fees	22.09.2006		\$114.00		\$2,150.85	\$21,740.38	\$23,891.23
Mahaman	27.09.2006	CS Niger		\$1,000.00	\$2,150.85	\$20,740.38	\$22,891.23
Return of Mahaman 27/9 wire net of \$35 bank fee	28.09.2006			(\$965.00)	\$2,150.85	\$21,705.38	\$23,856.23
Mahaman	04.10.2006	CS Niger		\$1,000.00	\$2,150.85	\$20,705.38	\$22,856.23
Otieno	17.10.2006	CS Tanzania		\$1,000.00	\$2,150.85	\$19,705.38	\$21,856.23
AMS September bank fees	20.10.2006		\$218.40		\$1,932.45	\$19,705.38	\$21,637.83
Jeltsch	24.10.2006	CS Switzerland		\$1,500.00	\$1,932.45	\$18,205.38	\$20,137.83
Camacho	24.10.2006	CS Peru		\$1,500.00	\$1,932.45	\$16,705.38	\$18,637.83
Grobler/Ran	10.11.2006	CS South Africa		\$1,000.00	\$1,932.45	\$15,705.38	\$17,637.83
Nikitin	10.11.2006	CS Ukraine		\$1,000.00	\$1,932.45	\$14,705.38	\$16,637.83
Seade	21.11.2006	CS Mexico		\$1,000.00	\$1,932.45	\$13,705.38	\$15,637.83
Talukder	22.11.2006	RT Bangladesh -> ICTP		\$1,000.00	\$1,932.45	\$12,705.38	\$14,637.83
Onshuus	27.11.2006	CS Colombia		\$1,000.00	\$1,932.45	\$11,705.38	\$13,637.83
El Hodalbi	27.11.2006	CS Morocco		\$1,000.00	\$1,932.45	\$10,705.38	\$12,637.83
Shrivastava	11.12.2006	CS India		\$1,000.00	\$1,932.45	\$9,705.38	\$11,637.83
Math. Soc. Japan	14.12.2006			(\$1,272.05)	\$1,932.45	\$10,977.43	\$12,909.88
AMS October bank fees	18.12.2006		\$124.60		\$1,807.85	\$10,977.43	\$12,785.28
Balance at 31 December 2006					\$1,807.85	\$10,977.43	\$12,785.28

CDE REPORT 2007

Transaction	Date	Type	Schedule (Admin.)	Schedule B (\$ to Ind.)	Balances Schedule A	Schedule B	Account
CDE Beginning Balance 2007	01.01.2007				\$1,807.85	\$10,977.43	\$12,785.28
Budget for 2007	01.01.2007		(\$2,500.00)	(\$45,000.00)	\$4,307.85	\$55,977.43	\$60,285.28
Lemrabet	11.01.2007	CS Algeria		\$1,000.00	\$4,307.85	\$54,977.43	\$59,285.28
Chan Roath	19.01.2007	CS Cambodia		\$1,500.00	\$4,307.85	\$53,477.43	\$57,785.28
Received from DCSG due to their having increased CDE's 19 Jan 07 \$1K award to Chan Roath by \$500 (NB: Roath grant paid from funds at AMS)	19.01.2007			(\$500.00)	\$4,307.85	\$53,977.43	\$58,285.28
AMS November & December 2006 bank fees	19.01.2007		\$315.00		\$3,992.85	\$53,977.43	\$57,970.28
Muranov	30.01.2007	RT Belarus->ICTP (CDE/ICTP)		\$500.00	\$3,992.85	\$53,477.43	\$57,470.28
Nkemzi	31.01.2007	RT Cameroon->ICTP (CDE/ICTP agmt)		\$750.00	\$3,992.85	\$52,727.43	\$56,720.28
Rath	31.01.2007	RT India->ICTP (CDE/ICTP)		\$1,000.00	\$3,992.85	\$51,727.43	\$55,720.28
Zhou	01.02.2007	CS China		\$1,000.00	\$3,992.85	\$50,727.43	\$54,720.28
Some	05.02.2007	CS Burkina Faso		\$1,000.00	\$3,992.85	\$49,727.43	\$53,720.28
Eddahbi	12.02.2007	CS Morocco		\$1,000.00	\$3,992.85	\$48,727.43	\$52,720.28
Sarmiento	12.02.2007	CS Philippines		\$1,000.00	\$3,992.85	\$47,727.43	\$51,720.28
Shahgholian	12.02.2007	CS Armenia		\$1,000.00	\$3,992.85	\$46,727.43	\$50,720.28
Diener	16.02.2007	CS Vietnam		\$1,000.00	\$3,992.85	\$45,727.43	\$49,720.28
Ferrari (Total US\$ 1000 made up of Sch. A & Sch. B funds at AMS)	21.02.2007	CS Peru	\$772.57	\$227.43	\$3,220.28	\$45,500.00	\$48,720.28
AMS January 2007 bank fees	01.03.2007		\$177.40		\$3,042.88	\$45,500.00	\$48,542.88
Tuladhar	12.03.2007	CS Nepal		\$1,000.00	\$3,042.88	\$44,500.00	\$47,542.88
Xiao	12.03.2007	CS China		\$1,000.00	\$3,042.88	\$43,500.00	\$46,542.88
Yengui	12.03.2007	RT Tunisia->France		\$600.00	\$3,042.88	\$42,900.00	\$45,942.88
Ayeni	12.03.2007	CS Nigeria		\$500.00	\$3,042.88	\$42,400.00	\$45,442.88
Uludag	12.03.2007	CS Turkey		\$1,000.00	\$3,042.88	\$41,400.00	\$44,442.88
Shum	12.03.2007	CS China		\$750.00	\$3,042.88	\$40,650.00	\$43,692.88
AMS February 2007 bank fees	21.03.2007		\$182.00		\$2,860.88	\$40,650.00	\$43,510.88
Giraldo Salazar	16.04.2007	CS Colombia		\$1,000.00	\$2,860.88	\$39,650.00	\$42,510.88
Gwet	17.04.2007	CS Cameroon		\$1,000.00	\$2,860.88	\$38,650.00	\$41,510.88
Nitsure/Srinivas	23.04.2007	CS India		\$1,000.00	\$2,860.88	\$37,650.00	\$40,510.88
Wade	23.04.2007	CS Senegal		\$1,000.00	\$2,860.88	\$36,650.00	\$39,510.88
Shuungula	23.04.2007	CS Namibia		\$500.00	\$2,860.88	\$36,150.00	\$39,010.88
Onder	23.04.2007	CS Turkey		\$1,000.00	\$2,860.88	\$35,150.00	\$38,010.88
AMS March 2007 bank fees	31/04/2007		\$19.00		\$2,841.88	\$35,150.00	\$37,991.88
Transferred from AMS to Berlin	04.05.2007		\$341.88		\$2,500.00	\$35,150.00	\$37,650.00
Actual amount received in Berlin of above transfer	04.05.2007		(\$324.83)		\$2,824.83	\$35,150.00	\$37,974.83
Adane/Paycha	09.05.2007	CS Colombia		\$750.00	\$2,824.83	\$34,400.00	\$37,224.83
Rao	11.05.2007	RT India->USA		\$1,000.00	\$2,824.83	\$33,400.00	\$36,224.83
Saikia	25.05.2007	RT India->France		\$1,000.00	\$2,824.83	\$32,400.00	\$35,224.83
Parpieva	29.05.2007	RT Uzbekistan->ICTP (CDE/ICTP agmt)		\$800.00	\$2,824.83	\$31,600.00	\$34,424.83
Okoya	01.06.2007	RT Nigeria->ICTP (CDE/ICTP agmt)		\$1,000.00	\$2,824.83	\$30,600.00	\$33,424.83
Rath 2006 grant reimbursement	11.06.2007			(\$983.29)	\$2,824.83	\$31,583.29	\$34,408.12
Nguyen Quang Dieu	29.06.2007	RT Vietnam->ICTP (CDE/ICTP agmt)		\$1,000.00	\$2,824.83	\$30,583.29	\$33,408.12
Hernandez Mederos	02.07.2007	RT Cuba->ICTP (CDE/ICTP)		\$600.00	\$2,824.83	\$29,983.29	\$32,808.12
Hessami Pilehrood K.	02.07.2007	RT Iran->ICTP (CDE/ICTP)		\$500.00	\$2,824.83	\$29,483.29	\$32,308.12
Hessami Pilehrood T.	02.07.2007	RT Iran->ICTP (CDE/ICTP)		\$500.00	\$2,824.83	\$28,983.29	\$31,808.12
Avitser	12.07.2007	CS Brazil		\$1,000.00	\$2,824.83	\$27,983.29	\$30,808.12
Todjihoude	13.07.2007	RT Benin->Germany		\$800.00	\$2,824.83	\$27,183.29	\$30,008.12
Abdeljaoued/Boukricha	14.08.2007	CS Tunisia		\$1,000.00	\$2,824.83	\$26,183.29	\$29,008.12
Sango	14.08.2007	CS South Africa		\$1,000.00	\$2,824.83	\$25,183.29	\$28,008.12
Narayanan / Rajarama Bhat	15.08.2007	CS India		\$1,000.00	\$2,824.83	\$24,183.29	\$27,008.12
Tirao	15.08.2007	CS Argentina		\$1,000.00	\$2,824.83	\$23,183.29	\$26,008.12
Narasimha Sastry	23.08.2007	RT India->Belgium		\$500.00	\$2,824.83	\$22,683.29	\$25,508.12
Okasha	21.08.2007	RT Egypt->ICTP (CDE/ICTP)		\$530.00	\$2,824.83	\$22,153.29	\$24,978.12
Förster/Trunk	31.08.2007	CS Germany		\$600.00	\$2,824.83	\$21,553.29	\$24,378.12
Azaiez	25.10.2007	RT Tunisia->India		\$900.00	\$2,824.83	\$20,653.29	\$23,478.12
Boucetta	25.10.2007	CS Morocco		\$1,000.00	\$2,824.83	\$19,653.29	\$22,478.12
Bahouri/Bellassoued	01.11.2007	CS Tunisia		\$1,000.00	\$2,824.83	\$18,653.29	\$21,478.12
Anosov	06.11.2007	CS Russian Federation		\$1,000.00	\$2,824.83	\$17,653.29	\$20,478.12
Ruscheweyh	06.11.2007	CS India		\$1,000.00	\$2,824.83	\$16,653.29	\$19,478.12
El Alaoui Talibi	06.11.2007	CS Morocco		\$1,000.00	\$2,824.83	\$15,653.29	\$18,478.12
Kabbaj	15.11.2007	CS Morocco		\$1,000.00	\$2,824.83	\$14,653.29	\$17,478.12
Loday-Richaud	23.11.2007	CS Peru		\$1,000.00	\$2,824.83	\$13,653.29	\$16,478.12
Vasilieva	23.11.2007	CS Colombia		\$1,000.00	\$2,824.83	\$12,653.29	\$15,478.12
Rossi / Puthenpurakal	29.11.2007	CS India		\$1,000.00	\$2,824.83	\$11,653.29	\$14,478.12
Contribution from DCSG (November 2007)				(\$6,000.00)	\$2,824.83	\$17,653.29	\$20,478.12
Tonga	10.12.2007	CS Cameroon		\$1,000.00	\$2,824.83	\$16,653.29	\$19,478.12
Yengui	10.12.2007	CS Tunisia		\$1,000.00	\$2,824.83	\$15,653.29	\$18,478.12
Bank fees 1 Jan - 11 Dec 2007			\$1,364.20		\$1,460.63	\$15,653.29	\$17,113.92
Mathematical Society of Japan donation	21.12.2007			(\$1,293.54)	\$1,460.63	\$16,946.83	\$18,407.46
Encumbered funds							
Rasulov		RT Uzbekistan->ICTP (CDE/ICTP agmt)		\$800.00	\$1,460.63	\$16,146.83	\$17,607.46
Leadi		RT Benin->ICTP (CDE/ICTP)		\$900.00	\$1,460.63	\$15,246.83	\$16,707.46
Searle		CS Mexico		\$1,000.00	\$1,460.63	\$14,246.83	\$15,707.46
Tiedjo		RT Cameroon->Germany		\$400.00	\$1,460.63	\$13,846.83	\$15,307.46
Hervé/Treuil		CS Madagascar		\$1,000.00	\$1,460.63	\$12,846.83	\$14,307.46
El Harti		CS Morocco		\$1,000.00	\$1,460.63	\$11,846.83	\$13,307.46
Dzhailov		CS Uzbekistan		\$1,000.00	\$1,460.63	\$10,846.83	\$12,307.46
Barreto/Cardoso		CS Brazil		\$1,000.00	\$1,460.63	\$9,846.83	\$11,307.46
CDE Closing Balance 31 Dec. 2007					\$1,460.63	\$9,846.83	\$11,307.46

CDE REPORT 2008							
Transaction	Date	Type	Schedule (Admin.)	Schedule B (\$ to Ind.)	Balances Schedule A	Schedule B	Account
		CS=Conf. Support					
		RT=Ind. Res. Trav.					
		Proj=Project					
CDE Beginning Balance 2008 (inclusive of USD 7100 encumbered but not disbursed in 2007)	01.01.2008				\$1,460.63	\$16,946.83	\$18,407.46
50% of CHF 6180 Sch A + 115000 Sch B for 2008 (ROE CHF1=USD 0.905293)				(\$2,797.36)	(\$52,054.35)		\$73,259.17
Swiss Mathematical Society donation (Euro 516.24)	14.02.2008			(\$760.68)	\$4,257.99	\$69,761.86	\$74,019.85
Nang	20.02.2008	RT Gabon->ICTP (agrmt)		\$800.00	\$4,257.99	\$68,961.86	\$73,219.85
De Los Reyes	20.02.2008	CS Ecuador		\$800.00	\$4,257.99	\$68,161.86	\$72,419.85
Ran/Wiegerinck	20.02.2008	CS The Netherlands		\$1,000.00	\$4,257.99	\$67,161.86	\$71,419.85
Rasulov (2007 award)	04.03.2008	RT Uzbekistan->ICTP (CDE/ICTP agrmt)		\$800.00	\$4,257.99	\$66,361.86	\$70,619.85
Mena	25.03.2008	RT Ecuador->Germany		\$800.00	\$4,257.99	\$65,561.86	\$69,819.85
Searle (2007 award)	01.04.2008	CS Mexico		\$1,000.00	\$4,257.99	\$64,561.86	\$68,819.85
Detalla	03.04.2008	RT Philippines->ICTP (agrmt)		\$800.00	\$4,257.99	\$63,761.86	\$68,019.85
Prajapat	03.04.2008	RT India->ICTP (agrmt)		\$800.00	\$4,257.99	\$62,961.86	\$67,219.85
Bahraini	03.04.2008	RT Iran->ICTP (agrmt)		\$700.00	\$4,257.99	\$62,261.86	\$66,519.85
El Harti (2007 award)	07.04.2008	CS Morocco		\$1,000.00	\$4,257.99	\$61,261.86	\$65,519.85
Minian	21.04.2008	CS Argentina		\$1,000.00	\$4,257.99	\$60,261.86	\$64,519.85
Mukerjee	21.04.2008	CS India		\$1,000.00	\$4,257.99	\$59,261.86	\$63,519.85
Martinez-Moro	05.05.2008	CS Spain		\$900.00	\$4,257.99	\$58,361.86	\$62,619.85
Harboure	05.05.2008	CS Argentina		\$1,000.00	\$4,257.99	\$57,361.86	\$61,619.85
Sarih	13.05.2008	CS Morocco		\$800.00	\$4,257.99	\$56,561.86	\$61,019.85
Chorwadwala	19.05.2008	RT India->ICTP (agrmt)		\$800.00	\$4,257.99	\$55,761.86	\$60,219.85
Demidenko	19.05.2008	CS Russian Federation		\$1,500.00	\$4,257.99	\$54,461.86	\$58,719.85
Barreto/Cardoso (2007 award)	19.05.2008	CS Brazil		\$1,000.00	\$4,257.99	\$53,461.86	\$57,719.85
Pacharoni	02.06.2008	CS Argentina		\$1,000.00	\$4,257.99	\$52,461.86	\$56,719.85
Shubladze	02.06.2008	RT Georgia->ICTP (agrmt)		\$900.00	\$4,257.99	\$51,561.86	\$55,819.85
Sahakian/Arakelian	02.06.2008	CS Armenia		\$1,000.00	\$4,257.99	\$50,561.86	\$54,819.85
Herve/Treuil (2007 award)	20.06.2008	CS Madagascar		\$1,000.00	\$4,257.99	\$49,561.86	\$53,819.85
Azizi	20.06.2008	CS Morocco		\$1,500.00	\$4,257.99	\$48,061.86	\$52,319.85
Pani/Nataraj	17.07.2008	CS India		\$1,500.00	\$4,257.99	\$46,561.86	\$50,819.85
Rittatore	17.07.2008	RT Uruguay -> Canada		\$1,000.00	\$4,257.99	\$45,561.86	\$49,819.85
Dotti/Lauret	28.07.2008	CS Argentina		\$1,000.00	\$4,257.99	\$44,561.86	\$48,819.85
Reimbursement of 3 April 2008 cheque to Prajapat	13.08.2008			(\$730.04)	\$4,257.99	\$45,291.90	\$49,549.89
Iusem	05.09.2008	CS Guatemala		\$1,000.00	\$4,257.99	\$44,291.90	\$48,549.89
Leadi (2007 award)	05.09.2008	RT Benin->ICTP (CDE/ICTP)		\$900.00	\$4,257.99	\$43,391.90	\$47,649.89
Nurov	05.09.2008	RT Tajikistan->ICTP (agrmt)		\$900.00	\$4,257.99	\$42,491.90	\$46,749.89
Okoya	18.09.2008	RT Nigeria->ICTP (agrmt)		\$1,000.00	\$4,257.99	\$41,491.90	\$45,749.89
Agapito Ruiz	24.09.2008	RT Portugal->Argentina		\$900.00	\$4,257.99	\$40,591.90	\$44,849.89
SAMSA Conference 2008 (Munembe)	24.09.2008	CS Mozambique		\$1,000.00	\$4,257.99	\$39,591.90	\$43,849.89
Kocatepe	26.09.2008	CS Turkey		\$1,500.00	\$4,257.99	\$38,091.90	\$42,349.89
Uludag	26.09.2008	CS Turkey		\$1,500.00	\$4,257.99	\$36,591.90	\$40,849.89
Tri Baskoro	26.09.2008	CS Indonesia		\$1,500.00	\$4,257.99	\$35,091.90	\$39,349.89
Kamoun	26.09.2008	CS Tunisia		\$1,500.00	\$4,257.99	\$33,591.90	\$37,849.89
Yengui	25.10.2008	RT Tunisia->France		\$500.00	\$4,257.99	\$33,091.90	\$37,349.89
Wolanski	29.10.2008	CS Argentina		\$1,000.00	\$4,257.99	\$32,091.90	\$36,349.89
Reimbursement of Agapito Ruiz's Euro 610 (20 Nov. 2008 USD equivalent = 765.35)	17.11.2008			(\$765.35)	\$4,257.99	\$32,857.25	\$37,115.24
Zahorodniuk	24.11.2008	CS Ukraine		\$1,000.00	\$4,257.99	\$31,857.25	\$36,115.24
Barseghyan	11.12.2008	RT Armenia->ICTP		\$1,000.00	\$4,257.99	\$30,857.25	\$35,115.24
Quattara	12.12.2008	CS Burkina Faso		\$1,000.00	\$4,257.99	\$29,857.25	\$34,115.24
Gasparim	12.12.2008	CS Cuba		\$1,500.00	\$4,257.99	\$28,357.25	\$32,615.24
Donation from Mathematical Society of Japan	16.12.2008			(\$1,575.96)	\$4,257.99	\$29,933.21	\$34,191.20
Jazar-CIMPA	18.12.2008	CS Egypt		\$1,500.00	\$4,257.99	\$28,433.21	\$32,691.20
Geetha	18.12.2008	CS India		\$1,500.00	\$4,257.99	\$26,933.21	\$31,191.20
Bank charges for 2008 money transfers	31.12.2008			\$1,561.87	\$2,696.12	\$26,933.21	\$29,629.33
Funds encumbered							
Tieudjo (encumbered since 2007)		RT Cameroon->Germany		\$400.00	\$2,696.12	\$26,533.21	\$29,229.33
Khosrovshahi		CS Iran		\$1,500.00	\$2,696.12	\$25,033.21	\$27,729.33
Cardona/Reyes		CS Colombia		\$1,500.00	\$2,696.12	\$23,533.21	\$26,229.33
Maniar		CS Morocco		\$1,000.00	\$2,696.12	\$22,533.21	\$25,229.33
Ruzhansky/Laptev		CS United Kingdom		\$1,500.00	\$2,696.12	\$21,033.21	\$23,729.33
El Zein		CS Uzbekistan		\$3,000.00	\$2,696.12	\$18,033.21	\$20,729.33
Polcino Milies		CS Brazil		\$2,500.00	\$2,696.12	\$15,533.21	\$18,229.33
CDE Closing Balance 31 December 2008					\$2,696.12	\$15,533.21	\$18,229.33

