



Bulletin of the IMU, No. 57 (2009)

Bulletin of the International Mathematical Union

Bulletins of the International Mathematical Union, No. 57, 90 pp. (2009)

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DOI: [The DOI will be assigned later]

IMU

BULLETIN OF THE

INTERNATIONAL MATHEMATICAL UNION

No. 57

December 2009

Secretariat:

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

http://www.mathunion.org

List of Abbreviations

CDC	Committee for Developing Countries
CDE	Commission on Development and Exchange
CEIC	Committee on Electronic Information and Communication
DCSG	Developing Countries Strategy Group
ICHM	International Commission on the History of Mathematics
ICMI	International Commission on Mathematical Instruction
ICSU	International Council for Science
IUHPS	International Union of the History and Philosophy of Science

Dear Members of the International Mathematical Union,

IMU's Associate Membership has increased from three to four since Thailand has become a new Associate Member. The number of IMU member countries is now 72. As of January 1, 2010, IMU welcomes a third Affiliate Member, the African Mathematical Union (AMU). Finland changes its group adherence from II to III with effect from January 2010.

The most important event in the world of mathematics, the International Congress, comes more and more to the fore, the organization of ICM has picked up speed. The ICM 2010 Organizing Committee officially announced the Congress, opened online preregistration, informed on the structure of the ICM program and the satellite conferences, financial aid programs, provided general information on accommodation, the conference venue, the social and cultural background. About 4000 mathematicians have preregistered by the end of 2009.

The Program Committee, chaired by Hendrik W. Lenstra, decided on the list of plenary and sectional invited speakers at ICM 2010.

The IMU Nominating Committee, chaired by former IMU President David Mumford, was set up. It is responsible for collecting, from the 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 General Assembly 2010 in Bangalore, India.

At ICM 2010, on the occasion of the Opening Ceremony a new prize will be awarded for the first time, the Chern Medal Award. The International Mathematical Union and the Chern Medal Foundation agreed to jointly launch this prize in memory of the outstanding mathematician Shiing-Shen Chern. It will be awarded to an individual whose lifelong outstanding achievements in the field of mathematics warrant the highest level of recognition.

The 15th General Assembly of the International Mathematical Union charged the IMU Executive Committee 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. CDC will take up its operation in January 2011 while CDE and DCSG will cease to exist.

The IMU is extremely pleased that 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 meeting of the General Assembly in Bangalore in August 2010.

Another important decision to be taken at the meeting of the General Assembly will be the choice of the location of the International Congress of Mathematicians 2014. Three excellent applications were received. The "ICM Site Selection Committee" visited all three candidates and will make its proposal at the Bangalore General Assembly.

Hoping to see delegates from all of IMU's Adhering Organizations at the General Assembly in Bangalore on August 16 and 17, 2010 and large delegations of mathematicians from the world over at ICM 2010 in Hyderabad I remain

with best wishes

M. Grötchel

Martin Grötschel IMU Secretary

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1. 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 2009:

78th EC Meeting, Fuzhou, China, April 18/19, 2009

2. Members of the Union

The following 72 countries were members of IMU through December 31, 2009:

Group I	Armenia	Bosnia & Herzegovina	Bulgaria
-	Cameroon	Colombia	Croatia
	Cuba	Estonia	Georgia
	Greece	Hong Kong	Iceland
	Indonesia	Ivory Coast	Kazakhstan
	Latvia	Lithuania	New Zealand
	Nigeria	Pakistan	Peru
	Philippines	Romania	Saudi Arabia
	Serbia	Singapore	Slovenia
	Tunisia	Turkey	Uruguay
	Venezuela	Vietnam	
C H	A	A	
Group II	Argentina	Austria	Chile
	Denmark	Egypt	Finiand
	Slavalria	Mexico South Africa	Portugal
	Slovakla	South Africa	Ukraine
Group III	Australia	Belgium	Czech Republic
-	Hungary	Iran	Norway
Group IV	Brazil	India	Republic of Korea
Group IV	Netherlands	Poland	Spain
	Sweden	Switzerland	Spuin
Crown V	Canada	China	France
Group v	Callada	Israel	Italy
	Ianan	Russia	United Kingdom
	United States	Kussia	Chined Kingdom
Associate	Feuador	Kenva	Kvravzetan
Membership	Thailand	ixonyu	1591 <i>5</i> 9 <i>2</i> 50011

The following 2 organizations were members of IMU through December 31, 2009:

Affiliate	Unión Matemática de América Latina y el Caribe (UMALCA)
Membership	European Mathematical Society (EMS)

3. IMU Officers 2007 - 2010

COMMISSION ON DEVELOPMENT AND EXCHANGES (CDE)

January 1, 2007 - December 31, 2010

S. Dani (India)
G. Gonzalez-Sprinberg (France)
G. Boente (Argentina)
P. Cordaro (Brazil)
J-P. Gossez (Belgium)
M. T. Niane (Sénégal)
M. Sanz-Solé (Spain)
J. Zhang (China)
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)

$57^{\rm th}\,Bulletin$ of the International Mathematical Union

	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 Zhiming Ma Cheryl Praeger	2010 2010 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 Christian Houzel	2010 2010
IMU archive at Helsinki university	Guillermo Curbera	2010
UNESCO	Michèle Artigue	2010

4. Approved membership dues 2007 – 2010

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

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

Approved Budget for 2007-2010 (Swiss Francs) Approved Expenses Approved Budged for 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 22.6
Approved Expenses 5% Dues Budged for 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
Schedule A: 2003-2006 2007 2008 2009 2010 Secretarial help, IMU office 22.000 22.660
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Decention 22.000 20.000 20.000 20.000 20.000 20.000 20.000 20.000 20.000 20.000 20.000 <th20.000< th=""> <th20.000< th=""> <th20.000<< td=""></th20.000<<></th20.000<></th20.000<>
Accountant 9.000 9.270
ICMI 5.000 5.270
Initial Initial <thinitial< th=""> <thinitial< th=""> <thi< td=""></thi<></thinitial<></thinitial<>
Office expenses (including postage) 16.000 16.480 16
Onice expenses (including postage) 10.000 10.400 10.400 10.400 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
President's and Secretary's expenses 4.000 4.120 4.120 4.120 4.120 4.120 Contribution to ICSU 9.500 9.785 9.785 9.785 9.785 9.785
Contribution to ICSU 9.500 9.785 9.785 9.785 9.785 9.785 IMU Bulletin 5.000 1.500 1.500 1.500 1.500 1.500
Will Bulletin 5.000 1.000 1.000 1.000 1.000 1.000
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 0
Subtotal of Schedule A 152 000 136 430 136 430 136 430 136 430
Subidial of Schedule A 132.000 130.430 130.430 130.430
Schedule B:
IMU non-CDE conference support 90.000 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
CDE support staff 56.000 56.000 56.000
CEIC scientific activities 15.000 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
Subvention to ICM 28.000 28.840 28.840 28.840 28.840
Prize Committees (subvention) 11.100 11.100 11.100
Travel grants (young & senior) 40.000 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
Total Expenses (A & B) 362.000 501.173 501.173 501.173
Membership dues 270 940 225 709 252 565 274 204 200 044
International 279.040 330.790 333.303 371.304 390.013 ICSU Creat 10.500 0
ICOU Grain ICOU Grain U
Opecial Development Fund OU.000 32.000
Interest of balls accounts 58.000 10.000
Draw from Poconyos
Didw Hulli Reserves 57.155 40.388 22.649 3.938 Deturn to Reconves 0
Return to Reserves U <thu< th=""> U <thu< th=""></thu<></thu<>
Total income 309.340 301.173 301.173 501.173
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.

6. Circular Letters of the IMU Secretary to the Adhering Organizations

IMU AO Circular Letter 1/2009

International Mathematical Union

January 20, 2009 IMU AO Circular Letter 1/2009

To:IMU Adhering OrganizationsFrom:Martin Grötschel, IMU Secretary

IMU Bulletin No. 55, December 2007

Dear colleagues,

IMU Bulletin No. 55 reporting about the IMU activities in 2007 has been completed. You can find its pdf-version in the attachment. A printed copy will be sent by ordinary mail to all Adhering Organizations.

Bulletin No. 55 is also available on the IMU Web server at http://www.mathunion.org/publications/bulletins/archive/.

We apologize for the production delay.