CDE REPORT 2009

Transaction	Date	Type	Schedule (Admin.)	Schedule B (\$ to Ind.)	Balances Schedule A	Schedule B	Account
		CS=Conf. Support					
		RT=Ind. Res. Trav.					
		Proj=Project					
CDE Beginning balance 1 Jan. 2009					\$2,696.12	\$26,933.21	\$29,629.33
Initial Schedule B funds for 2009 pending receipt of Abel Fund contribution for 2009				(\$25,000.00)	\$2,696.12	\$51,933.21	\$54,629.33
Rasulov	27.01.2009	RT Uzbekistan->ICTP (agmt)		\$1,000.00	\$2,696.12	\$50,933.21	\$53,629.33
Tieudjo (2007 award)	16.02.2009	RT Cameroon->Germany		\$400.00	\$2,696.12	\$50,533.21	\$53,229.33
Florescu	12.02.2009	CS USA		\$3,000.00	\$2,696.12	\$47,533.21	\$50,229.33
Choudary	16.02.2009	CS Pakistan		\$2,000.00	\$2,696.12	\$45,533.21	\$48,229.33
Lombardo/Mazzocco	16.03.2009	CS Italy		\$2,000.00	\$2,696.12	\$43,533.21	\$46,229.33
Maniar (2008 award)	16.03.2009	CS Morocco		\$1,000.00	\$2,696.12	\$42,533.21	\$45,229.33
Ruzhansky (2008 award)	16.03.2009	CS United Kingdom		\$1,500.00	\$2,696.12	\$41,033.21	\$43,729.33
Cortinas	16.03.2009	CS Argentina		\$1,000.00	\$2,696.12	\$40,033.21	\$42,729.33
El Zein (2008 award)	09.04.2009	CS Uzbekistan		\$3,000.00	\$2,696.12	\$37,033.21	\$39,729.33
Simis	09.04.2009	CS Brazil		\$2,000.00	\$2,696.12	\$35,033.21	\$37,729.33
Yengui	09.04.2009	CS Tunisia		\$1,000.00	\$2,696.12	\$34,033.21	\$36,729.33
Andrada/Salvai	13.05.2009	CS Argentina		\$1,000.00	\$2,696.12	\$33,033.21	\$35,729.33
Cvetkovic-Ilic	13.05.2009	RT Serbia->ICTP		\$500.00	\$2,696.12	\$32,533.21	\$35,229.33
Hu	13.05.2009	RT China->ICTP		\$1,000.00	\$2,696.12	\$31,533.21	\$34,229.33
Ilic	13.05.2009	RT Serbia->ICTP		\$500.00	\$2,696.12	\$31,033.21	\$33,729.33
Moakher	13.05.2009	CS Tunisia		\$1,500.00	\$2,696.12	\$29,533.21	\$32,229.33
Tonga	13.05.2009	CS Cameroon		\$1,000.00	\$2,696.12	\$28,533.21	\$31,229.33
Khosrovshahi/Rahpeyma (2008 award)	26.05.2009	CS Iran		\$1,500.00	\$2,696.12	\$27,033.21	\$29,729.33
Schedule B funds pending review in August 2009	29.05.2009			(\$11,990.00)	\$2,696.12	\$39,023.21	\$41,719.33
Pappalardi/Jha-CIMPA	29.05.2009	CS Nepal		\$1,000.00	\$2,696.12	\$38,023.21	\$40,719.33
Mujuni/Mushi	29.05.2009	CS Tanzania		\$2,000.00	\$2,696.12	\$36,023.21	\$38,719.33
Gatsinzi	29.05.2009	RT Botswana->ICTP (agmt)		\$1,000.00	\$2,696.12	\$35,023.21	\$37,719.33
Qazaqzeh	04.06.2009	RT Jordan->ICTP (agmt)		\$1,000.00	\$2,696.12	\$34,023.21	\$36,719.33
Darwish	12.06.2009	RT Egypt->ICTP		\$800.00	\$2,696.12	\$33,223.21	\$35,919.33
Kumar	12.06.2009	RT India->ICTP		\$850.00	\$2,696.12	\$32,373.21	\$35,069.33
Nguyen Thai Son	18.06.2009	CS Vietnam		\$2,000.00	\$2,696.12	\$30,373.21	\$33,069.33
Sued	18.06.2009	CS Argentina		\$1,000.00	\$2,696.12	\$29,373.21	\$32,069.33
Cardona/Reyes (2008 award)	26.06.2009	CS Colombia		\$1,500.00	\$2,696.12	\$27,873.21	\$30,569.33
Labarca/Plaza	26.06.2009	CS Chile		\$1,500.00	\$2,696.12	\$26,373.21	\$29,069.33
Siddiqi	26.06.2009	CS India		\$1,000.00	\$2,696.12	\$25,373.21	\$28,069.33
Polcino Milies (2008 award)	16.07.2009	CS Brazil		\$2,500.00	\$2,696.12	\$22,873.21	\$25,569.33
Nguyen Tu Cuong	16.07.2009	RT Vietnam->ICTP		\$1,000.00	\$2,696.12	\$21,873.21	\$24,569.33
Todjihounde	16.07.2009	RT Rep. Benin->Germany		\$800.00	\$2,696.12	\$21,073.21	\$23,769.33
Contribution from DCSG	30.07.2009			(\$10,000.00)	\$2,696.12	\$31,073.21	\$33,769.33
Reimbursement of Qazaqzeh CDE/ICTP agrmt RT residue	04.08.2009			(\$179.75)	\$2,696.12	\$31,252.96	\$33,949.08
Remainder of Schedule B funds for 2009	06.08.2009			(\$12,330.00)	\$2,696.12	\$43,582.96	\$46,279.08
Tirao	06.08.2009	CS Argentina		\$1,000.00	\$2,696.12	\$42,582.96	\$45,279.08
Vernicos	06.08.2009	CS Greece		\$1,500.00	\$2,696.12	\$41,082.96	\$43,779.08
Bonheure	25.08.2009	CS Belgium		\$2,000.00	\$2,696.12	\$39,082.96	\$41,779.08
Ponnusamy	07.09.2009	CS India		\$1,000.00	\$2,696.12	\$38,082.96	\$40,779.08
Chowdhury	14.10.2009	CS Bangladesh		\$1,500.00	\$2,696.12	\$36,582.96	\$39,279.08
Gangbo	14.10.2009	CS Benin		\$3,000.00	\$2,696.12	\$33,582.96	\$36,279.08
Okoya	05.11.2009	RT Nigeria -> Italy		\$800.00	\$2,696.12	\$32,782.96	\$35,479.08
Solarin	04.01.2010	CS Nigeria		\$2,000.00	\$2,696.12	\$30,782.96	\$33,479.08
Yengui	12.11.2009	RT Tunisia -> France		\$800.00	\$2,696.12	\$29,982.96	\$32,679.08
Muchtadi	01.12.2009	CS Indonesi		\$3,000.00	\$2,696.12	\$26,982.96	\$29,679.08
Aussel	08.12.2009	CS Vietnam		\$2,000.00	\$2,696.12	\$24,982.96	\$27,679.08
Mishra	14.12.2009	CS India		\$1,000.00	\$2,696.12	\$23,982.96	\$26,679.08
Choudary	14.12.2009	CS Pakistan		\$3,000.00	\$2,696.12	\$20,982.96	\$23,679.08
Zili	17.12.2009	CS Tunisia		\$1,500.00	\$2,696.12	\$19,482.96	\$22,179.08
Saley (in process, encumbered in 2009)		CS Niger		\$1,500.00	\$2,696.12	\$17,982.96	\$20,679.08
Sastry (in process, encumbered in 2009)		CS India		\$1,000.00	\$2,696.12	\$16,982.96	\$19,679.08
Berhanu (in process, encumbered in 2009)		CS Morocco		\$3,000.00	\$2,696.12	\$13,982.96	\$16,679.08
Mordecki-Monzon	29.01.2010	CS Uruguay		\$2,000.00	\$2,696.12	\$11,982.96	\$14,679.08
Mercado	28.01.2010	CS Chile		\$1,500.00	\$2,696.12	\$10,482.96	\$13,179.08
Jazar	28.01.2010	CS Lebanon		\$1,500.00	\$2,696.12	\$8,982.96	\$11,679.08
Pardoux	28.01.2010	CS Senegal		\$1,000.00	\$2,696.12	\$7,982.96	\$10,679.08
Manzi (in process, encumbered in 2009)		RT China -> India		\$1,000.00	\$2,696.12	\$6,982.96	\$9,679.08
Baricz (in process, encumbered in 2009)		RT Romania -> India		\$1,000.00	\$2,696.12	\$5,982.96	\$8,679.08
Bank charges			\$1,574.11		\$1,122.01	\$5,982.96	\$7,104.97
CDE closing balance Dec 31, 2009					\$1,122.01	\$5,982.96	\$7,104.97

**Report on the activities of the
Developing Countries Strategy Group (DCSG)**

1 January 2006 - 31 December 2009

Janhavi Joshi, Administrative Secretary, IMU/DCSG

(May 2009)

Activities of the Developing Countries Strategy Group during year 2006

1. DCSG succeeded in procuring additional travel grant funds for ICM06, from the U.S. National Academies (USD 26,000) and the Committee for Developing Countries of the European Mathematical Society (Euro 1,635). This enabled the participation of 14 mathematicians from developing and economically disadvantaged countries in the Congress, which would otherwise not have been possible.
2. DCSG has continued to support CIMPA's project in Cambodia, providing, in June 2006, a grant of Euro 5,000 from our Abel 2005 funds.
3. DCSG has continued to work actively to support the African Mathematics Millennium Science Initiative, which is gaining ground. With the grant awarded by the Nuffield Foundation, to date, three mentoring collaborations have been established between UK mathematicians and mathematics departments in Cameroon, Ethiopia and Ghana. (For details of AMMSI activity in 2006/07, see our report for the Abel Fund Board on the uses of their grant to IMU for 2006.)
4. DCSG continues to support ICMI.
 - (i) Award to ICMI in September 2006: A grant of USD 5,000 for their ICMI Study 17 Conference and Workshop (Hanoi, December 2006) to facilitate the participation of teachers from Cambodia and Laos;
6. Also in April 2007, DCSG approved \$2,500 for each of an International Conference on Mathematical Biology and a Graduate Summer School in Biomathematics, which will take place, respectively, in Marrakesh, Morocco, in December 2007 and Kampala, Uganda, in July 2008.

Activities of the Developing Countries Strategy Group during year 2007

1. DCSG has continued to support ICMI, awarding them:
 - (i) in April 2007, a grant of USD 4,000 for their 2nd African Regional Congress which took place in Kenya in May 2007. (Report appended.);
 - (ii) in May 2007, a grant of USD 3,000 to transport the UNESCO - ICMI "Experiencing Mathematics" Exhibition to Latin America at the end of 2007.

2. DCSG has continued to support CIMPA's project in Cambodia, providing, in June 2007, a grant of Euro 5,000. (Report appended.)
3. DCSG has continued monitoring the deployment of the grants awarded by the Levehulme Trust and the Nuffield Foundation, in particular the Mentoring African Research in Mathematics (MARM) mentorships, now matching the responses to its second call for prospective mentors with interested mathematics departments in Africa.
4. DCSG provided \$3,000 for the International Council for Industrial and Applied Mathematics (ICIAM) towards the travel/living expenses of four mathematicians from developing countries for participation in the Round Table Discussion on "Developing Mathematics in the Developing World" during the 6th International Congress on Industrial and Applied Mathematics, which took place in Zurich, Switzerland, during the interval 16 - 20 July 2007.
5. DCSG provided \$2,500 for training at a Park City Mathematics Institute Graduate Summer School in 2007 of Ugandan teacher-leaders for a Graduate Summer School in Biomathematics to take place in Kampala, Uganda, in July 2008.
6. DCSG provided \$2,500 for each of an International Conference on Mathematical Biology and a Graduate Summer School in Biomathematics, which took place, respectively, in Marrakesh, Morocco, in December 2007 and Kampala, Uganda, in July 2008
7. DCSG provided a grant of \$2,500 to the ICSU Regional Office for Africa for an International Workshop on Natural and Human-Induced Hazards and Disasters in Africa, which took place in Kampala, Uganda, during 21 - 22 July 2007.
8. DCSG supplemented by \$500 CDE's grant of \$1,000 to the Cambodian Mathematical Society for a Workshop on the Usefulness of Mathematics, which took place at the Regional Pedagogy Training Centre of Battambang Province, Cambodia, on 9 March 2007.
9. DCSG approved the allocation of \$6,000 towards a fund for a programme of volunteer lecturers to deliver short courses in Mathematics in the developing world.
10. DCSG approved IMU involvement in a programme of the U.S. National Committee for Mathematics to help vet applications from the developing world to the mathematics research institutes in the U.S.. The vetting is being done via our network of professional mathematicians in the developing world. Between August and November 2007, two institutes (the Institute for Pure and Applied Mathematics of the University of California at Los Angeles, and the Institute for Mathematics and its Applications of the University of Minnesota) sought our collaboration for the vetting of 3 applicants.
11. In December 2007, DCSG approved a grant of \$5000 towards the participation of mathematicians

from developing countries in the Fifth European Congress of Mathematics, to take place in Amsterdam, The Netherlands, from 14 to 18 July 2008.

12. The John Templeton Foundation approached DCSG Chair, Herb Clemens, requesting that DCSG undertake a survey on mathematics in Africa, with a view to guiding future Templeton investment in the region. DCSG (and IMU/EC) approved the survey, and the dossier required by the Foundation was compiled and submitted in late December 2007.

13. DCSG approved \$6,000 to supplement the budget of IMU's Commission on Development and Exchanges for its operations in 2007.

Activities of the Developing Countries Strategy Group during year 2008

1. DCSG completed the report "Mathematics in Africa: Challenges and Opportunities" requested by and financed the John Templeton Foundation. 65 institutions/individuals were invited to contribute to the survey, and 19 contributions were received; a 50-page report was issued. The report is available on the IMU website.

2. Volunteer Lecturer Programme: In early 2008 DCSG approved a Volunteer Lecturer Program to send volunteer lecturers to give intensive short courses in the developing world, to be carried out in cooperation with CIMPA and the U.S. National Committee for Mathematics:

(a) DCSG approved the allocation of USD 13,000 towards the fund for our VLP participation in 2008, in particular to finance the visits of three volunteer lecturers to the National University of Laos in August 2009.

(b) Within the framework of the Volunteer Lecturers Programme, the Department of Mathematics of the University of Dar es Salaam, Tanzania, requested a volunteer to deliver a course on Functional Analysis, and Vladimir Vershinin from the University of Montpellier, France, accepted our invitation.

3. DCSG granted USD 5,000 towards the expenses of three African participants in a Round Table Discussion on Mathematics in Africa which took place during the 5th European Congress on Mathematics (Amsterdam, The Netherlands, 14 - 28 July 2008).

4. DCSG supplemented by USD 4,000 CDE²'s grant of USD 1,000 to the Southern Africa Mathematical Sciences Association (SAMSA) for its Annual Conference 2008, which took place in Maputo, Mozambique, during 25 - 29 November 2008.

5. DCSG granted USD 5,000 to the GIRAGA network (Groupe Inter-Africain de Recherche en Analyse, Géométrie et Applications) for its XIIth GIRAGA Seminar and an ensuing Colloquium in honour of J.-P. Ezin,

² Commission on Development and Exchanges of the International Mathematical Union

one of the network's founders. The event took place in Benin during 3 - 12 December 2008.