Sincerely,

IMU AO Circular Letter 2/2009

International Mathematical Union



March 9, 2009 IMU AO Circular Letter 2/2009

 To: IMU Adhering Organizations (Adhering Organizations of Associate Members receive this letter for information)
 From: Martin Grötschel, IMU Secretary

IMU Nominating Committee Call for nominations for the offices of President and Secretary of IMU

Dear colleagues,

The IMU Nominating Committee is complete now. It will consist of the following persons.

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

The IMU Nominating Committee is chaired by David Mumford who will initiate further correspondence and receive the nominations submitted by the Adhering Organizations. The Nominating Committee will review the nominations received and make suggestions for IMU offices.

Now the Adhering Organizations and Committees for Mathematics are invited to submit names for the offices of the IMU President and the IMU Secretary for the next term (2011-2014). The Adhering Organizations' and Committees for Mathematics' submissions must include a candidate's declaration of willingness to serve if elected and a CV.

Please send your nominations by April 20, 2009 via your official Adhering Organization's/Committee for Mathematics' contact address (e-mail, fax, post) to David Mumford whose contact is the following

E-mail: David_Mumford@brown.edu

FAX: +1 401-863-1355

Postal address: David Mumford University Professor Div. of Applied Mathematics Brown University, Box F Providence RI, 02912 USA

Sincerely

International Mathematical Union



March 19, 2009 IMU AO Circular Letter 3/2009

To: IMU Adhering Organizations

From: Martin Grötschel, IMU Secretary

Visa problemsICM 2010 posters

Dear colleagues,

– Visa problems

At the General Assembly 2006 in Santiago de Compostela, Spain, the International Mathematical Union (IMU) adopted the following resolution:

"The General Assembly of the IMU continues to endorse the principle of universality expressed in the International Council for Science (ICSU) ARTICLE 5 of the STATUTES, as adopted by the 1998 General Assembly, and endorses the additional ICSU Statement on the Universality of Science (2004) (see

http://www.icsu.org/Gestion/img/ICSU_DOC_DOWNLOAD/567_DD_FILE_Universality.pdf).

Notwithstanding heightened tensions, security concerns, etc., the General Assembly urges free exchange of scientific ideas and free circulation of scientists and mathematicians across international borders. The IMU opposes efforts by governments to restrict contacts, interactions, access and travel in the world mathematical community, particularly when such restrictions penalize individual mathematicians for the actions of governments." see Resolution 10 at

http://www.mathunion.org/Organization/GA/Resolutions/RESOL2006.pdf.

ICSU has received a number of reports that some governments make it difficult, e.g., due to security clearance issues, for scientists to obtain visas in time to allow them to attend meetings. The attached letter from ICSU's Deputy Executive Director Carthage Smith is meant to alert scientists about this situation.

IMU asks all its Adhering Organization and all mathematical societies to inform its members of this issue and contact their governments in order improve this frustrating situation.

- ICM 2010 posters

The organizers of the ICM 2010 have produced three posters to advertise the next International Congress of Mathematicians which will be held in Hyderabad, India on 19-27 August 2010. All mathematical institutions in the world are asked to download, print and post them. To download the posters please go to:

http://www.mathunion.org/activities/icm/icm-2010/poster/, or

http://www.icm2010.in/posters.php.

Information about the ICM 2010 can be found on the ICM 2010 server: <u>http://www.icm2010.org.in/</u>.

Sincerely

Martin Grötschel IMU Secretary

Encl.

Letter from ICSU's Deputy Executive Director Carthage Smith

IMU AO Circular Letter 4/2009

International Mathematical Union



May 8, 2009 IMU AO Circular Letter 4/2009

To: IMU Adhering Organizations

From: Martin Grötschel, IMU Secretary

Welcome to ICM 2010 www.icm2010.org.in

Dear colleagues,

Attached you will find the first announcement of the ICM 2010 in Hyderabad, issued by the ICM 2010 Organizing Committee.

Please circulate this announcement to everyone you know in your mathematical community, encourage people to subscribe to the icm2010 mailing list, to keep up with the progress made and, eventually, to attend the ICM 2010 in Hyderabad.

I would like to draw your attention to the poster Web site of the ICM 2010 home page

(http://www.icm2010.org.in/posters.php).

Please print the poster images out and display them at locations you deem appropriate to make people aware of the upcoming International Congress of Mathematicians in India.

Sincerely

Martin Grötschel IMU Secretary

GREETINGS from the Organisers of ICM 2010

As you may be aware, The International Congress of Mathematicians (ICM) of 2010 will take place during August 19 - 27 at the Hyderabad International Convention Centre, Hyderabad, India. We urge you to participate in the Congress and help us make it a great success.

The preparations for the Congress are now underway. Some information about the city of Hyderabad, pre-registration, registration, some practical information about visiting India etc. can be found at our web-site

www.icm2010.org.in

A list of satellite conferences that are being planned is also available at the web-site.

Detailed instructions for registration, financial aid programs, as well as information on Hotel accommodation, list of invited speakers, lecture program, cultural program etc. will be put on the web-site as and when they get finalised.

On-line pre-registration will start on May 15, 2009 at the icm2010 web-site. It does not involve any payment. The pre-registered participants will be apprised of new developments by e-mail and will receive reminders of upcoming deadlines. Please do pre-register if you intend to participate: it will be of great help to us in our planning the event.

If you do not wish to receive any further announcements, please reply to this message with "unsubscribe" on the subject line.

We look forward to your participation at the ICM 2010 in Hyderabad.

Rajat Tandon Secretary Executive Organizing Committee ICM 2010 **International Mathematical Union**

May 15, 2009 IMU AO Circular Letter 5/2009

- To: IMU Adhering Organizations (Adhering Organizations of Associate Members receive this letter for information)
- From: Martin Grötschel, IMU Secretary

Proposal for the future structure of an IMU commission, to be called Commission for Developing Countries (CDC)

Dear colleagues,

The 15th General Assembly of the International Mathematical Union held in Santiago de Compostela in August 2006 charged the IMU Executive Committee 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 (briefly: future CDC), to define the structure of this commission, and to propose its Terms of Reference.

The IMU Executive Committee charged a small committee (called Committee for Developing Countries and abbreviated by "current CDC"), consisting of Jill Adler (South Africa), Charles Herbert Clemens (USA), Paulo Cordaro (Brazil), Shrikrishna G. Dani (India), Gerard Gonzalez-Sprinberg (France), Michel Jambu (France), Sheung Tsun Tsou (United Kingdom), Jiping Zhang (PR China), and headed by Marcelo Viana (Brazil), with the task to propose the future CDC structure and the Terms of Reference to the IMU EC.

At its 78th meeting in April 2009 the IMU Executive Committee discussed this proposal in detail and worked out (in cooperation with the current CDC) the proposal that you will find in the attachment.

The members of the future CDC have to be elected at the next General Assembly which is going to meet in August 2010 in Bangalore, India. To present candidates for the various CDC positions, the IMU Nominating Committee needs to know the future

CDC structure in detail. That is the reason why the IMU EC is asking the IMU members at this moment in time for a vote on the future structure of CDC.

If the suggestion is approved the IMU Nominating Committee can start searching for potential CDC members to be proposed to the General Assembly in Bangalore.

Please observe that the ballot for vote on the Terms of Reference and future structure of the Commission for Developing Countries will only be forwarded by ordinary mail to the addresses of the Adhering Organizations. Once you have received the ballot form and cast your vote you can return the ballot by fax,

Fax No. +49 30 84185269,

or by ordinary mail to

International Mathematical Union Prof. Dr. Martin Groetschel IMU Secretary c/o Konrad-Zuse-Zentrum Takustr. 7 D-14195 Berlin, Germany.

Please also note that the deadline for this voting process is July 17, 2009.

Sincerely

Martin Grötschel IMU Secretary

IMU AO Circular Letter 6/2009

International Mathematical Union

May 19, 2009 IMU AO Circular Letter 6/2009

To: IMU Adhering Organizations (Adhering Organizations of Associate Members receive this letter for information)

From: Martin Grötschel, IMU Secretary

- Postal Ballot 02/09 Thailand's Application for Associate Membership

Dear colleagues,

 Thailand has applied for associate membership of the IMU. The Executive Committee of the IMU recommends to favor the application. The enclosed application document (Report about the state of mathematics in Thailand, April 21, 2009) gives evidence of the mathematical activities in Thailand.

Please vote on the request of Thailand through the enclosed postal ballot and return the ballot by mail or fax

by July 31, 2009

to the address indicated on the ballot form.

Sincerely

Martin Grötschel IMU Secretary

IMU AO Circular Letter 7/2009

International Mathematical Union



June 1, 2009 IMU AO Circular Letter 7/2009

To: IMU Adhering Organizations

From: Martin Grötschel, IMU Secretary

Chern Medal Award – new prize in mathematics

http://www.mathunion.org/general/prizes/chern/details/

Dear colleagues,

The International Mathematical Union (IMU) and the Chern Medal Foundation (CMF) jointly launch a new mathematical prize, the Chern Medal Award, in memory of the outstanding mathematician Shiing-Shen Chern.

The Award is to be given to an individual whose lifelong outstanding achievements in the field of mathematics warrant the highest level of recognition. It consists of a medal and a monetary award of US\$ 500,000. Half of the amount shall be donated to organizations of the recipient's choice to support research, education, outreach, or other activities to promote mathematics.

For more information see the Press Release at

http://www.mathunion.org/fileadmin/IMU/Prizes/Chern/Chern_MedalPress_Release_090601. pdfand the Chern Medal Program Guidelines at

<u>http://www.mathunion.org/fileadmin/IMU/Prizes/Chern/Chern_Medal_Program_Guidelines.pd</u> <u>f</u>. The Chern Medal Program Guidelines also inform about the nomination procedure. Both documents can be found in the attachment. The Chern Medal will be awarded for the first time at the opening ceremony of <u>ICM 2010</u> in Hyderabad, India on August 19, 2010.

Sincerely

Martin Grötschel IMU Secretary

IMU AO Circular Letter 8/2009

International Mathematical Union

June 10, 2009 IMU AO Circular Letter 8/2009

To: IMU Adhering Organizations

From: Martin Grötschel, IMU Secretary

Financial support for ICM 2010 participants http://www.icm2010.org.in/financial-support.php

Dear colleagues,

This letter is of particular interest for mathematicians from developing and economically disadvantaged countries.

The International Mathematical Union (IMU) and the local organizing committee of the International Congress of Mathematicians 2010 (ICM 2010) in Hyderabad, India are offering support programs to enable as many mathematicians from developing and economically disadvantaged countries as possible to participate in ICM 2010.

Support programs for travel, registration, and living support have been established in three different categories:

- 1. Young mathematicians from developing and economically disadvantaged countries;
- 2. Senior mathematicians from developing and economically disadvantaged countries;
- 3. Mathematicians from developing countries in Asia with emphasis on countries neighboring India.

Detailed information about the support programs can be found on the Web page:

http://www.icm2010.org.in/financial-support.php

Applications for support may be submitted from July 1, 2009 to January 1, 2010. The IMU and the local organizing committee have set up a grant selection committee that will decide on the applications and will communicate the decisions to the applicants

as soon as possible, after May 1, 2010. Queries about the ICM 2010 participation support program may be sent to the ICM organization at the address:

icm-aid@math.tifr.res.in.

I would like to ask all Adhering Organizations to distribute this information within their countries so that as many mathematicians as possible eligible for these support programs obtain information about financial aid to participate in ICM 2010.

IMU is grateful to the local hosts in India for generous contributions to this support program and wishes to thank all donors (mathematical societies, organizations, and many individuals from around the world) for making this offer possible via IMU's Special Development Fund.

Sincerely

IMU AO Circular Letter 9/2009

International Mathematical Union

July 20, 2009 IMU AO Circular Letter 9/2009

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

IMU Bulletin No. 56, December 2008

Dear colleagues,

IMU Bulletin No. 56 reporting about the IMU activities in 2008 has been completed. You can find a PDF version of the Bulletin in the attachment. A printed copy will be sent by ordinary mail to all Adhering Organizations.

Bulletin No. 56 is also available on the IMU Web server at http://www.mathunion.org/publications/bulletins/archive/.

Sincerely,

IMU AO Circular Letter 10/2009

International Mathematical Union

August 3, 2009 IMU AO Circular Letter 10/2009

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

- Postal Ballot 01/09 Terms of Reference and future structure of the Commission for Developing Countries (CDC)
- Postal Ballot 02/09 Admittance as Associate Member of Thailand

Dear colleagues,

 The vote on the Terms of Reference and future structure of the Commission for Developing Countries (CDC) yielded a positive result. The Adhering Organizations of the IMU approved the Terms of Reference and the future structure of the CDC (see <u>Proposal</u> in the IMU AO Circular Letter 5/2009) which will be elected at the 2010 General Assembly in Bangalore, India.

The slate established by the IMU Nominating Committee with at least one name for each of the positions of CDC President, CDC Secretary for Policy and CDC Secretary for Grant Selection and at least two names for each of the three positions for CDC members-at-large will be submitted for approval by another postal ballot prior to the 2010 General Assembly.

 The vote on Thailand's application for Associate Membership yielded a positive result. As of August 2009, Thailand is an Associate Member of the IMU. For more information on Thailand's Adhering Organization see <u>http://www.mathunion.org/members/countries/thailand/</u>.

Sincerely,

IMU AO Circular Letter 11/2009

International Mathematical Union

August 10, 2009 IMU AO Circular Letter 11/2009

To: IMU Adhering Organizations (Adhering Organizations of Associate Members receive this letter for information) From: Martin Grötschel, IMU Secretary

Call for nominations for the offices of

- IMU Vice Presidents and IMU EC Members-at-Large
- President, Secretaries and Members-at-Large of CDC
- IMU Representatives to ICHM
- for the term 2011-2014

Dear colleagues,

Further to my call for nominations for the offices of President and Secretary of IMU, see <u>IMU</u> <u>AO Circular Letter 2/2009</u>, I am inviting IMU's Adhering Organizations and Committees for Mathematics today to submit names for the offices of the

- IMU Vice Presidents and IMU Executive Committee Members-at-Large (The General Assembly will elect 2 Vice Presidents and 6 Members-at-Large.)
- President, Secretaries and Members-at-Large of the new Commission for Developing Countries (CDC)

(1 President, 1 Secretary for Policy and 1 Secretary for Grant Selection, and 3 members-at-large, in representation of Africa, Asia, and Latin America (see Terms of Reference in <u>Proposal</u>, as approved through postal ballot 02/09) will be elected by the General Assembly.)

- IMU Representatives to the International Commission on the History of Mathematics (ICHM)
 - (2 IMU Representatives to ICHM will be elected by the General Assembly.).

The Adhering Organizations' and Committees for Mathematics' submissions must include a candidate's declaration of willingness to serve if elected and a CV.

Please consult the IMU Procedures for Election and send your nominations

by November 15, 2009

via your official Adhering Organization's/Committee for Mathematics' contact address (e-mail, fax, post) to the Chair of the Nominating Committee, David Mumford, whose contact is the following

E-mail: David_Mumford@brown.edu

FAX: +1 401-863-1355

Postal address: Prof. David Mumford Div. of Applied Mathematics Brown University, Box F Providence RI, 02912, USA

Sincerely

IMU AO Circular Letter 12/2009

International Mathematical Union



September 9, 2009 IMU AO Circular Letter 12/2009

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

Call for Nominations: The Ramanujan Prize for Young Mathematicians from Developing Countries

Dear colleagues,

I would like to draw your attention to the Call for Nominations for the Ramanujan Prize which is funded by the Niels Henrik Abel Memorial Fund (Norway) and has been awarded annually since 2005 by the Abdus Salam International Centre for Theoretical Physics (ICTP, Italy) to young mathematicians from developing countries.

The Ramanujan Prize is usually awarded to one person, but may be shared equally among recipients who have contributed to the same body of work. Eligible for the prize is a mathematician from a developing country less than 45 years of age on 31 December of the year of the award. For the details of the nomination please see the attached call paper.

September 30, 2009 is the deadline for nominations.

Nominations are to be sent to <u>director@ictp.trieste.it</u>. Please advertise this call for nominations for the Ramanujan Prize in your mathematical communities.

Attached is a PDF file containing the official text of the call for nominations. The call can also be found at http://www.mathunion.org/imu-net/archive/2009/imu-net-36d/, which is the special issue No. 36d of IMU-Net, September 2009.

Sincerely,

Martin Grötschel IMU Secretary

Call for Nominations:

The Ramanujan Prize for Young Mathematicians from Developing Countries

The Abdus Salam International Centre for Theoretical Physics (ICTP) herewith calls for nominations for the 2009 Ramanujan Prize for Young Mathematicians from Developing Countries.