6. DCSG granted USD 5,000 to the South East Asian Mathematical Society for the Fifth Asian Mathematical Conference, to take place in Penang, Malaysia, during 22 - 26 June 2009.

7. DCSG has continued its cooperation the Mentoring African Research in Mathematics (MARM) programme. The mentorships are funded by the Levehulme Trust and the Nuffield Foundation, are administered by the London Mathematical Society and AMMSI.

8. As may be recalled from our previous report, since 2007 DCSG has helped to vet applications from the developing world to the mathematics research institutes in the U.S., the vetting is being done via our network of professional mathematicians in the developing world. In 2008, the U.S. Statistical and Applied Mathematical Sciences Institute in North Carolina sought our collaboration for the vetting one of their applicants.

Activities of the Developing Countries Strategy Group during year 2009

1. DCSG granted USD 4000 to Abdus Salam School of Mathematical Sciences for the 4th World Conference on 21st Century Mathematics, which took place at Abdus Salam School of Mathematical Sciences (ASSMS), Lahore, Pakistan from March 4 to March 8, 2009.

2. DCSG supplemented by USD 1500 CDE's grant of USD 1500 to Imperial College London, U.K., for the participation of mathematicians from developing countries in the 7th International ISAAC Congress, which took place in London during 13 - 18 July 2009.

3. DCSG granted USD 1500 to Cambodian Mathematical Society to support the travel expenses of five Cambodian mathematicians for participation in Asian Mathematical Conference 2009 in Malaysia from 22 to 26 June 2009.

4. Support for three Volunteer Lecturer Program lecturers:

a) Dr. Michael Nakamaye (USA) gave an intensive course at Obafemi Awolowo University, Ile – Ife, Nigeria, from March 3 – March 19, 2009, under IMU/DCSG's. (DCSG support USD 3140.22)

b) Dr. Robert Pour (USA) gave an intensive course at National University of Laos, Dong Dok Campus, Vientiane, Laos from July 28 - August 20 (DCSG support USD 4194.70)

c) Dr. Alex Mogilner (USA) gave an intensive course at National University of Laos, Dong Dok Campus, Vientiane, Laos, from August 10 – Aug 28, 2009. (DCSG support USD 2146.76)

For more information on Volunteer Lecturer program and report, pictures from the above visits etc. please visit the VLP website:

www.math.ohio-state.edu/~imu.cdc/vlp

5. An amount of USD 1500 was granted for buying a LCD projector and a few mathematics books for Royal University of Phnom Penh, Cambodia.
6. Support of USD 3000 was granted to Southern Africa Mathematical Sciences Association's (SAMSA) Conference 2009 which took place at Dar es Salaam, Tanzania from 22 - 27 November 2009. The funds were granted specifically towards the travel and living expenses of African mathematicians participating in the Conference.
7. The principal outlay of funds this year was a \$20,000 grant to the Africa Mathematics Millennium Science Initiative (AMMSI) in order to prevent the collapse of its scholarship program. Support of graduate students in African universities with graduate programs of quality and integrity is perhaps the most cost-effective tool for the nurturing of the mathematical sciences on that continent. Since this is not a new or innovative concept and the pay-off is long-term, it is difficult to sustain outside funding for such programs. However consistency of such programs, on a regular basis over an extended period of years, is key to their success. Initial funding of the AMMSI program, the only one of its kind in Africa, came from the Mellon Foundation, but subsequent fund-raising efforts have not been successful so far. IMU gave enough support to keep the program going, albeit in skeletal form, for one more year so that AMMSI can continue to seek outside funding without breaking the continuity of the program. For more information on the program, please visit the AMMSI website: <http://www.ammsi.org/>
8. An amount of USD 10000 was transferred from DCSG to CDE to support research travel by mathematicians in the developing world.
9. An amount of USD 2000 was granted in support of the participation of mathematicians from developing countries in a Workshop in Nonlinear Elliptic PDEs in honour of the 65th birthday of Jean-Pierre Gossez, which took place in Brussels, Belgium, from 2 to 4 September 2009.
10. In the area of mathematics education in Africa, support of USD 3500 was given to the workshop African Regional International Instruction in Mathematics Education (AFRICME), under the auspices of the International Commission on Mathematics Instruction (ICMI). The conference will be held in Botswana From May 18- May 21, 2010.
11. An amount of USD 1500 was granted to the Prize "Ibni Oumar Mahamat Saleh" which will be awarded annually by a scientific committee set up by CIMPA. It will allow a student of an institution of Central Africa or West Africa, in mathematics or statistics, at the graduate or post-graduate level, to benefit from a scientific training in a country other than his/her own.
12. An amount of USD 2000 was granted in support of pikot workshops in Africa to teach mathematicians how to make full use of electronic literature and scientific opportunities available on the

internet.

IMU-supported administrative post at ICTP (till Aug 2009) and at OSU (since July 2009)

Work done by Sharon Laurenti (till Aug 2009) and Janhavi Joshi (since July 2009) has included:

for CDE

- receipt and onward processing of applications for CDE support, checking for eligibility and completeness of information and, if necessary, contacting applicants for missing data;
- compiling and transmitting a monthly mailing to CDE members, retrieving from CDE records and including, where applicable, any information on previous awards;
- informing applicants of the Commission's decisions;
- administering CDE accounting and fund transfers;
- maintaining CDE archives and records;
- data gathering for and drafting of CDE's 2006 annual report to IMU/EC.

for DCSG

- administering DCSG accounting and fund transfers;
- maintaining DCSG webpage;
- transmitting a bi-monthly mailing to DCSG members;
- data-gathering for and drafting of various reports, including the preliminary draft of an article for the Communications of the German Mathematical Society (cf. MDMV 15/2007) IMU and Developing Countries, An Overview: 1978 - 2006..

for ICM 2006 by Sharon Laurenti

- collaborated with the Spanish Organizing Committee, including concerning the participation arrangements for IMU's various categories of grant recipients;
- extensive correspondence with travel grant applicants;
- procured from several sources fare estimates to Madrid from all the countries involved in order to establish cost-effective and realistic ceilings to be offered to travel grant awardees;
- collected the prescribed documentation and disbursed travel grant monies at the Congress;
- maintained updated grant applicant record statuses in the database of applications;
- prepared reports for donors.

DCSG REPORT 2006						
(funds held in Berlin)						
Transaction	Date	Schedule A	Schedule B	Balances		Account Balance
		(Admin.)	(\$ to Ind.)	Schedule A	Schedule B	
Beginning Balance 2009	01.01.2006				(\$2.744,02)	(\$2.744,02)
Abel Fund 2005 net (\$44980(award) - \$44980(advance from IMU)	01/18/2006		\$0,00		(\$2.744,02)	(\$2.744,02)
CIMPA Cambodia Project (from Abel Fund grant 2005)	06/15/2006		\$6.487,26		(\$9.231,28)	(\$9.231,28)
Ogana for ICM 2006 (Travel Kenya -> Spain)	8/26/2006		\$600,00		(\$9.831,28)	(\$9.831,28)
Clemens (50% of Euro 361.84 for Aug. 06 mtgs w/ LMS)	09/18/2006		\$229,17		(\$10.060,45)	(\$10.060,45)
Abel Fund grant 2006	25.10.2006		(\$44.970,00)		\$34.909,55	\$34.909,55
ICMI Study 17 Conference & Workshop, Vietnam, Dec. 06 (from Abel Fund grant 2006) (CS Vietnam)	07.11.2006		\$5.000,00		\$29.909,55	\$29.909,55
Abel 2004 grant's residual \$5000	08.11.2006		(\$4.979,85)		\$34.889,40	\$34.889,40
Extra contribn to Ogana for ICM 2006 (transferred together with SIG's \$1000) (Travel Kenya -> Spain)	15.11.2006		\$889,40		\$34.000,00	\$34.000,00
AMMSI (from Abel 2006 grant)(sent via AMS)	12/15/2006		\$25.000,00		\$9.000,00	\$9.000,00
Admin Sec salary for 2006 (from Abel Fund grant 2006)	31.12.2006		\$9.000,00		\$0,00	\$0,00
Disbursements from DCSG's residual funds (\$1,164.54) at AMS			(\$1.164,54)		\$1.164,54	\$1.164,54
Sidoravicius/Viana (CS Brazil)	09.05.2006		\$1.000,00		\$164,54	\$164,54
DCSG's 23 Aug. 06 mtg in Madrid (total cost \$178.81)			\$164,54		\$0,00	\$0,00
Balance					\$0,00	\$0,00

DCSG REPORT 2007						
(funds held in Berlin)						
Transaction	Date	Schedule A	Schedule B	Balances		Account Balance
		(Admin.)	(\$ to Ind.)	Schedule A	Schedule B	
IMU allocation for developing countries	01.01.2007	(\$4.970,83)	(\$92.502,54)	\$4.970,83	\$92.502,54	\$97.473,37
Allocated to CDE from allocation for developing countries	01.01.2007	\$2.500,00	\$45.000,00	\$2.470,83	\$47.502,54	\$49.973,37
Transferred to CDE for having increased CDE's 19 Jan 2007 \$1K award to Chan Roath by \$500	19.01.2007		\$500,00	\$2.470,83	\$47.002,54	\$49.473,37
ICMI/Mwathi/Adler for AFRICME 2	23.04.2007		\$4.000,00	\$2.470,83	\$43.002,54	\$45.473,37
ICMI Experiencing Maths Exhibition -> Latin America 2007-8	25.05.2007		\$3.000,00	\$2.470,83	\$40.002,54	\$42.473,37
CIMPA for Cambodia (Euro 5000)	20.06.2007		\$6.726,62	\$2.470,83	\$33.275,92	\$35.746,75
Griewank for ICIAM Round Table	03.07.2007		\$3.000,00	\$2.470,83	\$30.275,92	\$32.746,75
Africa/US Biomaths Workshop in Marrakesh	03.07.2007		\$2.500,00	\$2.470,83	\$27.775,92	\$30.246,75
ICSU-Africa for Int'l Workshop on Natural & Human-Induced Hazards & Disasters in Africa	12.07.2007		\$2.500,00	\$2.470,83	\$25.275,92	\$27.746,75
Training of Ugandan teacher-leaders towards a 2008 Africa/US Biomaths Workshop in Kampala	01.11.2007		\$2.500,00	\$2.470,83	\$22.775,92	\$25.246,75
Contribution to CDE (November 2007)			\$6.000,00	\$2.470,83	\$16.775,92	\$19.246,75
Bank fees 1 Jan - 11 Dec 2007 (provisional amount)		\$189,92		\$2.280,91	\$16.775,92	\$19.056,83
Funds encumbered						
5th European Congress of Mathematics			\$5.000,00	\$2.280,91	\$11.775,92	\$14.056,83
Fund for sending volunteers to the developing world			\$6.000,00	\$2.280,91	\$5.775,92	\$8.056,83
DCSG Closing Balance 2007				\$2.280,91	\$5.775,92	\$8.056,83

DCSG REPORT 2008

(funds held in Berlin)

Transaction	Date	Schedule A	Schedule B	Balances		Account Balance
		(Admin.)	(\$ to Ind.)	Schedule A	Schedule B	
DCSG Beginning Balance 2008 (inclusive of USD 11,000 encumbered but not disbursed in 2007)				\$2.280,91	\$16.775,92	\$19.056,83
50% of CHF 6180 Sch A + 115000 Sch B for 2008 (ROE CHF1=USD 0.905293)		(\$2.797,36)	(\$52.054,35)	\$5.078,27	\$68.830,27	\$73.908,54
Ran/Wiegerinck for 5th European Congress of Mathematics, 14-18 July 2008 (2007 encumbered funds)	20.02.2008		\$5.000,00	\$5.078,27	\$63.830,27	\$68.908,54
Ismail for 5th Asian Mathematical Conference (AMC2009), 22-26 June 2009	21.04.2008		\$5.000,00	\$5.078,27	\$58.830,27	\$63.908,54
Bekolle/Tossa for XI Giraga	02.06.2008		\$5.000,00	\$5.078,27	\$53.830,27	\$58.908,54
5th ECM for Round Table Discussion on Mathematics in Africa	20.06.2008		\$5.000,00	\$5.078,27	\$48.830,27	\$53.908,54
SAMSA Conference 2008 (Munembe)	24.09.2008		\$5.000,00	\$5.078,27	\$43.830,27	\$48.908,54
Vershinine I (from 2007 funds encumbered for VLP)	08.09.2008		\$1.489,36	\$5.078,27	\$42.340,91	\$47.419,18
Vershinine II (from 2007 funds encumbered for VLP)	31.10.2008		\$2.419,27	\$5.078,27	\$39.921,64	\$44.999,91
Forfeit of funds to compensate for loss in Abel Fund income due to currency fluctuations	17.11.2008		\$13.900,00	\$5.078,27	\$26.021,64	\$31.099,91
Bank charges for 2008 money transfers	31.12.2008	\$149,75		\$4.928,52	\$26.021,64	\$30.950,16
Funds encumbered for VLP for 3 volunteers for Laos in August 2009						
VLP Fund (USD 2,091.37 remaining from 2007 encumbered funds + USD 13,000 from 2008 funds)			\$15.091,37	\$4.928,52	\$10.930,27	\$15.858,79
ISAAC 2009			\$1.500,00	\$4.928,52	\$9.430,27	\$14.358,79
Closing balance at 31 December 2008				\$4.928,52	\$9.430,27	\$14.358,79

DCSG REPORT 2009						
(funds held in Berlin)						
Transaction	Date	Schedule A	Schedule B	Balances		Account Balance
		(Admin.)	(\$ to Ind.)	Schedule A	Schedule B	
DCSG Beginning Balance 2009 (includes the USD 16,591.37 of encumbered funds at 2008 closure)	01.01.2009			\$4,928.52	\$26,021.64	\$30,950.16
Initial Schedule B funds for 2009 pending receipt of Abel Fund contribution for 2009	01.01.2009		(\$25,000.00)	\$4,928.52	\$51,021.64	\$55,950.16
Abdus Salam School of Mathematical Sciences (4 - 8 March 2009)	12.02.2009		\$4,000.00	\$4,928.52	\$47,021.64	\$51,950.16
Ruzhansky for ISAAC 2009 (13 - 17 July 2009) (2008 funds)	16.03.2009		\$1,500.00	\$4,928.52	\$45,521.64	\$50,450.16
Cambodian Mathematical Society (22 - 26 June 2009)	26.03.2009		\$1,500.00	\$4,928.52	\$44,021.64	\$48,950.16
Books and LCD projector for RUPP Cambodia	März-09		\$1,336.15	\$4,928.52	\$42,685.49	\$47,614.01
Templeton survey contributor Roy's USD 500 compensation donated to DCSG	20.04.2009		(\$500.00)	\$4,928.52	\$43,185.49	\$48,114.01
Reimbursement to Herb for purchase of laptop for Seeber for ICM Travel Grants Database	21.05.2009	\$3,085.09		\$1,843.43	\$43,185.49	\$45,028.92
Schedule B funds pending review in August 2009	29.05.2009		(\$11,990.00)	\$1,843.43	\$55,175.49	\$57,018.92
Mujuni/Mushi for SAMSA 2009 Conference to complement CDE's USD 2000	29.05.2009		\$3,000.00	\$1,843.43	\$52,175.49	\$54,018.92
Contribution towards laptop for CDC administrative position at OSU	12.06.2009	\$837.37		\$1,006.06	\$52,175.49	\$53,181.55
Nakamaye VLP Nigeria (from balance of 2007 amount earmarked [2091.37] & from the 13000 earmarked in 2008)	12.06.2009		\$3,140.22	\$1,006.06	\$49,035.27	\$50,041.33
Contribution to CDE	30.07.2009		\$10,000.00	\$1,006.06	\$39,035.27	\$40,041.33
Templeton survey contributors Bregman's & Thompson's USD 500 (each) compensation donated to DCSG	05.08.2009		(\$1,000.00)	\$1,006.06	\$40,035.27	\$41,041.33
AMMSI Scholarship Program	06.08.2009		\$20,000.00	\$1,006.06	\$20,035.27	\$21,041.33
Remainder of Schedule B funds for 2009	06.08.2009		(\$12,330.00)	\$1,006.06	\$32,365.27	\$33,371.33
Balance of Templeton grant to DCSG for its operations in the developing world	07.08.2009		(\$598.07)	\$1,006.06	\$32,963.34	\$33,969.40
Clemens: reimbursement of advance to volunteer Pour	14.08.2009		\$500.00	\$1,006.06	\$32,463.34	\$33,469.40
Clemens -> Pour for xerox copying for NUOL	14.08.2009		\$500.00	\$1,006.06	\$31,963.34	\$32,969.40
Bonheure (Workshop in Nonlinear Elliptic PDEs in honour of J.-P. Gossez' 65th birthday)	25.08.2009		\$2,000.00	\$1,006.06	\$29,963.34	\$30,969.40
VLP fund for Mogilner	21.09.2009		\$2,146.76	\$1,006.06	\$27,816.58	\$28,822.64
VLP funds for Pour	21.09.2009		\$3,194.70	\$1,006.06	\$24,621.88	\$25,627.94
AFRICME3	02.09.2009		\$3,500.00	\$1,006.06	\$21,121.88	\$22,127.94
Transfer Schedule B to Schedule A (administration through 2010)		(\$7,500.00)	\$7,500.00	\$8,506.06	\$13,621.88	\$22,127.94
DHL shipment from Sharon(CTP) to Janhavi (Ohio state)(231.28 euros)	03.11.2009	\$341.42		\$8,164.64	\$13,621.88	\$21,786.52
Bonami (Ibni Prize) (In process but approved in 2009)			\$1,500.00	\$8,164.64	\$12,121.88	\$20,286.52
Sheung Tsun Tsou (workshops on use of electronic resources) (In process but approved in 2009)			\$2,000.00	\$8,164.64	\$10,121.88	\$18,286.52
Encumbered against 2010 budget				\$8,164.64	\$10,121.88	\$18,286.52
ICM 2010 travel grants expenses		\$914.91		\$7,249.73	\$10,121.88	\$17,371.61
Bank Charges for the year 2009		\$397.03		\$6,852.70	\$10,121.88	\$16,974.58
Balance				\$6,852.70	\$10,121.88	\$16,974.58

21. International Commission on the History of Mathematics (ICHM)

<http://www.unizar.es/ichm/>

Report to the International Mathematical Union 2006-2010

Karen Hunger Parshall (Immediate Past Chair)

From 2006 through March 2010, the International Commission for the History of Mathematics (ICHM) has continued to pursue its dual aims of encouraging the study of the history of mathematics and of promoting a high level of historically and mathematically sophisticated scholarship in the field internationally. It has done so in the following ways:

Meetings of the Executive Committee (EC) of the ICHM:

Beginning in 2002, the EC adopted a new meeting policy. It now meets at least four times yearly via e-mail to discuss matters of interest to the international history of mathematics community. Among the business discussed and the issues considered over the four-year period from 2006 to March 2010 were: (in 2006) discussion and coordination of a wide variety of ICHM co-sponsored events internationally for the Euler tercentenary in 2007; (in 2007) issues of governance; (in 2008) the role of the ICHM in the co-sponsorship of events in the history of mathematics internationally and the establishment of a e-mail list of historians of mathematics internationally better to inform colleagues of the ICHM and its events; and (in 2009) the editorial transition of the ICHM's journal, *Historia Mathematica*, the selection of the sixth Kenneth O. May Medalists and the selection of the first Montucla Prize winner.

Conferences /Symposia/ Congresses:

From 2006 to March of 2010, the ICHM contributed to, organized, or co-sponsored numerous conferences, symposia, and congresses internationally: Special Sessions at the annual joint meetings of the American Mathematical Society and Mathematical Association of America (UNITED STATES) (2006, 2007, 2008, 2009); "Ibero-American Mathematics in the Nineteenth and Twentieth Centuries" at the International Congress of Mathematicians, Madrid, Spain (August 2006); "Some Current Trends in Research on History of Mathematics in France and Spain" at the First French-Spanish Congress of Mathematics, Zaragoza, Spain (July 2007); Satellite Conference in the History of Mathematics to the Fourth International Congress on Representation Theory, Lhasa, Tibet, (July, 2007); Session on "Leonhard Euler" at the joint meeting of the Canadian Society for History and Philosophy of Mathematics(CSHPM) and the British Society for the History of Mathematics (BSHM), Montréal, Québec, Canada (July, 2007); Conference "In Commemoration of the 300th Anniversary of Euler's Birth and the 400th Anniversary of the Publication of the Chinese Translation of Euclid's *Elements*" held in Chengdu, China (October, 2007); Special Sessions on "The Peirce's of Boston: Snapshots of Science in 19th-Century America" and "Leonhard Euler: On the Tercentenary of His Birth: Primary Sources, Rivalry with Clairaut and d'Alembert, and the Second St. Petersburg Period" at the History of Science Society annual meeting, Arlington, VA, UNITED STATES (November, 2007); Meeting celebrating "Leonard Euler's Tercentenary in São Paulo, Brazil (December, 2007); The Ninth Austrian Symposium on the History of Mathematics, "Mathematics—Picture of Reality or Created by the Mind?" in Miesenbach, Austria (12–18 May, 2008); "The Archimedes Palimpsest

Symposium” held in conjunction with the XIIth International Conference of the History of Science in East Asia (ICHSEA), Baltimore, MD, UNITED STATES (18 July, 2008); Special Session on "Case Studies in the Internationalization of Mathematics: Goals, Strategies, and Outcomes in the Nineteenth and Twentieth Centuries" at the History of Science Society annual meeting, Pittsburgh, PA, UNITED STATES (November 2008); Conference on “‘Unreasonable Effectiveness’: Historical Origins and Philosophical Problems for Applied Mathematics" held at Queen's College, Oxford, UK (December 2008); and Special Sessions on “Transmission and Transformation of Mathematics and Mathematical Instruments in Their Social Contexts, East and West,” “Status in Mathematics: In Particular the Role of Applications in the First World War,” “Mathematical Analysis in the Eighteenth and Nineteenth Centuries,” and “History of Numerical Tables: The Second Meeting on the History of the Exact Sciences along the Silk Road” at the 23rd International Congress of History of Science and Technology held in Budapest, Hungary (July 28 - August 2, 2009). Special sessions on the history of mathematics at the Joint Mathematics Meetings held in San Francisco, CA United States 15-16 January 2010; organized by Craig Fraser, Deborah Kent, Sloan Despeaux

Full reports on all of these conferences (may be found on the ICHM website at <http://www.unizar.es/ichm/>)

Projects:

1. The ICHM mounted and continues to maintain a webpage of its activities and of matters of interest to historians of mathematics internationally. See the ICHM website.
2. The ICHM continues to update and maintain a database of information on historians of mathematics around the world.
3. The ICHM created and maintains an e-mail list of historians of mathematics internationally designed to inform colleagues in a timely manner of the ICHM’s activities.
4. The ICHM continues actively to solicit and to co-sponsor special sessions and conferences internationally.

Publications:

1. *Historia Mathematica* is the official journal of the ICHM. It appears four times annually and publishes roughly 525 pages of original research in the history of mathematics from all times and cultures. From 2003 through 2007 the journal was edited by Craig Fraser (Canada) and Benno van Dalen (Germany); from 2007 to the 2009, it was edited by Benno van Dalen (Germany) and June Barrow-Green (United Kingdom); from 2009 to the present, it is edited by Niccolò Guicciardini (Italy) and June Barrow-Green (United Kingdom). It is published by Elsevier Science and is available electronically to subscribers of IDEAL.

Medals and Prizes:

- The Kenneth O. May Medal is awarded every four years to the historian or historians of mathematics whose work best exemplifies the high scholarly and intellectual contributions to the field that May worked so hard to achieve. It was awarded for the sixth time at the International Congress of History of Science and Technology in Budapest, Hungary in July 2009 to Ivor Grattan-Guinness (United Kingdom) for his

seminal work particularly in the history of nineteenth- and twentieth-century mathematics and to R. C. Gupta (India) for his ground-breaking work on the history of mathematics in India (see the ICHM website for the report).

- The Montucla Prize is an honor established in 2009 by ICHM to recognize research in the history of mathematics. The prize is awarded every four years to the author of the best article published by a young researcher in *Historia Mathematica* in the four years preceding the International Congress of History of Science and Technology. The prize is named after the great eighteenth-century historian of mathematical science Etienne Montucla, one of the founders of the modern discipline of the history of mathematics. The Montucla Prize for 2009 was awarded to: Henrik Kragh Sørensen of the University of Aarhus for his article "Exceptions and counterexamples: understanding Abel's comment on Cauchy's Theorem," *Historia Mathematica* 32 (2005).

The members of the EC of the ICHM:

From 2006 through 2009, the ICHM was chaired by Karen Hunger Parshall (United States). The EC's current members are: Craig Fraser (Canada), Chair; Jackie Stedall (United Kingdom), Vice Chair; Elena Ausejo (Spain), Secretary; Jan Hogendijk (The Netherlands), Treasurer; Ahmed Djebbar (France); Natalja Ermolaeva (Russia); Alejandro Garçiadiego (Mexico); Niccolò Guicciardini (Italy); Sergio Nobre (Brazil); QU Anjing (China); Luis Saraiva (Portugal); Ken Saito (Japan). Ex officio members are: Kirsti Andersen (Denmark); Joseph W. Dauben (United States); Karen Hunger Parshall (United States) and Christoph Scriba (Germany). The two IMU members are: Peter Neumann (United Kingdom) and Christian Houzel (France). For a list of the current ICHM national members, see the back cover of any recent issue of *Historia Mathematica*.

22. Committee on Electronic Information and Communication (CEIC)

<http://www.mathunion.org/ceic/>

Quadrennial Report of the CEIC

July 2010

John Ball, Chair

Terms of reference. The current terms of reference of CEIC, as approved by the IMU Executive Committee in June 2008, are as follows:

The CEIC is a standing committee of the Executive Committee of the International Mathematical Union, reviewed every four years by the EC at its meeting preceding that of the

IMU General Assembly. Members are appointed in even-numbered years for staggered four year terms, normally commencing on January first of the following year, using criteria similar to those for IMU Commissions.

The mandate of the CEIC is to advise the EC on matters concerning information and communication. The CEIC's duties include:

- *Reporting regularly to the EC, advising it on aspects of IMU operations related to information and communication, including financial implications, and keeping it informed of new developments.*
- *Reviewing the development of electronic information, communication, publication, and archiving so as to keep the EC abreast of current and emerging issues.*
- *Advising the EC about potential opportunities to endorse standards ('best practice recommendations') on issues related to publication and communication, including such matters as the use of software and data repositories.*
- *Advising the EC about potential opportunities to foster the growth of electronic infrastructure, and selectively creating tools for this purpose (such as the Federated World Directory of Mathematicians or links to other tools).*

(These terms of reference are due to be updated at the August 2010 IMU Executive Committee Meeting.)

Membership. At the beginning of the quadrennial period 2007-2010 the membership of the committee was:

Jonathan Borwein (Chair), John Ball (EC representative), Michael Doob, David Eisenbud, John Ewing, Ulf Rehmann and Alf van der Poorten.

David Eisenbud resigned in November 2007, and a new committee took over on 1 July 2008, consisting of:

John Ball (Chair and EC representative), Olga Caprotti, James Davenport, Michael Doob, Carol Hutchins, Peter Olver and Ulf Rehmann.

The IMU is very grateful for the dedicated service of the retiring members of the committee.

Meetings of CEIC. There were four meetings of the committee during the period, in Providence, Rhode Island, 1-4 November 2007, in Budapest on 22 April 2008, in Oxford, 19-20 December 2008, and in Minneapolis, 13-14 February 2010. The minutes of these meetings are available at <http://www.mathunion.org/ceic/Publications/index.shtml> .

Expenditure. In the calendar year 2006 the total expenditure was 20,475 USD (15,508 EUR), covering CEIC meetings and support for the Federated World Directory of Mathematicians (FWDM). In the calendar year 2007 the total expenditure was 14,310 USD (9,723 EUR), covering the Providence meeting and support for FWDM. In the calendar year 2008 the total expenditure was 23,783 USD (16,873 EUR), covering the costs of the Budapest and (in part) Oxford meetings and support for FWDM. In the calendar year 2009 the total expenditure was 1,479 USD (1,032 EUR), covering remaining costs of the Oxford meeting and the cost of transferring the ICM'98 videos to DVD. The expenditure for 2010 will be reported in the next quadrennial report.

The major issues addressed by the CEIC in the quadrennial period were as follows:

Digitization of earlier ICM Proceedings. Remarkable work has been done Keith Dennis and Ulf Rehmann to digitize all proceedings of the International Congress of Mathematicians from 1893-2006 (after which the Proceedings were born digital), and to obtain the copyright where possible. The aim is to make these publicly available as soon as possible.

Federated World Directory of Mathematicians (FWDM). The FWDM has been improved and new mathematical society databases added.

Archiving. This concerns the question of preserving the records (paper and especially electronic) of the IMU. An augmented subgroup of CEIC has considered this, and a revised version of their report was discussed by the IMU EC. A priority is to ensure that existing material is not lost. One recommendation being implemented is that the recollections of former IMU officers will be filmed. The technical issues of electronic archiving pose difficult problems that are being faced by many organizations. Final decisions will need to wait for the location of the (possible) IMU Stable Office to be decided.

World Digital Mathematical Library (WDML). Much of the effort to establish the WDML has now been superceded by retrodigitization by commercial publishers. However the European DML Initiative EuDML recently obtained substantial funding of 1.6 million Euro for 3 years from the EU (see <http://www.eudml.eu/>).

IMU on the Web. Carol Hutchins has taken over from Alf van der Poorten in coordinating the IMU on the Web section of the electronic newsletter IMU-Net.

CEIC web pages. These were moved to the IMU server. They are in need of revamping and updating. The aim is to achieve this by the time of ICM 2010, though a more systematic set of changes will need to await the decisions over the stable office.

Copyright agreements for ICM 2010. CEIC made recommendations, which were adopted, for the form of the copyright agreements for ICM 2010 between authors and the local organizing committee (LOC), and between the publishers and the LOC, including issues concerning videoing of lectures.

ICSU World Data System. A letter amplifying IMU's expression of interest in joining the ICSU World Data System was approved, and subsequently sent. Mathematicians are both users of large data sets and can potential contribute such to the system (e.g. tables of group representations), as well as being involved in methods for handling such data.

ICM 2010 Round Table on *The use of metrics for evaluating research*. CEIC organized this Round Table, which is a follow-up to the IMU/ICIAM/IMS report Citation Statistics (see <http://www.mathunion.org/publications/reports-recommendations>). The members of the panel (chosen by CEIC) are Laszlo Lovász (Chair), Doug Arnold (USA), Frank Pacard (France), Antonio de la Peña (Mexico), Malcolm MacCallum (U.K.). At the Minneapolis CEIC meeting Doug Arnold presented a case study on Impact Factor Manipulation for journals in Mathematics, clearly demonstrating that this is a worrying trend. He suggested that unless an alternative was provided then impact factors would continue to be used as a means of evaluation of researchers, departments and institutions, and proposed that IMU and ICIAM might jointly consider creating their own ranking mechanism for journals. (Subsequently the IMU Executive Committee agreed to approach ICIAM with a view to assessing if such a mechanism would be valuable.)

Best Practice Document for the running of mathematics journals. A best practice document for the running of mathematics journals was drafted. This was discussed at the Rome IMU EC meeting and was circulated to different stakeholders (editors, publishers, individual researchers, those concerned with publication ethics) for comment. A final version was prepared, with a view to possible endorsement by the IMU EC at their meeting in Bangalore prior to ICM2010 and by the General Assembly.

23. Independent Auditor's Reports 2006 -2009

Independent Auditor's Report 2006 – Excerpt

INTERNATIONAL MATHEMATICAL UNION		
Statement of Income and Expenditures For The General Fund-Modified Cash Basis		
For The Years Ended December 31, 2006 and 2005		
	2006	2005
I - INCOME	US DOLLARS	US DOLLARS
Grant from ICSU Fund and US National Academy of Sciences		
Allocation from UNESCO to ICSU Grants Program		
UNESCO Contracts		
Contributions from National Members	\$225,707	\$223,549
Contributions from Other Members		
Special Contributions	\$38,008	\$26,656
Contracts		
Sales of Publications, Royalties	\$788	\$4,362
Sales of Scientific Materials		
Bank Interest	\$16,320	\$12,180
Gain on Exchange		
Other Income	\$52,443	\$59,980
TOTAL INCOME	\$333,264	\$326,727
II - EXPENDITURES AND TRANSFERS		
A) SCIENTIFIC ACTIVITIES		
General Assembly or equivalent	\$3,267	\$3,252
Scientific Meetings: Symposia/ Colloquia/ Working Groups/ Training Courses, etc.	\$108,554	\$100,848
Representation at Scientific Meetings		
Data Gathering/ Processing		
Research Projects		
Grants to Individuals/Organizations	\$99,016	\$127,437
Other		
Less covered by UNESCO Contracts		
Routine Meetings		
Bureau/ Executive Committee	\$28,293	\$34,934
Other		
Publications	\$0	\$0
B) OTHER ACTIVITIES		
Contribution to ICSU	\$6,002	\$6,002
Contribution to other ICSU bodies	\$5,330	\$5,776
Activities covered by UNESCO Contracts		
C) ADMINISTRATIVE EXPENSES		
Salaries and Related Expenses	\$41,632	\$27,031
CDE Admin Assistant	\$52,231	\$53,985
General Office Expenses	\$130	\$111
Office Equipment		
Audit Fees	\$5,000	\$5,200
Bank Charges	\$2,327	\$1,802
Loss on Exchange		
TOTAL EXPENDITURES AND TRANSFERS	\$351,782	\$366,378
EXCESS EXPENDITURES AND TRANSFERS OVER INCOME	(\$18,518)	(\$39,651)
ACCUMULATED BALANCE AT JANUARY 1	\$418,917	\$458,568
ACCUMULATED BALANCE AT DECEMBER 31	\$400,399	\$418,917

See notes to financial statements.

INTERNATIONAL MATHEMATICAL UNION
 ASSETS and LIABILITIES in US\$ Dollars - Modified Cash Basis
 DECEMBER 31, 2006 and 2005

	<u>2006</u>		<u>2005</u>	
ASSETS				
BANK ACCOUNTS and CASH (Note 2)				
Cash				
Current Accounts	\$5,235		\$12,500	
Deposit Accounts	<u>\$402,326</u>	\$407,561	<u>\$549,789</u>	\$562,289
Prepayments				
Receivables		<u>\$38</u>		<u>\$45,406</u>
TOTAL ASSETS		<u>\$407,599</u>		<u>\$607,695</u>
LIABILITIES				
Creditors and Accruals		\$5,000		\$5,000
ACCUMULATED FUNDS (Note 3)				
General Fund				
Beginning of Year Balance	\$418,917		\$458,568	
Excess Expenditure over Income	<u>(\$18,518)</u>	\$400,399	<u>(\$39,651)</u>	\$418,917
Special Development Fund				
Beginning of Year Balance	\$98,857		\$64,711	
Provision to ICM 06	\$0		\$34,146	
Expenses	<u>(\$96,657)</u>	\$2,200	<u>\$0</u>	\$98,857
General Assembly Fund				
Beginning of Year Balance	\$12,978		\$9,726	
Provision to General Assembly 06	\$0		\$3,252	
Expenses	<u>(\$12,978)</u>	\$0	<u>\$0</u>	\$12,978
World Directory of Mathematicians Fund				
Beginning of Year Balance	\$6,038		\$6,038	
Provision to W.D.M.	\$0		\$0	
Expenses	<u>(\$6,038)</u>	\$0	<u>\$0</u>	\$6,038
Fund to ICM 06				
Beginning of Year Balance	\$65,905		\$43,140	
Provision to ICM 06	\$0		\$22,765	
Expenses	<u>(\$65,905)</u>	\$0	<u>\$0</u>	\$65,905
		<u>\$407,599</u>		<u>\$607,695</u>

See notes to financial statements.