The Prize is awarded annually to a researcher from a developing country less than 45 years of age on 31 December of the year of the award, who has conducted outstanding research in a developing country. The environment in which the research was carried out will be taken into account. Researchers working in any branch of the mathematical sciences are eligible. The Prize carries a \$15,000 cash award and travel and subsistence allowance to visit ICTP for a meeting where the Prize winner will be required to deliver a lecture. The Prize will usually be awarded to one person, but may be shared equally among recipients who have contributed to the same body of work.

The Prize is funded by the Niels Henrik Abel Memorial Fund. It is awarded annually by ICTP through a selection committee of five eminent mathematicians appointed in conjunction with the International Mathematical Union (IMU). The first prize was awarded in 2005. The deadline for receipt of nominations is September 30, 2009.

Please send nominations to director@ictp.trieste.it describing the work of the nominee in adequate detail. Two supporting letters should also be arranged.

IMU AO Circular Letter 13/2009

International Mathematical Union

October 29, 2009 IMU AO Circular Letter 13/2009

To: IMU Adhering Organizations (Adhering Organizations of Associate Members receive this letter for information)

From: Martin Grötschel, IMU Secretary

- Postal Ballot 03/09 Change of Group of Adherence of Finland

- Finland has requested a change from Group II to Group III. The Executive Committee of the IMU recommends this change. Enclosed is the report of the state of mathematics in Finland 2009 submitted by the Finnish National Committee for Mathematics.

Please vote on the request of Finland through the enclosed postal ballot and return the ballot

by mail or fax

by December 15, 2009

to the address indicated on the ballot form.

Sincerely yours,

Martin Grötschel IMU Secretary

IMU AO Circular Letter 14/2009

International Mathematical Union

November 3, 2009 IMU AO Circular Letter 14/2009

To: IMU Adhering Organizations (Adhering Organizations of Associate Members receive this letter for information)

From: Martin Grötschel, IMU Secretary

- Postal Ballot 04/09 Application for Affiliate Membership of the African Mathematical Union (AMU)

 The African Mathematical Union (AMU), represented through its Secretary General O. Daniel Makinde, has applied for affiliate membership to the IMU. The AMU's webpage <u>http://www.math.buffalo.edu/mad/AMU/AMU-index.html</u> gives an overview of this organization.

Being an IMU affiliate member, the African Mathematical Union can automatically participate (without voting rights) in the IMU General Assembly. This gives the AMU an excellent possibility to observe the functioning and interaction of the mathematical community worldwide and will contribute to improve communication with the mathematicians in Africa. The Executive Committee of the IMU recommends to admit the African Mathematical Union as an affiliate member of the IMU.

Please vote on the request of the African Mathematical Union through the enclosed postal ballot¹ and return the ballot

by mail or fax

by December 15, 2009

to the address indicated on the ballot form.

Sincerely yours,

Martin Grötschel IMU Secretary

¹ The postal ballot sheet is forwarded only with regular mail to the Adhering Organizations of the IMU member countries who are solely responsible for voting. If the postal ballot would be sent out by e-mail (with possibly multiple recipients) this could lead to multiple voting of one member country (with possibly contrary votes – as has happened in the past).

IMU AO Circular Letter 15/2009

International Mathematical Union

December 11, 2009 IMU AO Circular Letter 15/2009

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

The IMU's Special Development Fund Appeal

Dear colleagues, dear members of mathematical societies and organizations, dear friends and supporters of mathematics,

Next year, in August 2010, the International Congress of Mathematicians (ICM 2010) will take place in Hyderabad, India. The congress is an ideal meeting place for mathematicians from all over the world to exchange experience, to present results, to learn from each other, to establish contacts, to make friends.

Mathematicians from developing countries, regardless of other difficulties, are often not able to attend such a meeting because they hardly can raise the money needed for travel and board and lodging. That is why IMU has established its so-called SPECIAL DEVELOPMENT FUND (SDF). This fund collects money (donations, contributions) over the years which is disbursed in the year of a congress as travel grants to junior and senior mathematicians from developing countries. A Travel Grants Committee selects the most suitable candidates from all travel grant applications received, and the IMU Executive Committee makes the final selection of the travel grant awardees.

For instance, 145 young and senior mathematicians from developing countries have been able to attend the ICM 2006 in Madrid through travel grants out of the SPECIAL DEVELOPMENT FUND (for the great majority of them the registration fee, board and lodging have been covered by the local organizing committee). IMU wants to continue this tradition of supporting young and senior mathematicians from developing countries. In order to enable as much candidates as possible to travel to the ICM 2010 your support is requested.

Please help us advance mathematics in the developing countries. Contribute to IMU's SPECIAL DEVELOPMENT FUND and send your donation. You can send us a cheque. Or you transfer the funds to one of the following accounts:

Or you transfer the funds to one of the following account

Account No. (IBAN): DE45100200003591211100 (for transfer in Euros - EUR) Account No. (IBAN): DE5610020000093025115 (for transfer in Swiss Francs -CHF) Account No. (IBAN): DE6510020000093025050 (for transfer in US dollars -USD)

Beneficiary:	Bank: Berliner Bank
International Mathematical Union	Address: Hardenbergstr. 32, D-10623 Berlin, Germany
Address: Takustr. 7, D-14195 Berlin, Germany	Bank code (BIC/SWIFT): BEBEDEBB

IMU AO Circular Letter 16/2009

International Mathematical Union

December 21, 2009 IMU AO Circular Letter 16/2009

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

- Postal Ballot 03/09 Finland changed from group II to group III

- Postal Ballot 04/09 African Mathematical Union (AMU) Affiliate Member of the IMU

Dear colleagues,

- The vote on Finland's request to change from group II to group III yielded a positive result. As of January 2010, Finland adheres to Group III.
- The vote on the African Mathematical Union's application for Affiliate Membership yielded a positive result. As of January 2010, the African Mathematical Union is an Affiliate Member of the IMU. See the AMU's Web page to get an overview of the organization (<u>http://www.math.buffalo.edu/mad/AMU/AMU-index.html)</u>.

Sincerely,

7. International Commission on Mathematical Instruction (ICMI) http://www.mathunion.org/icmi/home/

Report on ICMI activities in 2009 prepared by Bernard R. Hodgson, Secretary-General

1. Organisation

The 2007-2009 **Executive Committee (EC)** of the International Commission on Mathematical Instruction (ICMI) 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". Besides this meeting, the work and discussions of the ICMI EC during 2009 were mostly conducted by electronic communication under the direction of the President and the Secretary-General of ICMI.

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 8 below). It also allowed to examine joint IMU/ICMI projects, such as the Pipeline and the Klein projects (see 9 and 10 below), and to discuss long term issues such as the development of the ICMI Digital Library — for which IMU offers to ICMI a crucial logistic support — or the archival of ICMI documents. Moreover ICMI presented an analysis of its financial situation and made some requests in connection with the IMU 2011-2014 budget, to be adopted by the IMU General Assembly in August 2010.

There was no new member country of ICMI during 2009. However 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. The number of **countries members of ICMI** at the end of 2009 was thus still 85, but with 13 countries not being members of IMU. A major progress in the appointment of **ICMI representatives** should be noted, as 30 of them have been replaced during the years 2008 and 2009, in due 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 has now been integrated in the revised version of the ICMI Terms of Reference adopted in 2009 — see below.) This new vitality looks promising for the functioning of the Commission, since the representatives form the ICMI General Assembly and thus play a crucial role in the life of ICMI. During 2009, a total of fourteen collective e-

mail messages were sent by the Secretary-General to the ICMI representatives, most of these asking for collaboration in the dissemination of information about ICMI and its activities.

During the past two years, the ICMI EC has 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 ICMI EC has set as a goal to finalise these discussions before the end of its term of office and to prepare a new version of the Terms. This work was completed during the last months of 2009, thus allowing for the revised Terms to be formally adopted by the EC of IMU on December 31, 2009, while the ICMI EC has 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 among the many actors involved in the life of 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. (More on this in section 11 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 and whose composition was announced in the 2008 ICMI report on activities. 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.