INTERNATIONAL MATHEMATICAL UNION
 STATEMENT OF INCOME and EXPENDITURE for the GENERAL FUND
 FINANCIAL YEARS 2006 and 2005 COMPARED, IN US\$ DOLLARS

	<u>2006</u>		<u>2005</u>	
INCOME				
Allocation from UNESCO grant to ICSU	\$0		\$0	
Contributions from National Members	\$225,707		\$223,549	
Special Contributions	\$38,008		\$26,656	
Sale of Publications	\$786		\$4,362	
Bank Interest	\$16,320		\$12,180	
Gain on Exchange	\$0		\$0	
Other Income	<u>\$52,443</u>	\$333,264	<u>\$59,980</u>	\$326,727
EXPENDITURES AND TRANSFERS				
A. MEETINGS				
Executive Committee	\$27,197		\$29,579	
Other	\$0		\$0	
Program Committee	\$1,096		\$5,355	
General Assembly	<u>\$3,267</u>	\$31,560	<u>\$3,252</u>	\$38,186
B. PUBLICATIONS				
		\$0		\$0
C. SCIENTIFIC ACTIVITIES				
ICMI	\$22,570		\$21,828	
CDE	\$43,435		\$73,709	
CEIC	\$20,475		\$19,776	
Travel Grants	\$34,426		\$34,146	
Conferences	\$74,128		\$66,702	
Other	<u>\$0</u>	\$195,034	<u>\$0</u>	\$216,161
D. ADMINISTRATIVE EXPENSES				
Contribution to ISCU	\$6,002		\$6,002	
Grant to CTS	\$0		\$0	
Grant to ICMI	\$12,536		\$12,124	
Grant to CDE	\$5,330		\$5,776	
Audit Fees	\$5,000		\$5,200	
Salaries and related charges	\$41,632		\$27,031	
Salary CDE Admin Assistant	\$52,231		\$53,985	
General office expense	\$130		\$111	
Office Equipment	\$0		\$0	
Bank charges	\$2,327		\$1,802	
Loss on exchange	<u>\$0</u>	\$125,188	<u>\$0</u>	\$112,031
		<u>\$351,782</u>		<u>\$366,378</u>
EXCESS (DEFICIT) OF INCOME OVER EXPENDITURES AND TRANSFERS				
		(\$18,518)		(\$39,651)
Allocated to General Fund		\$18,518		\$39,651

INTERNATIONAL MATHEMATICAL UNION

STATEMENT OF INCOME AND EXPENDITURE

IN SWISS FRANCS - 2006

EXPENDITURE

SCHEDULE A:	Budget	Actual
Secretarial help, IMU Office	20,000	33,390
Secretarial help, President	5,000	0
Accountant	8,000	16,984
CDE Admin Assistant	0	65,811
ICMI	15,000	15,796
CDE	7,000	6,716
Office expenses (including postage)	16,000	3,095
Travel expenses of E.C.	30,000	34,268
President's and Secretary's expense	4,000	2,083
Contribution to ICSU	9,500	7,563
IMU Bulletin	5,000	
Audit Fee	7,000	6,300
General Assembly - 2006	4,000	4,116
World Directory of Mathematicians	20,000	0
Contingencies	2,000	0
Subtotal	152,500	196,122

Schedule B:	BUDGET	ACTUAL
Symposia, Conferences, IMU Lectures	95,000	64,586
ICMI scientific activities	27,000	28,438
CDE scientific activities	40,000	54,728
Program Committee for ICM 06	8,000	1,381
Travel Grants	42,000	43,377
Subvention to ICM 06	28,000	28,815
CEIC scientific activities	25,000	25,798
Subtotal	265,000	247,123
TOTAL	417,500	443,245

INCOME		
Membership dues (212 x 1320)	279,840	284,391
ICSU subvention	10,500	0
Sales of W.D.M.	14,160	0
Sales of Publications	0	990
Other Income	0	66,078
Special Development Fund	72,000	47,890
Interest on bank accounts	41,000	20,563
TOTAL	417,500	419,912

Actual US dollars Statement of Income and Expenditure converted to Swiss Francs, using the average 2006 rate calculated from the UN Operational Rates of Exchange of 1 US Dollar =1.26 Swiss Francs.

International Mathematical Union, Berlin

STATEMENT OF ASSETS AND LIABILITIES as of 31 December 2007

ASSETS	€	€	€	€
A. Current Assets				
I. Receivables and Other Assets				
1. Receivables from member contributions	28,451.98			307,465.98
2. Other assets	<u>17,044.00</u>	<u>45,495.98</u>		<u>88,943.45</u>
II. Bank Balances			<u>424,758.75</u>	<u>2,054.86</u>
			470,254.73	40,695.49
Total Assets			<u>470,254.73</u>	<u>470,254.73</u>
LIABILITIES				
A. Net Assets				
I. Association net assets				396,409.43
II. Annual surplus				6,000.00
B. Provisions				
C. Liabilities				
1. Trade payables				2,054.86
2. Liabilities from donations not yet spent				40,695.49
3. Other liabilities				<u>16,975.84</u>
D. Deferred Income				<u>8,119.11</u>
Total Liabilities				<u>470,254.73</u>

Annex 2

International Mathematical Union, Berlin

Statement of Income and Expenditure for 2007

	€	€	€
Income			341,111.84
Member contributions	251,587.23		
Donations - national	5,516.91		
Donations - international	70,879.95		
Donations	10,000.00		
Other income	3,127.75		
Other Expenditures			-259,270.32
Administrative Expenses		-121,798.05	
Salaries	-42,739.10		
Travel	-8,544.57		
Consulting	-6,951.98		
Audit fees	-7,587.46		
Other activities CDE/ICMI	-9,383.60		
Member contributions	-6,002.00		
Postage	-559.25		
Bank fees	-2,740.00		
Other	<u>-37,290.09</u>		
Expenditures for Scientific Activities		<u>-137,472.27</u>	
Promotion of scientific activities	-90,812.67		
Expense ICM	-282.16		
Expense Prize Award	-7,349.54		
Transfer to liabilities from donations not yet spent	<u>-39,027.90</u>		
Interest and Similar Income			7,912.31
Interest and Similar Expenditures			<u>-0.13</u>
<u>Result of Association Activities</u>			89,753.70
Taxes			<u>-810.25</u>
<u>Annual Surplus (Excess of Income over Expenditures and Transfers)</u>			<u><u>88,943.45</u></u>

INTERNATIONAL MATHEMATICAL UNION

Budget Comparison* — 2007
for the year ended December 31, 2007

	Budget 2007 CHF (Swiss Franc)	Actual 2007	Budget 2007 EUR (Euro)	Actual 2007
Expenses				
Schedule A:				
Secretarial help, IMU office	22,660	0	13,670	0
Secretarial help, President	5,150	3,336	3,107	2,011
Accountant	9,270	0	5,592	0
ICMI	15,450	15,564	9,320	9,384
CDE	6,180	2,017	3,728	1,216
Office expenses (including postage)	16,480	2,020	9,941	1,218
Travel expenses of the EC	30,900	3,145	18,640	1,896
President's and Secretary's expenses	4,120	1,877	2,485	1,132
Contribution to ICSU	9,785	9,956	5,903	6,002
IMU Bulletin	1,500	0	905	0
Audit fee	8,755	24,117	5,281	14,539
General Assembly	4,120	0	2,485	0
World Directory of Mathematicians	0	0	0	0
Contingencies	2,060	73,784	1,243	44,483
Subtotal of Schedule A	136,430	135,816	82,300	81,881
Schedule B:				
IMU non-CDE conference support	20,000	32,858	12,065	19,809
ICMI scientific activities	27,810	28,016	16,776	16,890
CDE scientific activities	115,000	73,631	69,373	44,390
CDE support staff	56,000	67,556	33,781	40,728
CEIC scientific activities	25,000	16,127	15,081	9,723
Website support	6,253	0	3,772	0
ICM Site Committee	2,000	0	1,207	0
Program Committee for ICM	8,240	468	4,971	282
Subvention to ICM	28,840	0	17,397	0
Prize Committees (subvention)	11,100	0	6,696	0
Awards	0	12,191	0	7,350
Travel grants (young & senior)	61,000	0	36,798	0
Media Relations	3,500	0	2,111	0
Subtotal of Schedule B	364,743	230,847	220,028	139,172
Total Expenses (A & B)	501,173	366,663	302,328	221,053
Income				
Membership dues	336,798	417,310	203,170	251,587
ICSU Grant	0	0	0	0
Special Development Fund	32,000	50,520	19,304	30,458
Interest on bank accounts	16,000	13,124	9,652	7,912
Donations	59,220	83,637	35,724	50,422
Other income	0	14,339	0	8,645
Draw from Reserves	57,155	0	34,478	0
Return to Reserves	0	0	0	0
Total Income	501,173	578,930	302,328	349,024
Income less Expenses	0	212,267	0	127,971

Transition to Statement of Income and Expenditure:

Transfer to liabilities from donations not yet spent	-39,028 €
Excess (deficit) of income over expenditure:	88,943 €

Actual Euro Income and Expenses converted to Swiss Franc, using the December 31, 2007 rate of 1 Euro = 1.66 Swiss Franc

*Based on the corrected version of the Budget for 2007-2010, published in IMU Bulletin No. 55, 2007

International Mathematical Union, Berlin

Statement of Income and Expenditure for 2008

	per 31.12.2008		Prior Year
	€	€	€
Income		305,595.02	341,111.84
Member contributions	229,768.05		251,587.23
Donations - national	1,968.42		5,516.91
Donations - international	41,000.12		70,879.95
Gifts	0.00		10,000.00
Other income	32,858.43		3,127.75
Other Expenditures		-226,415.57	-259,270.32
Administrative Expenses	-111,771.18		-121,798.05
Salaries	-45,311.66		-42,739.10
Travel	-20,283.73		-8,544.57
Print	-1,356.60		0.00
Consulting	-785.02		-6,951.98
Audit fees	-7,000.00		-7,587.46
Other activities CDE/ICMI	-9,575.70		-9,383.60
Member contributions	-6,302.00		-6,002.00
Postage	-827.15		-559.25
Bank fees	-2,106.13		-2,740.00
Other	<u>-18,223.19</u>		-37,290.09
Expenditures for Scientific Activities	-114,644.39		-137,472.27
Promotion of scientific activities	-83,893.46		-90,812.67
Expenditures ICM	-13,776.78		-282.16
Travel	-381.66		0.00
Expenditures Prize Award	-11,800.00		-7,349.54
Transfer to liabilities from restricted donations	-3,465.24		-39,027.90
Other	<u>-1,327.25</u>		0.00
Interest and Similar Income		7,195.88	7,912.31
Interest and Similar Expenditures		0.00	-0.13
Result of Association Activities		86,375.33	89,753.70
Taxes		0.00	-810.25
Annual Surplus (Excess of Income over Expenditures and Transfers)		86,375.33	88,943.45

INTERNATIONAL MATHEMATICAL UNION

Annex 4

Statement of Income and Expenditure*– 2008
for the year ended December 31, 2008

	Budget 2008 CHF (Swiss Franc)	Actual 2008	Budget 2008 EUR (Euro)	Actual 2008
Expenses				
Schedule A:				
Secretarial help, IMU office	22,660	0	15,226	0
Secretarial help, President	5,150	5,405	3,461	3,632
Accountant	9,270	0	6,229	0
ICMI	15,450	14,251	10,382	9,576
CDE	6,180	1,714	4,153	1,152
Office expenses (including postage)	16,480	4,838	11,074	3,251
Travel expenses of the EC	30,900	22,921	20,763	15,402
President's and Secretary's expenses	4,120	4,335	2,768	2,913
Contribution to ICSU	9,785	9,379	6,575	6,302
IMU Bulletin	1,500	2,019	1,008	1,357
Audit fee	8,755	11,586	5,883	7,785
General Assembly	4,120	0	2,768	0
World Directory of Mathematicians	0	0	0	0
Contingencies	2,060	25,122	1,384	16,881
Subtotal of Schedule A	136,430	101,570	91,674	68,251
Schedule B:				
IMU non-CDE conference support	20,000	44,646	13,439	30,000
ICMI scientific activities	27,810	25,651	18,687	17,236
CDE scientific activities	115,000	74,089	77,276	49,784
CDE support staff	56,000	62,028	37,629	41,660
CEIC scientific activities	25,000	25,110	16,799	16,873
Website support	6,253	308	4,202	207
ICM Site Committee	2,000	0	1,344	0
Program Committee for ICM	8,240	20,503	5,537	13,777
Subvention to ICM	28,840	0	19,379	0
Prize Committees (subvention)	11,100	920	7,459	618
Awards	0	17,561	0	11,800
Travel grants (young & senior)	61,000	568	40,989	382
Media Relations	3,500	747	2,352	502
Subtotal of Schedule B	364,743	272,131	245,091	182,859
Total Expenses (A & B)	501,173	373,701	336,765	251,110
Income				
Membership dues	353,565	341,941	237,579	229,768
ICSU Grant	0	44,646	0	30,000
Special Development Fund	32,000	6,642	21,503	4,463
Interest on bank accounts	16,000	10,709	10,751	7,196
Donations	59,220	54,374	39,793	36,537
Other income	0	51,261	0	34,445
Draw from Reserves	40,388	0	27,139	0
Return to Reserves	0	0	0	0
Total Income	501,173	509,573	336,765	342,409
Income less Expenses	0	135,872	0	91,299

Transition to P&L Statement:	Transfer to liabilities from donations not yet spent	-3,465
	Depreciation of receivables from member contributions	-1,841
	Withdrawal from liabilities from donations not yet spent	382
	Excess (deficit) of income over expenditure:	86,375

Actual Euro Income and Expenses converted to Swiss Franc, using the December 31, 2008 rate of 1 Euro = 1,4882 Swiss Franc

*Based on the corrected version of the Budget for 2007-2010, published in IMU Bulletin No. 55, 2007



International Mathematical Union
Berlin

Audit Report on the
Annual Financial Statements as of 31 December 2009



International Mathematical Union Berlin

Audit Report on the Annual Financial Statements as of 31 December 2009

1 February 2010

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Annexes to the Audit Report



A. Audit Engagement

We were engaged by the Secretary and Treasurer of the

International Mathematical Union
Berlin

(hereinafter "IMU" or "Association")

to audit and report on the annual financial statements for the reporting year ending 31 December 2009.

The IMU is an international association. According to German law, the IMU is an "ideal" association (§ 21 German Civil Code (BGB)) because it pursues ideal purposes rather than financial purposes. The Association does not have legal capacity in Germany because it is not registered with the German Register of Associations.

The Association is not required by law to have its annual financial statements audited. In accordance with article 45 of the IMU Statutes, at least once every four years the members of the Union shall obtain from the Executive Committee an audit of the accounts. In continuation of current practice, the audit of the annual financial statements is performed annually. The financial statements consist of a statement of assets and liabilities as well as a statement of income and expenditure. According to the size definitions of § 267 German Commercial Code (HGB), the IMU would be classified as a small entity. Accordingly, the audit was performed in conformity with the accounting regulations applicable to small entities.

As per agreement, we included explanations to the net assets, financial position and results of operations in our audit report (section D.)

The budget comparison included in Annex 4 was, per agreement, not audited.

The performance of the audit and our liability, including any third-party liability, is controlled by the enclosed "General Engagement Terms for German Public Auditors and Public Audit Firms as of January 1, 2002" under Annex 6.

This report was prepared under the auditing standard of the Institut der Wirtschaftsprüfer in Deutschland e. V. IDW PS 450 "Fundamentals of Proper Audit Reporting."

B. Object, Nature and Scope of the Audit

Object of the Audit

We audited the annual financial statements of the IMU as of 31 December 2009 together with the bookkeeping system. The financial statements (statements of assets and liabilities and income and expenditure) were prepared in accordance with German accounting principles. Bookkeeping and the preparation of the annual financial statements are the responsibility of the Association's Secretary. Our responsibility is to provide an opinion on the annual financial statements based on our audit.

An audit of compliance with other statutory regulations is part of our engagement only to the extent that those regulations typically have an effect on the annual financial statements or to the extent that non-compliance may have an effect on the annual financial statements.

In addition, an audit is not intended to determine whether the Association is compliant with all regulations of, for example, tax law, social security and employment law, competition and price regulations, the law of foreign transactions, consumer protection regulations or environmental regulations or similar matters.

It is not the nature of an audit to detect and investigate criminal acts (e. g. embezzlement, fraud, collusion) occurring beyond the scope of the annual financial statements.

We have not examined the extent and appropriateness of insurance coverage.

Nature and Scope of the Audit

We conducted our audit of the annual financial statements in accordance with §§ 316 *et seq.* HGB as well as in observance of the Principles of Performing Audits of Financial Statements of the Institut der Wirtschaftsprüfer in Deutschland e. V. (IDW). Therein, an audit has to be planned and performed such that material misstatements affecting the bookkeeping and annual financial statements are to be detected with reasonable assurance.

The evidence supporting the disclosures in the accounting and annual financial statements is to be examined on a test basis. The audit includes assessing the accounting, measurement and classification principles used and significant estimates made by management, as well as evaluating the overall presentation of the annual financial statements. We believe that our audit provides a reasonable basis for our opinion.



We conducted our audit in January 2010 in the offices of the Konrad-Zuse-Zentrum für Informationstechnik Berlin (ZIB). The audit report was prepared in our office.

Our audit commenced with our independent auditor's report dated 22 January 2009 for the year ended 31 December 2008. The Statutes do not provide for an adoption of the annual financial statements. Instead, on the basis of every fourth annual financial statements (most recently on 31 December 2005, thereafter not until 31 December 2009) the preparation of a budget for the following four-year-period is anticipated. The budget for the time from 1 January 2007 to 31 December 2010 was approved by the 15th General Assembly in Santiago de Compostela/Spain on 19 and 20 August 2006.

We received information from:

- | | |
|--|---|
| <ul style="list-style-type: none"> – Prof. Dr. Dr. h. c. mult.
Martin Grötschel – Ms. Sylwia Markwardt | <ul style="list-style-type: none"> Secretary of the IMU Assistant to the Secretary of the IMU |
|--|---|

Management provided us with the information and documentation we requested and issued a standard letter of representation.

The audit had no particular focus because of the limited size of the Association. We audited the complete and timely recording of business transactions on a test basis and were convinced of the implementation of the four-eye-principle as the main instrument of the internal control system.

Our audit included events of particular importance occurring after the end of the reporting year as well as whether the annual financial statements as a whole provide an accurate view of the net assets, financial position and results of operations of the Association.

C. Statements and Notes on Accounting

1. Proper Accounting

1.1. Bookkeeping and Other Audited Documents

Financial bookkeeping is performed using Microsoft Excel software. Wage and salary accounting is not necessary because there is no personnel.