2. ICMEs

The preparation of the Proceedings of ICME-11, held in Monterrey on July 6-13, 2008, has met with substantial delay with respect to the planned schedule, in particular as regards the contacts with all those who were in charge of specific components of the congress programme and who are to prepare documents and reports for the Proceedings. Consequently the ICMI EC has launched during 2009 a series of actions in order to alleviate this situation. In addition to formal contacts with the Sociedad Mathemática Mexicana (SMM), the main body responsible for the Mexican bid for ICME-11, these actions included discussions with the Chair of the ICME-11 International Programme Committee in order to try to reorganise the agenda for the realisation of the Proceedings, offer of support from the ICMI EC with some of the steps to be undertaken, and finally, just after the ICMI EC meeting held in September in Saint-Petersburg, establishment of direct contacts by ICMI with all the regular lecturers as well as chairs of Topic Study Groups and Discussion Groups at ICME-11. Those actions were very well received by the potential contributors to the Proceedings and provoked immediate reactions, thus allowing for a substantial part of the needed documents to be promptly collected and sent to the SMM. However, it must be reported that, in spite of these actions by the ICMI EC, the global issue of the ICME-11 Proceedings remained unresolved by the end of 2009.

The International Programme Committee of the 12th International Congress on Mathematical Education, ICME-12, to be held in Korea on July 8-15, 2012, is chaired by Professor Sung Je Cho, of Seoul National University. This IPC, whose composition is announced in the December 2008, No. 63, issue of the ICMI Bulletin, had its first meeting at the COEX in Seoul on June 14-17, 2009, on the very site of the ICME-12 congress. This meeting was held in an excellent atmosphere, thanks to the remarkable support offered by the Korean bodies responsible for the congress, and was initiated by having the IPC members involved in a critical reflection on the evolution of the programme of the recent ICMEs, which has become more and more complex over the years. 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 next decisions of the IPC, concerning among others the choice of the Regular Lecturers or the appointment of the teams in charge of TSGs, is to be finalised by email discussions. The second IPC meeting will be held in February 2011. The June 2009 meeting of the IPC was also the occasion of the official launching of the ICME-12 website, which can be accessed at the url

http://www.icme12.org

Up to date information about the congress is available there, as well as the First Announcement. The ICME-12 organisers have already announced that the registration fees will be of 400 USD, which brings a welcome substantial reduction to these fees as compared to recent ICMEs.

An official call for bids to host **ICME-13** in 2016 was made by the Secretary-General of ICMI during the closing session of ICME-11. This call also appears in the *ICMI Bulletin* (No. 63, December 2008). Three countries have responded in 2009 to the invitation of informing the ICMI Executive Committee by a declaration of intent indicating that they are considering preparing an official bid, thus comforting the EC that sound proposals should be submitted by the deadline of November 2010. The decision about the site of ICME-13 will be announced by the end of 2011.

3. ICMI Studies

No new ICMI Study was launched in 2009. However at its meeting in Saint-Petersburg, the Executive Committee discussed a set of 16 possible themes for future studies — ten of these being proposals made in the past and kept as potential themes, while six resulted from the call for proposals made by the Secretary-General in the editorial of *ICMI News* no. 6 (October 2008). The EC decided to select some of these themes for further consideration (this includes both "old" and "new" topics) and asked the proposers to provide additional information about the possible scope of such studies, so to be able to make suggestions to the next EC about the theme that ICMI Study 22 may address. The selected themes concerns primary school mathematics education, the mathematics education of children with special needs, and the design and use of tasks for pedagogic purposes in mathematics education. The EC also considered the development of a study in the mathematical domain of discrete mathematics.

By the end of 2009 the situation as regards recent and ongoing Studies was as follows.

• ICMI Study 15: The Professional Education and Development of Teachers of Mathematics

The ICMI Study volume has appeared in 2009 in the New ICMI Study Series; eds: Ruhama Even and Deborah Loewenberg Ball. (NISS 11)
- ICMI Study 16: *Challenging Mathematics In and Beyond the Classroom* The ICMI Study volume has also appeared in 2009 in the New ICMI Study Series; eds: Edward J. Barbeau and Peter J. Taylor. (NISS 12)
- ICMI Study 17: *Mathematics Education and Technology Rethinking the Terrain* The ICMI Study volume, dated 2010, has in fact appeared late in 2009 in the New ICMI Study Series; eds: Celia Hoyles and Jean-Baptiste Lagrange. (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 study conference was held in 2008. 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: *Proof and Proving in Mathematics Education* The Conference for Study 19 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)
- ICMI Study 20: Educational Interfaces between Mathematics and Industry (EIMI) The International Programme Committee for the 20th ICMI Study met for a second time in November 2009 in Paris to finalise the programme of the Study conference, to be held in April 2010 in Lisbon. This Study is organised jointly with the International Council for Industrial and Applied Mathematics (ICIAM).
- ICMI Study 21: *Mathematics Education and Language Diversity* The International Programme Committee for ICMI Study 21, co-chaired by Mamokgethi Setati (University of Pretoria) and Maria do Carmo Domite (Universidade de São Paulo), had its first meeting in Pretoria, South Africa, in February 2009. The Discussion Document was finalised by the end of 2009. The Study conference will be held in Brasil in September 2011.

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.

4. ICMI Regional Conferences

One ICMI Regional Conference was held in 2009.

• 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).

Besides **AFRICME 3** (to be held in Gaborone, Botswana, May 18-21, 2010) and **ICMI-EARCOME-5** (Tokyo, Japan, August 18-22, 2010), already announced, the ICMI EC has granted in 2009 the status of ICMI Regional Conference to two other conferences:

- 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 11 below).
- **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, and by Michèle Artigue and Bernard R. Hodgson on that of XIII CIAEM.

5. ICMI Centennial

The most successful symposium celebrating the ICMI Centennial, held in Rome in March 2008, has resulted in two publications.

The Proceedings of the centennial symposium were published under the editorship of Marta Menghini, Fulvia Furinghetti, Livia Giacardi and Ferdinando Arzarello. As already announced, the book *The first century of the International Commission on Mathematical Instruction (1908-2008). Reflecting and shaping the world of mathematics education* has appeared in the "Collana Scienze e Filosofia" of the Istituto della Enciclopedia Italiana, (Roma, 2008). Members of the ICMI community have been offered a special discount on the purchase of the book. Negotiations are underway with the Istituto about the eventual open access to the book via the ICMI Digital Library.

Moreover, 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. The url of the ICMI history website is

http://www.icmihistory.unito.it/

6. UNESCO/ICMI Exhibition

The collaboration of ICMI to the mathematical exhibition "**Experiencing mathematics**", initiated in 2004 and developed jointly with UNESCO and other bodies, was maintained in

2009. In particular ICMI provided this year a grant of 2 500 USD to support the travelling of the exhibition. Support for the exhibition is also provided by IMU, CIMPA and the French Ministry of Foreign Affairs. The three copies of the exhibition have circulated during 2009 in various parts of the world.

In Latin America, the exhibition, coming from Singapore, has visited seven countries since 2007. 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 finishes 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 presentations of the exhibition in Asia 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 exhibition has 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 brought again in Africa, this time in 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.

The virtual exhibition "Experiencing Mathematics"

www.ExperiencingMaths.org,

realized as a complement, support and follow-up to the interactive exhibition, 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. The CDrom was used in each preparation session when the exhibition is visiting a given place, such as in Santiago where 300 mathematics teachers received the CD.

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 whom are secondary school pupils or undergraduate students. Since its first presentation in 2004, the exhibition was presented in some 100 cities from 30 different countries, and has welcomed more than one million visitors, including 75% of secondary or tertiary students. The year 2009 is the second best year of attendance since the launching of the exhibition.

More information on the exhibition is available on the website <u>http://www.mathex.org/</u>

7. 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. But the ICMI-UNESCO links have not been limited to this exhibition project. 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. Such was the case as well in 2009, as 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. At the end of that meeting, 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, as agreed in the contract signed with UNESCO, and approved by the mathematics experts. Members of the ICMI EC have supported the elaboration of the text, reading a preliminary version of it and, together with members of the ICMI community at large, contributing to the appendices attached to it. This community was also instrumental in preparing translations in different languages from the initial French version. The ICMI EC was specifically in charge of the English translation of the document.

8. Developing Countries

ICMI has had through 2009 various actions related to **developing countries**. A substantial part of these actions was targeted to Africa in the context of the regional networks built around both the English-speaking community (AFRICME) and the French-speaking community (EMF).

ICMI outreach to developing country was in part organised in collaboration with the Developing Countries Strategy Group (DCSG) of IMU, where ICMI was represented by Vice-President Jill Adler. She is also representing ICMI on IMU Committee for Developing Countries, an interim committee established in early 2008 with the mandate of designing a structure for a future *Commission for Developing Countries*, to be presented at IMU's next General Assembly in 2010. Moreover, ICMI has collaborated, again 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 mathematics education in Africa.

Following the tradition of previous AFRICME congresses (2005 in South Africa and 2007 in Kenya), a request for funding support of 5000 USD for AFRICME-3, to be held in Botswana in 2010, was approved by CDC.

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 4 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 the year: in August in Yamoussoukro, during the 7th COPAM (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.

The Secretary-General was also 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 de las Indias, Colombia, on July 15-18, 2009, in relation with the 10th anniversary of the *Journal of Science Education*.

9. Projects Related to IMU Concerns

The **Pipeline Project** was launched jointly by IMU and ICMI in reaction to IMU concerns about mathematics students, notably as regards the numbers and quality of students choosing to pursue mathematics study at the university level. It has received impetus from the appointment late in 2008 of a half-time post-doctoral position at The University of Auckland that is partly allocated to the Pipeline New Zealand project, and partly to the international project. A Moodle site for contributors was established, and complementary searches for relevant data for the pilot countries undertaken. In October a presentation was made to the conference on *Paradigms in Mathematics Education for the XXI Century* in Valencia.

The project concerns four different transitions: School to Undergraduate courses, Undergraduate courses to Postgraduate, University into Workforce, University into Teaching. There are large variations according to the countries as regards available data, but the study has allowed in many cases to cover a long period, without restricting to the years 1993-2003, as was the case for the OECD study often quoted in this connection.

The pilot phase of the Pipeline Project ended at the end of this year, 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 involved in the project. The numbers of such students in universities is susceptible to changes in school curricula and examination systems.

Some elements may however be stressed already at this stage. These concern for instance the fluctuations and the diversity of the dynamics observed, the diversity of the factors coming into play, and in particular the role of structural or political changes and that of the attractiveness of various types of profession.

As already mentioned in last year's report, a Special Issue of the *International Journal of Mathematical Education in Science and Technology* (volume 40, number 1), devoted to the theme "Recruitment, Entrance and Retention of Students to University Mathematics Studies in Different Countries", was published in January 2009 under the guest editorship of Derek Holton. This is an important outcome of the Survey Team organised for ICME-11 on the same theme. It shows the positive effects of actions recently taken in some countries as regards the tertiary and secondary levels, as well as the school-university transition.

At the invitation of the President of IMU, the ICMI President and Secretary-General took part in a meeting organised by IMU 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 mathematical research and education in all countries, as well as awareness about the role and importance 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.

10. The Klein Project

The Klein Project was fully launched in 2009 with the first meeting of the Design Group taking place in Paris, from May 28 to June 2. At that meeting it was confirmed that the project would produce a 300-page book and accompanying "wiki" website, as well as, possibly, other DVD or booklet resources. A draft list of chapters was created, and the first newsletter written. The next Design Group meeting is being held in Auckland in April 2010.

The first Klein Conference took place in Madeira on October 1-4, organized under the auspices of CIM (*Centro Internacional de Matemática*, Portugal) and hosted by the University of Madeira. About 80 people — a mixture of mathematicians and mathematics educators — attended, many of whom were from Portugal and Brazil. This meeting provided opportunity for discussing, over the three-day period, possible ideas in connection with the project.

From this meeting, as well as other contexts where the Klein project has been discussed, it is clear that the project generally raises great enthusiasm among the international community to which it is targeted. On the basis of comments received, some adjustments have already been made to the organisation of the project, notably as regards the priority now given to the establishment of the wiki site. This site has already been launched, and more information on the project and its evolution can be found there. It can be accessed at

www.kleinproject.org

11. ICMI Affiliate Organizations

As indicated in section 1 above, the Terms of Reference of ICMI were amended in 2009 in such a way to allow affiliation to ICMI not only of study groups focussing on a specific field of interest and study in mathematics education, 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) has become the first organisation to make use of this new mode of affiliation to ICMI. This affiliation, which was approved in December 2009 by the Executive Committees of both ICMI and CIAEM, has allowed to set in a new framework the long-standing links between ICMI and CIAEM, hopefully thus helping these links to remain vivid and productive over the years.

CIAEM thus joins 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.

Contacts have been established with two other multi-national organizations as regards a possible affiliation to ICMI: **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*). It is expected that in both cases, positive developments should be announced in a near future.

12. The ICMI Solidarity Program in Mathematics Education

A report to the 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 reminded 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 per congress), 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.

It was also proposed that beyond continuing some form of support to participation to ICMI activities, the dissemination of ICMI publications, including by supporting the translations, could be part of the Solidarity actions. For such projects the contribution could be of the order of 5000 USD.

Of course such Solidarity actions would require substantial amounts of money. The development of the Solidarity Fund must thus be considered in the more global context of a deeper discussion about the global long-term financing of ICMI and of its activities.

Further discussions about the development of the ICMI Solidarity Fund is being passed to the next EC. It is proposed that a Solidarity Board of three members be appointed, comprising one ICMI EC member and two others.

13. The ICMI Awards

The following information should have been part of the 2008 ICMI report on activities, but was inadvertently omitted. The two recipients of the **ICMI Awards in mathematics** education research 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 Award 2005), Jeremy Kilpatrick (Klein 2007), Paul Cobb (Freudenthal 2005) and Anna Sfard (Freudenthal 2007). As a tangible token of recognition, each awardee received 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 is scheduled for the first months of 2010 and 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

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 to make the book available on the ICMI website.

In a similar vein, negotiations were pursued in 2009 with the two main houses were ICMI material has been published over the past years, Springer and Cambridge University Press (CUP). While Springer had shown openness as regards the ICMI Study volumes, as can be seen through the new contract for the NISS series signed in 2008, such is not the case as regards other (and older) material, such as the proceedings of some of the first ICME congresses. Discussions are being pursued on this matter with Springer, but with no clear sign of positive development up to now.

On the other hand, it appears that the difficulties that had been encountered with CUP (see the ICMI 2008 report on activities) are on the verge of being resolved.

15. Information and Communication

The new **ICMI website** was finally launched in May 2009. While the site is still under development, it contains enough material to make it a tool that will hopefully be useful to the ICMI community. For instance all the previous versions of the Terms of Reference of ICMI (see section 1) are now accessible on the website. The maintenance and updating of its content is made much easier by the use of the TYPO3 Web Content Management System.

ICMI News, the bimonthly electronic newsletter of ICMI, has now two years of existence. On the other hand, the publication of the two issues of the *ICMI Bulletin* for the year 2009 has again met with delays.

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

ACCOUNTS

For the year ended December 31, 2009

ICMI Accounts 2009

1 January – 31 December

BALANCE AS OF JANUARY 1:

- ICMI Canadian Dollars
 - US Dollars
 - Euros

38 647,76 (4 011,85) 63 788,85

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	609,90
ICMI President and Secretary-General ⁵⁹	
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 ³	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,	1 782,68
Klein Dreient Deeien Teerre meeting, Deeie (Mass 2000)	5 710 00
Klein Project Design Team meeting, Paris (May 2009)	5 /18,28
Klein Project Design Team meeting, Paris: expenses of ICMI Secretary-General	8/9,50
grant to UNESCO/ICMI math exhibition "Experiencing Mathematics" (2 500,00 USD) ⁵⁷	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

## **<u>US Dollars Account:</u>**

## Income:

ICMI balance 2008	(4 011,85)
ICMI EC meeting. Saint-Petersburg (September 2009): support from Moscow	5 000,00 5 000.00
Institute of Open Education ²⁾	0 000,00
royalties on ICMI Study volumes (Springer)	1 146,61
transfer from CAD account (corresponding to 5 390,19 CAD) 7	4 807,00
<b>ICMI</b> interest	0,00
Solidarity Fund balance 2008 ¹¹⁾	39 202,20
Solidarity Fund interest	424,09
total	<u>51 568,05</u>
Expenditure:	1 062 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
Solidarity Fund support to FMF 2009 ¹⁰⁾	200.00
Solitarity Fund Support to Livit 2007	200,00
ICMI balance 2009 (USD account)	(106,96)
Solidarity Fund balance 2009 (USD account)	39 426,29
total	<u>51 568,05</u>
<u>Euros Account:</u>	
Income:	
balance 2008	63 788,85
interest	888,24
total	<u>64 677,09</u>
Expenditure:	0,00
ICMI balance 2009 (EUR account)	64 677,09
total	<u>64 677,09</u>

Average exchange rate, 2009 1 USD = 1,14 CAD = 0,72 EUR

#### Notes:

1. The second meeting of the International Programme Committee for the twentieth ICMI Study on *Educational interfaces between mathematics and industry* took place at the IREM of Université Paris 7 in November 2009. In addition to providing free access to its rooms, the IREM offered a support of 400 € for the hosting of this meeting.