Records are properly kept and, together with the books and other documents, allow for a proper audit. In accordance with our findings, which are based on sampling, the bookkeeping corresponds to statutory and regulatory requirements.

1.2. Annual Financial Statements

Preparation of the Annual Financial Statements

The enclosed annual financial statements were prepared in accordance with the regulations of the Third Book of the HGB (§§ 238 *et seq.*) under observance of the supplementary regulations for corporations in the Second Section (§§ 264 *et seq.*).

The annual financial statements commence with the prior year's financial statements and are based on proper bookkeeping. In accordance with the written statement issued by management, the annual financial statements include all required assets, liabilities and risks.

Accounting and Measurement

Proper documentation of assets and liabilities is maintained. Assets and liabilities have been reported and measured in compliance with statutory regulations and principles of proper bookkeeping.

Classification

The classifications used in the statement of assets and liabilities and statement of income and expenditure correspond to regulations under §§ 265 to 277 HGB.

The statement of income and expenditure is prepared in accordance with the total cost (nature of expense) method (§ 275 (2) HGB). Classifications were modified to conform to the requirements of the IMU.

Notes to the Annual Financial Statements

The Association does not have a legal obligation to prepare notes to the annual financial statements. Accordingly, the IMU has permissibly waived the preparation of notes.

Contingencies, Other Financial Obligations

As per the information provided to us and our own inquiries, contingencies requiring disclosure within the meaning of § 251 HGB and other financial obligations within the meaning of § 285 no. 3 HGB did not exist on the balance sheet date.



1.3. Management Report

The Association does not have a legal obligation to prepare a management report. Accordingly, the IMU has permissibly waived the preparation of a management report.

The IMU provides its members with an annual accounting of its activities in the Bulletin of the International Mathematical Union. The current Bulletin number 56 dated December 2008 was published in July 2009.

The Bulletin provides, in particular, a description of IMU activities for the promotion of mathematics in the world and the proper use of member contributions and donations.

According to management information and the results of our audit, no events of particular importance occurred after the conclusion of the financial year.

2. Overall Assertions of the Annual Financial Statements

2.1. Our Opinion on the Overall Assertions of the Annual Financial Statements

According to the results of our audit, the annual financial statements give a true and fair view of the net assets, financial position and results of operations of the Association in accordance with German principles of proper accounting.

As per § 321 (2) sent. 4 HGB, the auditor is required to include statements in his audit report on significant measurement principles as well as the extent to which changes in measurement principles, including the exercise of accounting and measurement elective options and use of discretion, influence the presentation of the net assets, financial position and result of operations as a whole.

The influence of material measurement principles and changes thereto in the presentation of the net assets, financial position and results of operations are explained in section 2.2.

General explanations of the net assets, financial position and results of operations are provided in sections D.1. - D.3.

2.2. Significant Measurement Principles

The exercise of accounting and measurement elective options and the use of discretion do not indicate any tendency to improve or worsen the result or in any way influence the total disclosures of the annual financial statements.

Foreign currency receivables and payables are recorded in the bookkeeping in Euro at the exchange rate valid on the date of their accrual. Measurement on the balance sheet date is at the exchange rate valid on that date, as necessary.

D. Other Classifications and Explanations to the Annual Financial Statements

1. Net Assets

In order to evaluate the net assets and changes thereto, the balance sheets of the last two financial years are shown in condensed form:

ASSETS	2009		2008		Change
	k€	%	k€	%	k€
Current Assets					
Receivables from member contributions	42	7.0	45	7.9	-3
Cash	555	93.0	519	91.5	36
Other receivables (including prepaid expenses)	0	0.0	3	0.5	-3
	<u>597</u>	100.0	<u>587</u>	100.0	<u>30</u>

LIABILITIES	2009		2008		Change
	k€	%	k€	%	k€
<u>Net assets (own funds)</u>	<u>500</u>	83.8	<u>483</u>	85.2	17
Current Liabilities					
Provisions	18	3.0	13	2.3	5
Trade payables	3	0.5	0	0.0	3
Liabilities from restricted donations	75	12.6	64	11.3	11
Other liabilities (including deferred income)	1	0.2	7	1.2	-6
	<u>97</u>	16.3	<u>84</u>	14.8	13
	<u>597</u>	100.0	<u>587</u>	100.0	<u>30</u>



Receivables from member contributions are as follows:

Country	Year	Amount		Receipt of payment
		€	CHF	
Bosnia & Herzegovina	2009	1,025.83	1,528.00	20.1.2010
Cameroon	2009	1,025.83	1,528.00	6.1.2010
Cuba	2009	1,025.83	1,528.00	
Egypt	2009	2,051.67	3,056.00	
India	2009	8,206.67	12,224.00	26.1.2010
Kazakhstan	2009	1,025.83	1,528.00	
Netherlands	2009	8,206.67	12,224.00	
Pakistan	2009	1,025.83	1,528.00	
Peru	2009	1,025.83	1,528.00	
Philippines	2009	1,025.83	1,528.00	
Russia	2009	6,155.00	9,168.00	
Ukraine	2009	2,051.67	3,056.00	4.1.2010
Uruguay	2009	1,025.83	1,528.00	
		<u>34,878.32</u>	<u>51,952.00</u>	
Bosnia & Herzegovina	2008	879.00	1,455.00	20.1.2010
Cuba	2008	878.45	1,455.00	
Georgia	2008	878.45	1,455.00	
Pakistan	2008	878.45	1,455.00	
Peru	2008	477.43	717.00	
		<u>3,991.78</u>	<u>6,537.00</u>	
Bosnia & Herzegovina	2007	861.57	1,386.00	20.1.2010
Cuba	2007	861.57	1,386.00	
Georgia	2007	861.57	1,386.00	
Kazakhstan	2007	861.57	1,386.00	
		<u>3,446.28</u>	<u>5,544.00</u>	
Georgia	2006/2005	1,592.55	2,640.00	
EWB Georgia	2005-2008	-1,841.00	-2,740.00	
		<u>42,067.93</u>	<u>63,933.00</u>	

At the end of 2009, outstanding member contributions were k€ 44 (kCHF 67) and at the time of the audit they amounted to k€ 29 (kCHF 44). An impairment of 50 % was made on the receivable of Georgia because it has not paid its member contributions for 2005 to 2008.

Cash, part of which is in foreign currency, is located in accounts with the Berliner Bank AG and is composed of the following:

	Foreign currency	€
Account in € (35 91 21 11 30)		301,306.01
Account in CHF (00 93 02 51 15)	CHF 248,216.57	166,868.55
Account in USD (00 93 02 50 50)	USD 97,086.89	67,740.44
Account in € - Ito Fund (35 91 21 11 01)		10,386.28
Account in € (35 91 21 11 00)		8,621.36
Cash in €		<u>220.60</u>
		<u>555,143.24</u>
		=====

The conversion of foreign currency into Euro occurs at the period-end exchange rate.

Net assets (own funds) are composed of the following:

	€
Per 1.1.2009	482,784.76
Annual surplus 2009	<u>16,758.73</u>
Per 31.12.2009	499,543.49
	=====

A total of € 307,465.98 of net assets of the IMU was accumulated prior to the transfer of the IMU registered office to Germany as of 1 January 2007.



Liabilities from restricted donations developed as follows:

	€	€
<u>Special Development Fund</u>		
Per 1.1.2009		33,522.72
Contribution		
– American Mathematical Society	15,324.93	
– London Mathematical Society (LMS)	3,562.00	
– Unione Matematica Italiana	2,928.85	
– Deutsche Mathematiker-Vereinigung	<u>2,500.00</u>	<u>24,315.78</u>
Per 31.12.2009		57,838.50

<u>Ito Fund</u>		
Per 1.1.2009		10,256.35
Contribution interest revenue 2009		
less account fees		<u>129.93</u>
Per 31.12.2009		10,386.28

<u>Templeton Fund</u>		
Per 1.1.2009		20,426.56
Contribution		3,032.08
Withdrawal for expense compensation for project work and reporting		<u>-16,485.82</u>
Per 31.12.2009		6,973.02
		=====
		75,197.80
		=====

The funds shown under Special Development Fund are for the support of mathematicians from developing countries to support participants in International Congresses of Mathematicians. An international committee decides on the applications. The next congress will take place in Hyderabad/India in 2010.

The funds shown under Templeton Fund were granted to the IMU by the John Templeton Foundation on 30.6.2008 and are for the support of the DCSG-Project "Mathematics in Africa: Challenges and Opportunities".

2. Financial Position

The IMU was in a position to meet its payment obligations in a full and timely manner. The cash flow from current activities amounts to k€ 36 and corresponds to the change in the amount of cash between 1 January 2009 (k€ 519) and 31 December 2009 (k€ 555).

3. Results of Operations

The summarized statements of income and expenditure show the following structure for the reporting year:

	<u>2 0 0 9</u>		<u>2 0 0 8</u>		<u>Change</u>
	k€	%	k€	%	k€
<u>Revenue</u>	339	100.0	306	100.0	33
Administrative expenses	-128	-37.8	-112	-36.6	-16
Expenditure for scientific activities	-199	-58.7	-115	-37.6	-84
<u>Other expenditures</u>	-327	-96.5	-227	-74.2	-100
Operating result	12	3.5	79	25.8	-67
Interest and similar income	5	1.5	7	2.3	-2
<u>Result before taxes on income</u>	17	5.0	86	28.1	-69
Taxes on income	0	0.0	0	0.0	0
Annual surplus	17	5.0	86	28.1	-69

The IMU had revenue of k€ 339 in the reporting year, consisting largely of member contributions. In addition, the IMU received donations from scientific organizations.

Revenue is composed of the following:

	€
Member contributions	267,752.58
Third-party donations	48,896.54
Other revenue	<u>21,854.04</u>
	338,503.16
	=====

The composition of member contributions is shown in Annex 3 to this report.



Third-party donations from scientific organizations are composed of the following:

	€
- international	
Niels Henrik Abel Memorial Fund, Norway (thereof € 10,500.00 for Ramanujan-Prize)	40,357.45
- national	
DFG	<u>8,539.09</u>
	48,896.54
	=====

Other expenditures of approximately k€ 327 are shown in detail in the statement of income and expenditure (Annex 2).

Interest and similar income represents the interest paid on the bank balance by the Berliner Bank AG.

E. Reproduction of the Independent Auditor's Report and Concluding Statement

We have issued the following unqualified opinion dated 1 February 2010 for the annual financial statements as of 31 December 2009 of the IMU, Berlin. The annual financial statements are enclosed in this report under Annexes 1 to 2.

"Independent Auditor's Report"

To the International Mathematical Union, Berlin

We have audited the annual financial statements, together with the bookkeeping system of the International Mathematical Union for the reporting year from 1 January 2009 to 31 December 2009. The maintenance of the books and the preparation of the annual financial statements in accordance with the German Commercial Code (HGB) are the responsibility of the Association's management. Our responsibility is to express an opinion on the annual financial statements, together with the bookkeeping system, based on our audit.

We performed our audit of the annual financial statements in accordance with § 317 HGB and general accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Those standards require

that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the annual financial statements in accordance with German principles of proper accounting are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Association as well as expectations of possible misstatements are taken into account in determination of audit procedures. The effectiveness of the internal control system and the evidence supporting the disclosures in the books and records and in the annual financial statements are examined primarily on a test basis.

The audit includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall presentation of the annual financial statements. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion based on the information gathered during the audit, the annual financial statements correspond to statutory requirements as applicable to small entities and give a true and fair view of the net assets, financial position and results of operations of the Association in accordance with German principles of proper accounting."

The above audit report is submitted in compliance with statutory provisions and principles of proper audit reporting of annual financial statements (IDW PS 450).

Use of the above independent auditor's report outside of this audit report requires our prior consent. Publication or a copy of the annual financial statements in a form different from the certified form also requires our consent if our independent auditor's report is quoted or if reference is made to our audit. We herein refer to § 328 HGB.

Berlin, 1 February 2010

RÖVERBRÖNNER GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft



Helmut Schuhmann
Wirtschaftsprüfer

Annexes

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Annex 2

International Mathematical Union, Berlin

Statement of Income and Expenditure for 2009

	per 31.12.2009			Prior Year
	€	€	€	€
Income			338,503.16	305,595.02
Member contributions	267,752.58			229,768.05
Donations - national	8,539.09			1,968.42
Donations - international	40,357.45			41,000.12
Other income	21,854.04			32,858.43
Other Expenditures			-326,302.93	-226,415.57
Administrative Expenses		-127,727.83		-111,771.18
Salaries	-59,150.29			-45,311.66
Travel	-31,100.16			-20,283.73
Print	-2,380.00			-1,356.60
Consulting	0.00			-785.02
Audit fees	-10,205.00			-7,000.00
Other activities CDE/ICMI	-10,568.32			-9,575.70
Member contributions	-6,617.00			-6,302.00
Postage	-1,031.14			-827.15
Bank fees	-2,263.93			-2,106.13
Other	<u>-4,411.99</u>			-18,223.19
Expenditures for Scientific Activities		-198,575.10		-114,644.39
Promotion of scientific activities	-106,295.40			-83,893.46
Expenditures ICM	-75,152.50			-13,776.78
Travel	0.00			-381.66
Expenditures Prize Award	-10,500.00			-11,800.00
Transfer to liabilities from restricted donations	0.00			-3,465.24
Other	<u>-6,627.20</u>			-1,327.25
Interest and Similar Income			4,715.32	7,195.88
Interest and Similar Expenditures			-0.41	0.00
<u>Result of Association Activities</u>			16,915.14	86,375.33
Taxes			-156.41	0.00
<u>Annual Surplus</u>			16,758.73	86,375.33

International Mathematical Union

Annex 3

Schedule of Member Contributions 2009

- 1 -

Country	Amount EUR	Amount CHF
Argentina	2,051.67	3,056.00
Armenia	1,025.83	1,528.00
Australia	4,103.34	6,112.00
Austria	2,051.67	3,056.00
Belgium	4,103.34	6,112.00
Bosnia & Herzegovina	1,025.83	1,528.00
Brazil	8,206.67	12,224.00
Bulgaria	1,025.83	1,528.00
Cameroon	1,025.83	1,528.00
Canada	12,310.00	18,336.00
Chile	2,051.67	3,056.00
CMS, Beijing	7,386.00	11,001.60
Math Society, Taipei	4,926.02	7,337.40
Colombia	1,025.83	1,528.00
Croatia	1,025.83	1,528.00
Cuba	1,025.83	1,528.00
Czech Republic	4,103.34	6,112.00
Denmark	2,051.67	3,056.00
Egypt	2,051.67	3,056.00
Estonia	1,025.83	1,528.00
Finland	2,051.67	3,056.00
France	12,310.00	18,336.00
Georgia	1,025.83	1,528.00
Germany	12,310.00	18,336.00
Greece	1,025.83	1,528.00
Hong Kong	1,025.83	1,528.00
Hungary	4,103.34	6,112.00
Iceland	1,025.83	1,528.00
India	8,206.67	12,224.00
Indonesia	1,025.83	1,528.00
Iran	4,103.34	6,112.00
Ireland	2,051.67	3,056.00
Israel	12,310.00	18,336.00
Italy	12,310.00	18,336.00
Ivory Coast	1,025.83	1,528.00
Japan	9,240.56	13,764.00
Kazakhstan	1,025.83	1,528.00
Korea, Republic of	8,206.67	12,224.00
Latvia	1,025.83	1,528.00
Lithuania	1,025.83	1,528.00

International Mathematical UnionAnnex 3**Schedule of Member Contributions 2009**

- 2 -

Country	Amount EUR	Amount CHF
Mexico	2,051.67	3,056.00
Netherlands	8,206.67	12,224.00
New Zealand	1,025.83	1,528.00
Nigeria	1,025.83	1,528.00
Norway	4,103.34	6,112.00
Pakistan	1,025.83	1,528.00
Peru	1,025.83	1,528.00
Philippines	1,025.83	1,528.00
Poland	8,206.67	12,224.00
Portugal	2,051.67	3,056.00
Romania	1,025.83	1,528.00
Russia	12,310.00	18,336.00
Saudi Arabia	1,025.83	1,528.00
Serbia	1,025.83	1,528.00
Singapore	1,025.83	1,528.00
Slovakia	2,051.67	3,056.00
Slovenia	1,025.83	1,528.00
South Africa	2,051.67	3,056.00
Spain	8,206.67	12,224.00
Sweden	8,206.67	12,224.00
Switzerland	8,206.67	12,224.00
Tunisia	1,025.83	1,528.00
Turkey	1,025.83	1,528.00
Ukraine	2,051.67	3,056.00
United Kingdom	12,310.00	18,336.00
Uruguay	1,025.83	1,528.00
USA	12,310.00	18,336.00
Venezuela	1,025.83	1,528.00
Vietnam	1,025.83	1,528.00
Total	267,752.58	398,823.00

INTERNATIONAL MATHEMATICAL UNION

Annex 4

Statement of Income and Expenditure*– 2009
for the year ended December 31, 2009

	Budget 2009	Actual 2009	Budget 2009	Actual 2009
	CHF (Swiss Franc)		EUR (Euro)	
Expenses				
Schedule A:				
Secretarial help, IMU office	22,660	0	15,234	0
Secretarial help, President	5,150	1,968	3,462	1,323
Accountant	9,270	0	6,232	0
ICMI	15,450	15,378	10,387	10,337
CDE	6,180	2,391	4,155	1,607
Office expenses (including postage)	16,480	4,527	11,079	3,043
Travel expenses of the EC	30,900	24,407	20,773	16,406
President's and Secretary's expenses	4,120	4,279	2,770	2,876
Contribution to ICGU	9,785	9,844	6,578	6,617
IMU Bulletin	1,500	3,541	1,008	2,380
Audit fee	8,755	15,182	5,886	10,205
General Assembly	4,120	0	2,770	0
World Directory of Mathematicians	0	0	0	0
Contingencies	2,060	22,708	1,385	15,264
Subtotal of Schedule A	138,430	104,226	81,718	70,067
Schedule B:				
IMU non-CDE conference support	20,000	0	13,445	0
ICMI scientific activities	27,810	27,682	18,696	18,607
CDE scientific activities	115,000	128,918	77,311	86,656
CDE support staff	56,000	86,029	37,647	57,827
CEIC scientific activities	25,000	1,535	16,807	1,032
Website support	6,253	2,150	4,204	1,445
ICM Site Committee	2,000	4,495	1,345	3,022
Program Committee for ICM	8,240	19,995	5,540	13,440
Subvention to ICM	28,840	87,313	19,388	58,690
Prize Committees (subvention)	11,100	7,709	7,462	5,182
Awards	0	15,621	0	10,500
Travel grants (young & senior)	61,000	0	41,008	0
Media Relations	3,500	0	2,353	0
Subtotal of Schedule B	384,743	381,448	245,208	268,402
Total Expenses (A & B)	601,173	486,873	338,924	328,480
Income				
Membership dues	371,304	398,360	249,617	267,753
ICGU Grant	0	0	0	0
Special Development Fund	32,000	36,175	21,513	24,316
Interest on bank accounts	16,000	7,015	10,756	4,715
Donations	59,220	60,039	39,812	40,357
Other income	0	45,039	0	30,393
Draw from Reserves	22,649	0	15,226	0
Return to Reserves	0	0	0	0
Total Income	601,173	648,828	338,924	387,636
Income less Expenses	0	60,955	0	41,075

Transition to P&L Statement:	Transfer to liabilities from donations not yet spent	-24,318
	Excess (deficit) of Income over expenditure:	18,768

Actual Euro Income and Expenses converted to Swiss Francs, using the December 31, 2008 rate of 1 Euro = 1,4877 Swiss Francs

*Based on the corrected version of the Budget for 2007-2010, published in IMU Bulletin No. 66, 2007

Legal and Tax Position

1. Legal Position

Association, Registered Office

International Mathematical Union, Berlin/Germany

The IMU is an international association. According to German law, the IMU is an "ideal" association (§ 21 German Civil Code (BGB)) because it pursues ideal purposes rather than financial purposes. The Association does not have legal capacity in Germany because it is not registered with the German Register of Associations.