**2.** The Moscow Institute of Open Education provided a generous support of 10 000 USD for the hosting in Saint-Petersburg of the meeting of the ICMI Executive Committee. From this amount, 5 000 USD were used by the local hosts for the organisation of the meeting itself, and 5 000 USD were given to ICMI to partially cover travel expenses (2 000 USD) and accommodation expenses (equivalent in CAD of 3 000 USD) of the ICMI EC members, thus diminishing the financial impact of this meeting on the ICMI budget.

**3.** The President and Secretary-General of ICMI were invited to a meeting organised in Budapest by the President of IMU to prepare a proposal to UNESCO for an intergovernmental *International Mathematical Program*. The travel costs of the President and Secretary-General were shared between ICMI (609,90 CAD) and IMU (900,00 CAD), while the local costs were covered by IMU.

**4.** This amount corresponds to the travel costs (1050 €) of the ICMI President for her participation to the second meeting of the International Programme Committee of ICME-11, held in Monterrey, México, in January 2007. It had been understood that these expenses were to be reimbursed by the organisers of the ICME-11 congress. However, as this reimbursement did not occur, the amount was finally covered by the ICMI budget.

**5.** Although this meeting took place in 2010, the reimbursement was done during the fiscal year 2009.

**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):

	11 /	
•	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	
		5 000 00

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. 8. Commission on Development and Exchanges (CDE)

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

## **Report on CDE activities in 2009** prepared by Janhavi Joshi, Administrative Secretary IMU/CDE

During the interval 1 January - 31 December 2009, CDE received a total of 56 applications for financial support, in the three exisiting categories:

- (i) conferences in developing countries²
- (ii) conferences in developed countries³
- (iii) individual research travel support

After initial routine screening by the Administrative Secretary to ensure that requests fell within IMU programme guidelines, a total of 56⁴ applications were circulated to the Commission for review during the year.

During the interval 1 January - 31 December, a total of 55 awards were made, for a total value of USD 80,270.25 (This number of awards includes the applications received in December 2008).

Partial support was granted in **30 cases** for conferences taking place in the following **developing countries**:

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

² In 2009, the IMU/CDE definition of a developing country was where the Per Capita Gross National Income according to the World Bank's Development Indicators (Atlas methodology) was not in excess of USD 6,000.

³ CDE support to this category is intended solely for the participation of mathematicians from developing countries. Furthermore, conference organizers are required to demonstrate that they will match the funds being requested from/granted by CDE by an equal amount from other sources also dedicated to the participation of mathematicians from developing countries.

⁴ This number includes those applications received during December 2008 and circulated to the Commission in January 2009.

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

Partial support was granted in **10** cases of **conferences** taking place in the following **developed countries**:

Country	No. awards	Total value of awards (USD)
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

**Individual research travel support** was granted in **15** cases, to mathematicians from:

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

Due to budgetary constraints, the amounts awarded for conferences were perforce rather small.

Schedule A expenditures during the year were limited to USD 1,574.11 in bank fees charged for the transfer of grant monies.

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

# Income 1 January - 31 December 2009

A detailed financial report accompanies this narrative.

## Misc.

During the year, CDE co-operated fully with the efforts of the Executive Committee of the IMU to expand the reach of IMU support in the developing world.

### CDE REPORT 2009

Transaction	Date Type		Schedule A	Schedule B	Balances		Account
	1		(Admin.)	(\$ to Ind.)	Schedule A	Schedule B	Balance
		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				(\$25.000.00)	\$2,696,12	\$51.933.21	\$54.629.33
receipt of Abel Fund contribution for 2009	27 01 2009	RT Lizbekistan->ICTP (agrmt)		\$1,000,00	\$2,696,12	\$50 933 21	\$53,629,33
Tieudio (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
Choudan/	16.02.2000	CS Pakistan		\$2,000,00	\$2,696,12	\$45 533 21	\$48,229,33
	16.02.2003			\$2,000,00	\$2,000,12	¢43.533,21	\$46 220 22
	10.03.2009			\$2.000,00	\$2.090,12	\$43.533,21	\$40.229,33
	16.03.2009			\$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
	13.05.2009	RT Serbia->ICTP		\$500,00	\$2.696,12	\$31.033,21	\$33.729,33
	13.05.2009	CS Tunisia		\$1.500,00	\$2.696,12	\$29.533,21	\$32.229,33
	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	29.05.2005	RT Botswana->ICTP (agrmt)		\$1.000,00	\$2.696,12	\$35.023,21	\$37.719,33
Qazaqzeh	04.06.2009	RT Jordan->ICTP (agrmt)		\$1.000,00	\$2.696,12	\$34.023,21	\$36.719,33
	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	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
I	1					L	

CDE closing balance Dec 31, 2009					\$1.122,01	\$5.982,96	\$7.104,97
Bank charges			\$1.574,11		\$1.122,01	\$5.982,96	\$7.104,97
Baricz (in process, encumbered in 2009)		RT Romania -> India	]	\$1.000,00	\$2.696,12	\$5.982,96	\$8.679,08
Manzi (in process, encumbered in 2009)		RT China -> India		\$1.000,00	\$2.696,12	\$6.982,96	\$9.679,08
Pardoux	28.01.2010	CS Senegal		\$1.000,00	\$2.696,12	\$7.982,96	\$10.679,08
Jazar	28.01.2010	CS Lebanon		\$1.500,00	\$2.696,12	\$8.982,96	\$11.679,08
Mercado	28.01.2010	CS Chile		\$1.500,00	\$2.696,12	\$10.482,96	\$13.179,08
Mordecki-Monzon	29.01.2010	CS Uruguay		\$2.000,00	\$2.696,12	\$11.982,96	\$14.679,08
Berhanu (in process, encumbered in 2009)		CS Morocco		\$3.000,00	\$2.696,12	\$13.982,96	\$16.679,08
Sastry (in process, encumbered in 2009)		CS India		\$1.000,00	\$2.696,12	\$16.982,96	\$19.679,08
Saley (in process, encumbered in 2009)		CS Niger		\$1.500,00	\$2.696,12	\$17.982,96	\$20.679,08
Zili	17.12.2009	CS Tunisia		\$1.500,00	\$2.696,12	\$19.482,96	\$22.179,08
Choudary	14.12.2009	CS Pakistan		\$3.000,00	\$2.696,12	\$20.982,96	\$23.679,08
	14.12.2009	CS India		\$1.000,00	\$2.696,12	\$23.982,96	\$26.679,08
	08.12.2009	CS Vietnam		\$2.000,00	\$2.696,12	\$24.982,96	\$27.679,08
	01.12.2009	CS Indonesi		\$3.000,00	\$2.696,12	\$26.982,96	\$29.679,08
Yengui	12.11.2009	RT Tunusia -> France		\$800,00	\$2.696,12	\$29.982,96	\$32.679,08
Solarin	04.01.2010	CS Nigeria		\$2.000,00	\$2.696,12	\$30.782,96	\$33.479,08
Okoya	05.11.2009	RT Nigeria -> Italy		\$800,00	\$2.696,12	\$32.782,96	\$35.479,08
	14.10.2009	CS Benin		\$3.000,00	\$2.696,12	\$33.582,96	\$36.279,08
Chowdhury	14.10.2009	CS Bangladesh		\$1.500,00	\$2.696,12	\$36.582,96	\$39.279,08
Ponnusamy	07.09.2009	CS India		\$1.000,00	\$2.696,12	\$38.082,96	\$40.779,08
Bonheure	25.08.2009	CS Belgium		\$2.000,00	\$2.696,12	\$39.082,96	\$41.779,08
	06.08.2009	CS Greece		\$1.500,00	\$2.696,12	\$41.082,96	\$43.779,08
	06.08.2009	CS Argentina	I	\$1.000,00	\$2.696,12	\$42.582,96	\$45.279,08

## Report on the activities of the Developing Countries Strategy Group (DCSG) 1 January - 31 December 2009

## Activities

- 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. (Funds were approved in 2008)
- 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. (Funds were approved in 2008)
- 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.
- 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. (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 (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. (USD 2146.76) For more information on Volunteer Lecturer program and report, pictures from the above visits etc. please visit the VLP website: <u>www.math.ohio-state.edu/~imu.cdc/vlp</u>

- 5. An amount of USD 1500 was grated for buying a LCD projector and a few mathematics books for Royal University ofPhnom 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 although consistency of their application, 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 granted to CDE for supporting the travel expenses of mathematicians' research visit to or from developing countries.
- 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 amout 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 amout of USD 2000 was granted in support of workshops in the developing countries, and Africa to teach mathematicians how to make full use of electronic literature but also scientific opportunities available on the internet.