The registered office of the IMU was located in Princeton/USA, until 31 December 2006. According to article 28 f. of the IMU Statutes, the legal domicile of the Union shall be located at the offices of the Secretary.

Place of Management

c/o Konrad-Zuse-Zentrum (ZIB), Takustrasse 7, 14195 Berlin/Germany

Bookkeeping and monetary transactions of the IMU were performed by the Konrad-Zuse-Zentrum within the scope of the support activities.

Statutes

The Statutes were amended on 19 and 20 August 2006 in Santiago de Compostela/Spain by the 15th General Assembly. The amendments were with regard to articles 7-12 (Associate Membership), article 22 (term of office of the Executive Committee Members-at-Large) and article 23 (number of the Executive Committee Members-at-Large). A certified German translation is available.

Objectives of the Association

According to article 1 of the Statutes, the objectives are:

- “(a) to promote international cooperation in mathematics;
- (b) to support and assist the International Congress of Mathematicians and other international scientific meetings or conferences;
- (c) to encourage and support other international mathematical activities considered likely to contribute to the development of mathematical science in any of its aspects, pure, applied, or educational.”

Association Capital, Members

The Statutes make no provision for association capital. Association capital amounted to approximately k€ 307 on 1 January 2007, the time when the registered office was transferred from Princeton/USA to Berlin/Germany.

According to article 3, a country adheres to the Association through an adhering organization. This may be the principal academy, a mathematical society, its research council or some other institutions or association of institutions, or an appropriate agency of its government. At the end of 2009, the IMU had 68 regular members (voting) and 4 associate members (non-voting).

Executive Committee

The Executive Committee consists of the following persons:

- Mr. László Lovász, Hungary (President)
- Mr. Martin Grötschel, Germany (Secretary)
- Mr. Zhi-Ming Ma, China (Vice-President)
- Mr. Claudio Procesi, Italy (Vice-President)
- Mr. M. Salah Baouendi, USA (Member-at-Large)
- Mr. Manuel de León, Spain (Member-at-Large)
- Ms. Ragni Piene, Norway (Member-at-Large)

- Ms. Cheryl E. Praeger, Australia (Member-at-Large)
- Mr. Victor A. Vassiliev, Russia (Member-at-Large)
- Mr. Marcelo Viana, Brazil (Member-at-Large)
- Mr. John M. Ball, United Kingdom (Ex-officio,
because he is the former President of the IMU)

Ordinary business is performed by the Secretary and his assistant in Germany.

Reporting Year

The reporting year corresponds to the calendar year. Reports to members are made annually by dispatching the Bulletin of the IMU as well as through publication on the IMU homepage www.mathunion.org. The next General Assembly of all members will take place in 2010.

General Assembly

The General Assembly resolved the following in August 2006:

- appointments to various committees and commissions
- budget for the time between 2007 and 2010
- amendments to the IMU Statutes (see above "Statutes")
- increase in member contributions
- the next General Assembly will take place in 2010 in Hyderabad/India

2. Tax Information

The Association is registered with the Finanzamt für Körperschaften I, Berlin, under the tax number 27/840/57572.

At the time of the audit, there were no tax notices available for the Association, which has had its registered office in Germany since 2007.

The Association is non-profit. After common inquiries on 16 April 2007 at the Finanzamt für Körperschaften I, Berlin, the formal requirements for the recognition as a non-profit organization were fulfilled. The final certification of the non-profit status will be made after actual fulfillment of the requirements.

The Finanzamt für Körperschaften I, Berlin, issued a preliminary certification on 4 May 2007. This was done upon the instruction of the Senatsverwaltung für Finanzen, Berlin.

On 9 June 2009 it issued a notice of exemption for 2007 and 2008 in which the current income of the IMU is exempt from corporate and trade tax. In addition, revenue from capital of the IMU is not subject to withholding tax on capital up to 31 December 2011. The IMU is entitled to issue donation confirmations within this time period.

[Translator's notes are in square brackets]

General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms] as of January 1, 2002

This is an English translation of the German text, which is the sole authoritative version

1. Scope

- (1) These engagement terms are applicable to contracts between Wirtschaftsprüfer [German Public Auditors] or Wirtschaftsprüfungsgesellschaften [German Public Audit Firms] (hereinafter collectively referred to as the "Wirtschaftsprüfer") and their clients for audits, consulting and other engagements to the extent that something else has not been expressly agreed to in writing or is not compulsory due to legal requirements.
- (2) If, in an individual case, as an exception contractual relations have also been established between the Wirtschaftsprüfer and persons other than the client, the provisions of No. 9 below also apply to such third parties.

2. Scope and performance of the engagement

- (1) Subject of the Wirtschaftsprüfer's engagement is the performance of agreed services – not a particular economic result. The engagement is performed in accordance with the Grundsätze ordnungsmäßiger Berufsausübung [Standards of Proper Professional Conduct]. The Wirtschaftsprüfer is entitled to use qualified persons to conduct the engagement.
- (2) The application of foreign law requires – except for financial attestation engagements – an express written agreement.
- (3) The engagement does not extend – to the extent it is not directed thereto – to an examination of the issue of whether the requirements of tax law or special regulations, such as, for example, laws on price controls, laws limiting competition and Bewirtschaftungsrecht [laws controlling certain aspects of specific business operations] were observed; the same applies to the determination as to whether subsidies, allowances or other benefits may be claimed. The performance of an engagement encompasses auditing procedures aimed at the detection of the falsification of books and records and other irregularities only if during the conduct of audits grounds therefor arise or if this has been expressly agreed to in writing.
- (4) If the legal position changes subsequent to the issuance of the final professional statement, the Wirtschaftsprüfer is not obliged to inform the client of changes or any consequences resulting therefrom.

3. The client's duty to inform

- (1) The client must ensure that the Wirtschaftsprüfer – even without his special request – is provided, on a timely basis, with all supporting documents and records required for and is informed of all events and circumstances which may be significant to the performance of the engagement. This also applies to those supporting documents and records, events and circumstances which first become known during the Wirtschaftsprüfer's work.
- (2) Upon the Wirtschaftsprüfer's request, the client must confirm in a written statement drafted by the Wirtschaftsprüfer that the supporting documents and records and the information and explanations provided are complete.

4. Ensuring independence

The client guarantees to refrain from everything which may endanger the independence of the Wirtschaftsprüfer's staff. This particularly applies to offers of employment and offers to undertake engagements on one's own account.

5. Reporting and verbal information

If the Wirtschaftsprüfer is required to present the results of his work in writing, only that written presentation is authoritative. For audit engagements the long-form report should be submitted in writing to the extent that nothing else has been agreed to. Verbal statements and information provided by the Wirtschaftsprüfer's staff beyond the engagement agreed to are never binding.

6. Protection of the Wirtschaftsprüfer's intellectual property

The client guarantees that expert opinions, organizational charts, drafts, sketches, schedules and calculations – especially quantity and cost computations – prepared by the Wirtschaftsprüfer within the scope of the engagement will be used only for his own purposes.

7. Transmission of the Wirtschaftsprüfer's professional statement

- (1) The transmission of a Wirtschaftsprüfer's professional statements (long-form reports, expert opinions and the like) to a third party requires the Wirtschaftsprüfer's written consent to the extent that the permission to transmit to a certain third party does not result from the engagement terms. The Wirtschaftsprüfer is liable (within the limits of No. 9) towards third parties only if the prerequisites of the first sentence are given.
- (2) The use of the Wirtschaftsprüfer's professional statements for promotional purposes is not permitted; an infringement entitles the Wirtschaftsprüfer to immediately cancel all engagements not yet conducted for the client.

8. Correction of deficiencies

- (1) Where there are deficiencies, the client is entitled to subsequent fulfilment [of the contract]. The client may demand a reduction in fees or the cancellation of the contract only for the failure to subsequently fulfil [the contract]; if the engagement was awarded by a person carrying on a commercial business as part of that commercial business, a government-owned legal person under public law or a special government-owned fund under public law, the client may demand the cancellation of the contract only if the services rendered are of no interest to him due to the failure to subsequently fulfil [the contract]. No. 9 applies to the extent that claims for damages exist beyond this.
- (2) The client must assert his claim for the correction of deficiencies in writing without delay. Claims pursuant to the first paragraph not arising from an intentional tort cease to be enforceable one year after the commencement of the statutory time limit for enforcement.
- (3) Obvious deficiencies, such as typing and arithmetical errors and formelle Mängel [deficiencies associated with technicalities] contained in a Wirtschaftsprüfer's professional statements (long-form reports, expert opinions and the like) may be corrected – and also be applicable versus third parties – by the Wirtschaftsprüfer at any time. Errors which may call into question the conclusions contained in the Wirtschaftsprüfer's professional statements entitle the Wirtschaftsprüfer to withdraw – also versus third parties – such statements. In the cases noted the Wirtschaftsprüfer should first hear the client, if possible.

9. Liability

- (1) The liability limitation of § ["Article"] 323 (2) ["paragraph 2"] HGB ["Handelsgesetzbuch": German Commercial Code] applies to statutory audits required by law.
- (2) Liability for negligence; An individual case of damages
If neither No. 1 is applicable nor a regulation exists in an individual case, pursuant to § 54a (1) no. 2 WPO ["Wirtschaftsprüferordnung": Law regulating the Profession of Wirtschaftsprüfer] the liability of the Wirtschaftsprüfer for claims of compensatory damages of any kind – except for damages resulting from injury to life, body or health – for an individual case of damages resulting from negligence is limited to € 4 million; this also applies if liability to a person other than the client should be established. An individual case of damages also exists in relation to a uniform damage arising from a number of breaches of duty. The individual case of damages encompasses all consequences from a breach of duty without taking into account whether the damages occurred in one year or in a number of successive years. In this case multiple acts or omissions of acts based on a similar source of error or on a source of error of an equivalent nature are deemed to be a uniform breach of duty if the matters in question are legally or economically connected to one another. In this event the claim against the Wirtschaftsprüfer is limited to € 5 million. The limitation to the fivefold of the minimum amount insured does not apply to compulsory audits required by law.
- (3) Preclusive deadlines
A compensatory damages claim may only be lodged within a preclusive deadline of one year of the rightful claimant having become aware of the damage and of the event giving rise to the claim – at the very latest, however, within 5 years subsequent to the event giving rise to the claim. The claim expires if legal action is not taken within a six month deadline subsequent to the written refusal of acceptance of the indemnity and the client was informed of this consequence.
The right to assert the bar of the preclusive deadline remains unaffected. Sentences 1 to 3 also apply to legally required audits with statutory liability limits.

10. Supplementary provisions for audit engagements

- (1) A subsequent amendment or abridgement of the financial statements or management report audited by a Wirtschaftsprüfer and accompanied by an auditor's report requires the written consent of the Wirtschaftsprüfer even if these documents are not published. If the Wirtschaftsprüfer has not issued an auditor's report, a reference to the audit conducted by the Wirtschaftsprüfer in the management report or elsewhere specified for the general public is permitted only with the Wirtschaftsprüfer's written consent and using the wording authorized by him.
- (2) If the Wirtschaftsprüfer revokes the auditor's report, it may no longer be used. If the client has already made use of the auditor's report, he must announce its revocation upon the Wirtschaftsprüfer's request.
- (3) The client has a right to 5 copies of the long-form report. Additional copies will be charged for separately.

11. Supplementary provisions for assistance with tax matters

- (1) When advising on an individual tax issue as well as when furnishing continuous tax advice, the Wirtschaftsprüfer is entitled to assume that the facts provided by the client – especially numerical disclosures – are correct and complete; this also applies to bookkeeping engagements. Nevertheless, he is obliged to inform the client of any errors he has discovered.
- (2) The tax consulting engagement does not encompass procedures required to meet deadlines, unless the Wirtschaftsprüfer has explicitly accepted the engagement for this. In this event the client must provide the Wirtschaftsprüfer, on a timely basis, all supporting documents and records – especially tax assessments – material to meeting the deadlines, so that the Wirtschaftsprüfer has an appropriate time period available to work therewith.
- (3) In the absence of other written agreements, continuous tax advice encompasses the following work during the contract period:
- preparation of annual tax returns for income tax, corporation tax and business tax, as well as net worth tax returns on the basis of the annual financial statements and other schedules and evidence required for tax purposes to be submitted by the client
 - examination of tax assessments in relation to the taxes mentioned in (a)
 - negotiations with tax authorities in connection with the returns and assessments mentioned in (a) and (b)
 - participation in tax audits and evaluation of the results of tax audits with respect to the taxes mentioned in (a)
 - participation in Einspruchs- und Beschwerdeverfahren [appeals and complaint procedures] with respect to the taxes mentioned in (a)

In the afore-mentioned work the Wirtschaftsprüfer takes material published legal decisions and administrative interpretations into account.

(4) If the Wirtschaftsprüfer receives a fixed fee for continuous tax advice, in the absence of other written agreements the work mentioned under Paragraph 3 (d) and (e) will be charged separately.

(5) Services with respect to special individual issues for income tax, corporate tax, business tax, valuation procedures for property and net worth taxation, and net worth tax as well as all issues in relation to sales tax, wages tax, other taxes and dues require a special engagement. This also applies to:

- the treatment of nonrecurring tax matters, e. g. in the field of estate tax, capital transactions tax, real estate acquisition tax
- participation and representation in proceedings before tax and administrative courts and in criminal proceedings with respect to taxes, and
- the granting of advice and work with respect to expert opinions in connection with conversions of legal form, mergers, capital increases and reductions, financial reorganizations, admission and retirement of partners or shareholders, sale of a business, liquidations and the like.

(6) To the extent that the annual sales tax return is accepted as additional work, this does not include the review of any special accounting prerequisites nor of the issue as to whether all potential legal sales tax reductions have been claimed. No guarantee is assumed for the completeness of the supporting documents and records to validate the deduction of the input tax credit.

12. Confidentiality towards third parties and data security

- (1) Pursuant to the law the Wirtschaftsprüfer is obliged to treat all facts that he comes to know in connection with his work as confidential, irrespective of whether these concern the client himself or his business associations, unless the client releases him from this obligation.
- (2) The Wirtschaftsprüfer may only release long-form reports, expert opinions and other written statements on the results of his work to third parties with the consent of his client.
- (3) The Wirtschaftsprüfer is entitled – within the purposes stipulated by the client – to process personal data entrusted to him or allow them to be processed by third parties.

13. Default of acceptance and lack of cooperation on the part of the client

If the client defaults in accepting the services offered by the Wirtschaftsprüfer or if the client does not provide the assistance incumbent on him pursuant to No. 3 or otherwise, the Wirtschaftsprüfer is entitled to cancel the contract immediately. The Wirtschaftsprüfer's right to compensation for additional expenses as well as for damages caused by the default or the lack of assistance is not affected, even if the Wirtschaftsprüfer does not exercise his right to cancel.

14. Remuneration

- (1) In addition to his claims for fees or remuneration, the Wirtschaftsprüfer is entitled to reimbursement of his outlays: sales tax will be billed separately. He may claim appropriate advances for remuneration and reimbursement of outlays and make the rendering of his services dependent upon the complete satisfaction of his claims. Multiple clients averring engagements are jointly and severally liable.
- (2) Any set off against the Wirtschaftsprüfer's claims for remuneration and reimbursement of outlays is permitted only for undisputed claims or claims determined to be legally valid.

15. Retention and return of supporting documentation and records

- (1) The Wirtschaftsprüfer retains, for ten years, the supporting documents and records in connection with the completion of the engagement – that had been provided to him and that he has prepared himself – as well as the correspondence with respect to the engagement.
- (2) After the settlement of his claims arising from the engagement, the Wirtschaftsprüfer, upon the request of the client, must return all supporting documents and records obtained from him or for him by reason of his work on the engagement. This does not, however, apply to correspondence exchanged between the Wirtschaftsprüfer and his client and to any documents of which the client already has the original or a copy. The Wirtschaftsprüfer may prepare and retain copies or photocopies of supporting documents and records which he returns to the client.

16. Applicable law

Only German law applies to the engagement, its conduct and any claims arising therefrom.

24. Special Development Fund

Contributions to the IMU Special Development Fund 2006 – 2009:

2006

American Mathematical Society, USA	15,153.98 USD
European Mathematical Society (EMS)	2,092.32 USD
London Mathematical Society, United Kingdom	5,000.00 USD
Mathematical Society of Japan, Japan	16,697.29 USD
Unione Matematica Italiana, Italy	1,156.70 USD
U.S. National Academies of Science, USA	26,000.00 USD
Science Initiative Group, USA	3,500.00 USD

2007

American Mathematical Society, USA	16,506.20 USD
London Mathematical Society, United Kingdom	5,000.00 USD

2008

American Mathematical Society, USA	20,428.85 USD
London Mathematical Society, United Kingdom	5,000.00 USD

2009

American Mathematical Society, USA	20,355.89 USD
London Mathematical Society, United Kingdom	5,000.00 USD
Unione Matematica Italiana, Italy	4,197.69 USD
Deutsche Mathematiker-Vereinigung, Germany	3,583.05 USD

25. Third-Party Donations (monetary contributions)

2006	
Niels Henrik Abel Memorial Fund, Norway	49,950.00 USD
Mathematical Society of Japan, Japan	1,272.05 USD
2007	
Niels Henrik Abel Memorial Fund, Norway	55,000.00 USD
Mathematical Society of Japan, Japan	1,293,54 USD
Deutsche Forschungsgemeinschaft, Germany	49,316.91 EUR
2008	
Niels Henrik Abel Memorial Fund, Norway	46,100.00 USD
Mathematical Society of Japan, Japan	1,575.96 USD
Swiss Mathematical Society, Switzerland	760.68 USD
John Templeton Foundation, USA	40,900.00 USD
Deutsche Forschungsgemeinschaft, Germany	45,768.42 EUR
2009	
Niels Henrik Abel Memorial Fund, Norway	54,843.00 USD
Mathematical Society of Japan, Japan	1,643.72 USD
Swiss Mathematical Society, Switzerland	716.82 USD
Deutsche Forschungsgemeinschaft, Germany	54,492.73 EUR

26. IMU Bank accounts

New as of July 2010:

International Mathematical Union, Takustr. 7, D-14195 Berlin, Germany
Berliner Bank, Hardenbergstr. 32, D-10623 Berlin, Germany

BIC (SWIFT) code: DEUTDEDB110

CHF transfer to account No.:

IBAN code: DE58100708480511391501

EUR and USD transfer to account No.:

IBAN code: DE85100708480511391500

27. IMU Booklet

ICM 2010 – Hyderabad, India

International Mathematical Union

The International Mathematical Union is a non-governmental and non-profit scientific organization devoted to promoting the development of mathematics across the world. IMU is a member of the International Council for Science – ICSU.

The objectives of the International Mathematical Union are:

- To promote international cooperation in mathematics.
- To decide on the location and assist the organization of the International Congress of Mathematicians that takes place every four years.
- To support other international scientific meetings or conferences.
- To acknowledge outstanding research contributions to mathematics by awarding scientific prizes.
- To encourage and support other international mathematical activities considered likely to contribute to the development of mathematical science in any of its aspects, pure, applied, or educational.



IMU President László Lovász, and former Presidents Lennart Carlsson, Ludwig Faddeev and John Ball - Oslo, May 22, 2007

IMU was founded in 1920 and reborn after World War II in 1951. Detailed information about IMU, its history, and its activities can be found at IMU's website www.mathunion.org. A valuable history source is the book by Olli Lehto, *Mathematics Without Borders: A History of the International Mathematical Union*, Springer-Verlag, 1998.

International Congress of Mathematicians – ICM

The first ICM took place in Zurich, Switzerland in 1897. The ICM 2010 in Hyderabad, India is No. 26 in what has become the foremost series of mathematical gatherings worldwide. IMU considers the organization of the ICMs as its most important activity. An ICM should reflect what is going on in mathematics in the world at that time, present the best work of all mathematical subfields and different regions of the world, and thus point to the future of mathematics. The invited speakers at an ICM are carefully selected by an outstanding program committee which is supported by section panels. They are mathematicians of the highest quality who are able to present current research to a broad mathematical audience. The proceedings of all International Congresses have been digitized and they will be made freely available during 2010. The book of Guillermo Curbera, *Mathematicians of the world, unite!*, AK Peters, 2009, provides a lively historical perspective of the ICMs.

International Mathematical Union

IMU Prizes

The scientific prizes awarded by IMU are deemed to be the highest distinctions in the mathematical world. The opening ceremony of an ICM is the appropriate occasion to present these awards: Fields Medals (two to four medals are given since 1936), the Rolf Nevanlinna Prize (since 1986), the Carl Friedrich Gauss Prize (since 2006), and the Chern Medal Award (awarded for the first time in 2010).

The Fields Medal recognizes outstanding mathematical achievement. The Nevanlinna Prize honors distinguished achievements in mathematical aspects of information science.



The Fields Medal, front and back - photographs by Stefan Zschow

The Gauss Prize is awarded for outstanding mathematical contributions that have found significant applications outside of mathematics. The Chern Medal honors an individual whose lifelong achievements in the field of mathematics warrant the highest level of recognition. For the Fields

Medals (often referred to as the Nobel Prize of mathematics) and the Nevanlinna Prize a special age rule applies according to which a candidate's fortieth birthday must not occur before January 1st of the year of the Congress at which these prizes are awarded. For further information, see www.mathunion.org/general/prizes.

IMU also strongly supports the Abel Prize and nominates members of the Prize Committee. It plays a similar role with respect to the Ramanujan Prize for young mathematicians working in developing countries which is funded by the Niels Henrik Abel Memorial Fund and awarded by the International Centre for Theoretical Physics (ICTP) in Trieste.

IMU Membership and General Assembly

The International Mathematical Union has no individual members. Its *Members* are countries. Each Member country is represented through an *Adhering Organization*, which may be its principal academy, a mathematical society, its research council or some other institution or association of institutions, or an appropriate agency of its government. The Member countries adhere to different groups ranging from group I to V. The higher the number of the group, the more votes the country has and the more dues it pays. These dues finance almost all the activities of IMU.

A country starting to develop its mathematical culture and interested in building links to mathematicians all over the world is invited to join IMU as an *Associate Member*. For the purpose of facilitating jointly sponsored activities and jointly pursuing the objectives of the IMU, multi-national mathematical societies and professional societies can join IMU as *Affiliate Member*. At present IMU has 68 Members, 4 Associate, and 3 Affiliate Members. Every four years the IMU membership gathers in a *General Assembly (GA)* which consists of delegates appointed by the Adhering Organizations, together with the members of the Executive Committee. All important decisions are made at the GA, including the election of the officers, establishment of commissions, the approval of the budget, and changes of the statutes and by-laws.

Publications

Every two months IMU publishes a short electronic newsletter, IMU-Net, that aims to improve communication between IMU and the worldwide mathematical community by reporting decisions and recommendations of IMU and highlighting issues that are under discussion. In addition, IMU-Net reports on major international mathematical events and developments, and on other topics of general mathematical interest. Everyone can read the newsletters and can subscribe at www.mathunion.org/imu-net. IMU Bulletins are published annually, see www.mathunion.org/publications/bulletins/archive/, with the aim to inform IMU's membership about the Union's current activities. This includes reports about important decisions, budget, and other administrative and organizational issues.

Organization and Executive Committee

The International Mathematical Union is administered by an Executive Committee (EC) which, in accordance with the IMU Statutes and subject to the direction and review of the members, conducts the business of the Union. The EC consists of the *President*, two *Vice-Presidents*, the *Secretary*, six *Members-at-Large*, all elected for a term of four years, and the *Past President*. The EC is responsible for all policy matters and for such tasks as choosing the members of the ICM Program Committee and various prize committees. The EC meets physically for two days once a year and carries out most of its business by e-mail.



*IMU Executive Committee (2007-2010),
Abel Prize Ceremony - Oslo, May 22, 2007*

IMU Commissions and Committees

Mathematical Education: IMU keeps close contacts to mathematics education through its International Commission on Mathematical Instruction (ICMI). This commission is organized similar to IMU with its own Executive Committee and General Assembly.

Developing Countries: A significant percentage of IMU's budget, including grants received from individuals, mathematical societies, foundations, and funding agencies, is spent on activities for developing countries. Starting from 2011, this will be done through the newly created Commission for Developing Countries (CDC).

History of Mathematics: The International Commission for the History of Mathematics (ICHM) is operated jointly by the IMU and the Division of the History of Science (DHS) of the International Union for the History and Philosophy of Science (IUHPS).

Information and Communication: The Committee on Electronic Information and Communication (CEIC) advises IMU on matters concerning mathematical information, communication, and publishing.

International Mathematical Union

Commission for Developing Countries – CDC

IMU's recently formed Commission for Developing Countries – CDC brings together all of IMU's historical and current initiatives in support of mathematics and mathematicians in the developing world "under one roof". In particular, it incorporates into its portfolio the work of IMU's **Commission on Development and Exchanges – CDE**. For the last thirty years, the Commission on Development and Exchanges has been receiving applications and awarding grants for:

Research travel by mathematicians based in developing and economically disadvantaged countries.

Mathematics conferences organized in developing and economically disadvantaged countries.

CDE's mission also included supporting research partnerships and in some cases longer-term cooperation with regional centers. Since 1998, CDE has supported a total of 349 applications in the above-mentioned categories. More details are available at www.math.ohio-state.edu/~imucdc/cde/.

In addition, in the last 8 years, IMU has gradually increased its attention to the needs of colleagues in the developing world. It established the **Developing Countries Strategy Group – DCSG** to develop new programs and to raise the funds to support them. Besides direct IMU funding, DCSG receives generous continuing support from the Norwegian Niels Henrik Abel Memorial Fund. The work of DCSG also becomes a part of the portfolio of the Commission for Developing Countries. Some DCSG initiatives:

Mathematics in Africa: Challenges and Opportunities

Funded by the John Templeton Foundation, IMU/DCSG has released a report "Mathematics in Africa: Challenges and Opportunities" on the current state of mathematics in Africa and on opportunities for new initiatives to support mathematical development. This report can be downloaded at www.mathunion.org/fileadmin/IMU/Report/Mathematics_in_Africa_Challenges_Opportunities.pdf

African Mathematics Millennium Science Initiative

AMMSI is a network of mathematics centers in sub-Saharan Africa that organizes conferences and workshops, visiting lectureships and an extensive scholarship program for mathematics graduate students doing PhD work on the African continent. DCSG support has most recently focused on the AMMSI scholarship program, which needs continuing international funding to maintain its vital work of providing the continent with its next generation of mathematical leadership. More details can be found at the AMMSI website www.ammsi.org.



ICM 2010 – Hyderabad, India

Mentoring African Research in Mathematics

DCSG assisted the London Mathematical Society in founding the Mentoring African Research in Mathematics – MARM program, which supports mathematics and its teaching in the countries of sub-Saharan Africa via a mentoring partnership between mathematicians in the United Kingdom and African colleagues, together with their students. It focuses on cultivating longer-term mentoring relations between individual mathematicians and students. More details are available at the MARM website www.lms.ac.uk/grants/MARM.html.



Dr. Nakamaye and students of the course Topology, Real and Functional Analysis at Obafemi Awolowo University in Ile-Ife, Nigeria, in March, 2009.



Dr. Alex Mogilner and students of the course Applied Mathematics and Modeling at the National University of Laos in August 2009.

Volunteer Lecturer Program

The Volunteer Lecturer Program – VLP of IMU/DCSG identifies mathematicians interested in contributing to the formation of young mathematicians in the developing world. The Volunteer Lecturer Program maintains a database of mathematician volunteers willing to offer month-long intensive courses at the advanced undergraduate or graduate level in degree programs at universities in the developing world. IMU also seeks applications from universities and mathematics degree programs in the developing world that are in need of volunteer lecturers, and that can provide the necessary conditions for productive collaboration in the teaching of advanced mathematics. Finally, VLP pays travel and living expenses of the volunteer lecturers.

Details and application instructions are available at www.math.ohio-state.edu/~imu.odc/vlp/.

Support for the work of ICMI in the developing world

DCSG periodically offers support to the International Commission on Mathematical Instruction for its programs, exhibits and workshops in emerging countries, especially in Asia and Africa. (More details at the ICMI website www.mathunion.org/icmi/).

Financial Support for the International Congress of Mathematicians 2010

Every four years, DCSG also administers the IMU program offering travel support to mathematicians based in developing countries to attend the International Congresses of Mathematicians.



International Mathematical Union

International Commission on Mathematical Instruction – ICMI



ICMI is a forum to promote reflection, collaboration, exchange and dissemination of ideas and information on all aspects of the theory and practice of contemporary mathematical education, from primary to university level. Furthermore ICMI provides a link between educational researchers, curriculum designers, educational policy makers, teachers of mathematics, mathematicians, mathematics educators and others interested in mathematical education around the world. For all information on ICMI see www.mathunion.org/icmi/home.

ICMI initiates appropriate activities, publications and other programmes designed to further the development of a quality mathematical education for all, and to secure public appreciation of mathematics. It is also charged with the conduct of IMU's activities on mathematical or scientific education. In the pursuit of its objectives, ICMI cooperates with various thematic and regional groups outside its own structure. It supports AFRICME (Africa Regional Congress of ICMI on Mathematical Education), CIAEM (Inter-American Conference on Mathematical Education), EARCOME (East Asia Regional Conferences in Mathematics Education), and EMF (Espace Mathématique Francophone). ICMI publishes a bimonthly email newsletter, ICMI News (see website to subscribe).

Amongst other activities, the ICMI Studies are regarded as significant events. New studies are initiated more or less annually: a theme is chosen, and a discussion document generated. There follows a time for contributions, an invitational conference which works towards producing a book on the “state of the art” of mathematics education in that area. See the ICMI website for past and on-going studies.

ICMI and IMU currently collaborate on two projects. The Pipeline Project attempts to gather and analyse data on the “pipeline” of students and graduates in the mathematical sciences on a worldwide basis. The Klein Project, inspired by Felix Klein's book *Elementary Mathematics from an Advanced Standpoint*, aims to produce a book and web-resources to help upper secondary teachers make connections between the mathematics they teach and the contemporary field of mathematics. The main output, a book, will be simultaneously published in several languages. A series of Klein meetings is being held to allow wide contribution to this project.

Historical Note

ICMI was established in 1908 at the International Congress of Mathematicians held in Rome with the initial mandate of analysing the similarities and differences in the secondary school teaching of mathematics among various countries; this comparative study ultimately became a massive six-year project producing 187 volumes, containing 310 reports from eighteen countries. The founding President was the German mathematician Felix Klein (1849–1925), and the first Secretary-General was Henri Fehr from Switzerland, one of the co-founders of *L'Enseignement Mathématique*, a journal which was adopted as the commission's official organ. After interruptions of activity around the two World Wars, ICMI was reconstituted in 1952 and then became an official commission of IMU.



Mathematics education held a place at the International Congresses of Mathematicians in a section initially called “Teaching and History of Mathematics” – it was in this section at the 1900 ICM in Paris that David Hilbert gave his talk “Mathematical problems”. As the history of mathematics later acquired a section of its own, the name changed to “Mathematics Education and Popularization of Mathematics”, reflecting the broader nature of the field.

Over time, as the needs and complexity of mathematics education grew, ICMI developed its own strong community and this community elected directly its Executive Committee for the first time at the ICMI General Assembly of 2008. The status as a Commission of IMU, however, remains. More basic historical information on ICMI can be found in Olli Lehto’s book mentioned previously. On the occasion of the Symposium held in Rome in March 2008 to celebrate the centennial of ICMI, a website on the history of the Commission was launched:

www.icmihistory.unito.it



ICMI Executive Committee (2010-2012), first meeting, April 2010

International Congress on Mathematical Education – ICME

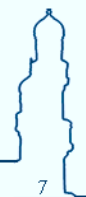
A major responsibility of ICMI is the quadrennial International Congress on Mathematical Education (ICME). This entails selecting the host country, appointing an International Programme Committee (IPC), and overseeing progress of the congress preparations. The practical and financial organisation of each ICME is the responsibility of a Local Organising Committee.

Launched in 1969 at the initiative of ICMI President Hans Freudenthal (1905–1990), the ICMEs have been held since then in leap years. Successive ICMEs have been held in Lyon, Exeter, Karlsruhe, Berkeley, Adelaide, Budapest, Québec, Sevilla, Tokyo, Copenhagen, and Monterrey. They usually attract 3000-5000 participants, and the programme includes nearly forty Topic Study Groups, thirty Discussion Groups and sixty Regular Lectures, with nine plenary sessions including reports from Survey Teams asked to review particular aspects of mathematics education.

ICME-12 will be held in Seoul, South Korea, in July 8-15, 2012, www.icme12.org. The Chair of the IPC is Sung Je Cho. Bids are currently open for ICME-13 in 2016. Starting with ICME-8, a special ICME Solidarity Fund, built by setting aside some ten percent of the total amount collected through the registration fees, has provided grants in order to support and increase congress participation from less affluent regions of the world.

ICMI Prizes

In 2003 ICMI created two awards in mathematics education research: the Felix Klein Award, for lifelong achievement in mathematics education research, and the Hans Freudenthal Award, for a major programme of research on mathematics education. These awards are announced every two years and formally conferred at the opening ceremonies of ICMEs.



History of Mathematics

To encourage the study of the history of mathematics and to promote a high level of historically and mathematically sophisticated scholarship in this field, IMU and the Division of the History of Science (DHS) of the International Union for the History and Philosophy of Science (IUHPS) jointly operate *The International Commission for the History of Mathematics* (ICHM), see www.unizar.es/ichm.

Information and Communication

The IMU EC established in 1998 the **Committee on Electronic Information and Communication** – CEIC with a very broad mandate to advise IMU on matters concerning mathematical information, communication, and publishing. Among CEIC's major achievements are its reports *Best Practice Recommendations on Information and Communication*, see www.mathunion.org/ceic/Publications/Recommendations/recommendations.pdf, *Some Best Practices for Retrodigitization*, see www.mathunion.org/ceic/Publications/retro_bestpractices.pdf, *Digital Mathematics Library: A Vision for the Future*, see www.mathunion.org/ceic/Publications/dml_vision.pdf.

An outgrowth of the CEIC activities is the report on impact factors and other bibliometrics, *Citation Statistics*, see www.mathunion.org/fileadmin/IMU/Report/CitationStatistics.pdf released in cooperation with the International Council for Industrial and Applied Mathematics – ICIAM and the Institute of Mathematical Statistics – IMS.



Cover of the "Citation Statistics" report, produced in collaboration with ICIAM and IMS

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