## Administrative Expenses:

1. A laptop for Mr. Seeber from Ohio State University was purchased for

managing ICM Travel Grants online Database (USD 3085.09).

- 2. A part of the laptop cost was granted for CDC administrative position at OSU. (USD 837.37)
- 3. Office transfer cost from ICTP to OSU.(231.28 euros = USD 341.42).

#### Income:

- 1. Three contributors to the Templeton survey donated their USD 500 stipend to DCSG. (Total USD 1500)
- 2. IMU's Schedule B funds USD 49320.
- 3. Balance of USD 598.07 from the Templeton grant was donated to DCSG for its operations in the developing world.

### DCSG REPORT 2009

#### (funds held in Berlin)

Transaction	Date	Schedule A	Schedule B	Balances		Account
		(Admin.)	(\$ to Ind.)	Schedule A	Schedule B	Balance
					[ ]	
						1
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	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 JP. 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(ICTP) to Janhavi (Ohio state)(231. <u>28 euros)</u>	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	L	\$6.852,70	\$10.121,88	\$16.974,58
Balance				\$6.852,70	\$10.121,88	\$16.974,58

9. International Commission on the History of Mathematics (ICHM) http://www.unizar.es/ichm/

### **Report of the Activities of the International Commission for the History of Mathematics in 2009** Craig Fraser (Chair)

An Open Meeting of the ICHM took place in Budapest on August 31 at the International Congress of the History of Science and Technology. At the meeting the 2009 winners of the May Prize were announced. The May Prize is awarded every four years for distinguished achievement in the history of mathematics and is the highest international honor awarded in the field. The 2009 winners were Ivor Grattan-Guinness and R. C. Gupta. Professor Grattan-Guinness was present at the meeting to receive the May Medal. Professor Gupta will be officially given the certificate and medal at the meeting of the IMU this August. Notices were published in *Historia Mathematica* and on the ICHM website.

In 2009 a new slate of executive officers were elected, whose four-year terms commenced with the Open Meeting of the ICHM in Budapest. The Chair is Craig Fraser of the University of Toronto. The Vice-Chair is Jackie Stedall of Oxford University. The treasurer is Jan Hogendijk of the University of Utrecht. Elena Ausejo of the University of Ciudad Universitaria, Zaragoza will be continuing in the position of Secretary. Outgoing chair Karen Parshall of the University of Virginia will continue to serve *ex officio* on the Executive Committee of the ICHM.

The official journal of the ICHM is *Historia Mathematica*, a quarterly journal of the history of mathematics published by Elsevier. On January 1, 2009 June Barrow-Green of the Open University and Niccolo Guicciardini of the University of Bergamo took over as editors of this journal. Former editor Benno van Dalen is continuing to serve as an associate editor of the journal.

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).

In 2009 the ICHM co-sponsored several symposia in the history of mathematics.

The following symposia at the ICHST09 in Budapest were co-sponsored by the ICHM:

Symposium S06 "Transmission and Transformation of Mathematics and Mathematical Instruments in their Social Contexts, East and West". Organizers: Joe Dauben (USA) and Liu Dun (China).

Symposium S03 "Status in Mathematics: In Particular the Role of Applications in the First World War". Organizers: Jeremy Gray (UK) and Reinhard Siegmund-Schultze (Norway).

Symposium S04 "Mathematical Analysis from the Eighteenth to the Nineteenth Centuries". Organizers: Craig Fraser (Canada) and Michiyo Nakane (Japan).

Symposium S36 "Modern Mathematics into Iberoamerican Countries". Organizers: Clara Sanchez (Colombia), Sergio Nobre (Brazil), and Alejandro Garciadiego (Mexico).

Symposium S35 "History of Numerical Tables: The Second Meeting on History of the Exact Sciences along the Silk Road". Organizer: QU Anjing.

For reports on these symposia see the ICHM website.

Other conferences or conference sessions co-sponsored by the ICHM in 2009:

Session on history of mathematics at the Joint Mathematics Meetings held in Washington, DC, United States.7-8 January.Organizers: Joseph Dauben, Deborah Kent, Patty Hunter, Karen Parshall.For a report on this session see the ICHM website.

International Conference, "History of Astronomy in Portugal: Theories, Institutions and Practices". 24-26 September. Museum of Science of the University of Lisbon. Organizer: Luis Saraiva.

Academic Conference: "Numeracy: Historical, philosophical and educational perspectives". 16-18 December. Oxford University, United Kingdom. Organizer: Benjamin Wardhaugh, All Souls College, Oxford, UK.

One set of conference sessions was co-sponsored by the ICHM in 2010: Sessions on history of mathematics at the Joint Mathematics Meeting of the American Mathematical Society and the Mathematical Association of America held in San Francisco, CA, United States, 15-16 January 2010. Organizers: Craig Fraser, Deborah Kent, Sloan Despeaux.

## **10.** Committee on Electronic Information and Communication (CEIC) <u>http://www.mathunion.org/ceic/</u>

## Annual Report of the CEIC for January 2009 - May 2010

John Ball, Chair

The CEIC did not meet in 2009, conducting its business by email. It met in Minneapolis 13–14 February 2010.

Present: John Ball (Chair), Olga Caprotti, James Davenport, Mike Doob, Carol Hutchins, Peter Olver.

In Attendance: Doug Arnold (University of Minnesota), Kris Fowler (Mathematics Librarian, University of Minnesota).

Apologies: Ulf Rehmann

The main items that were discussed, together will later developments, were as follows:

Round Table at ICM on *The Use of Metrics for Evaluating Research*.
 The Round Table is a follow-up to the IMU/ICIAM/IMS report *Citation Statistics* see <a href="http://www.mathunion.org/publications/reports-recommendations">http://www.mathunion.org/publications/reports-recommendations</a>.
 The members of the panel (chosen by CEIC) are:
 László Lovász (Chair), Doug Arnold (USA), John Ewing (USA), Antonio de la Peňa (Mexico), Malcolm MacCallum (U.K.).

2. Impact factors

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.)

3. Best Practice Document for Mathematical Journals

A draft best practice document for the running of mathematics journals was produced. It was discussed at the subsequent IMU EC meeting and now has been circulated to different stakeholders (editors, publishers, individual researchers, those concerned with publication ethics) for comment, with a view to possible endorsement by the IMU EC at their meeting in Bangalore prior to ICM2010.

### 4. Archiving

This concerns the question of preserving the records (paper and especially electronic) of the IMU. An augmented subgroup of CEIC had already 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 (probable) IMU Stable Office to be decided.

### 5. IMU on the Web

The Committee discussed alternative methods and infrastructure for the dissemination of 'IMU on the Web'. It was recommended that it might change to a blog. When this was discussed by the IMU EC a more radical suggestion emerged, that the whole electronic newsletter IMU-Net should become a blog, and this is likely to be implemented.

#### 6. 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.

### 7. CEIC Web Pages

These are in need of revamping and updating. The aim is to do a quick revision before ICM 2010, and then to further revise them when the location of the (probable) IMU Stable Office is decided.

#### 8. CEIC Terms of Reference

The CEIC's current terms of reference are:

## The CEIC's duties include:

(a) 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.

(b) Reviewing the development of electronic information, communication, publication, and archiving so as to keep the EC abreast of current and emerging issues.

(c) 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.

(d) 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).

It was suggested to recommend changing them as follows:

(b') Reviewing the development of electronic information, communication, publication, and archiving so as to keep the EC abreast of current and emerging issues. Publicising relevant developments to the wider community via IMU on the Web and other methods.

(d') Advising the EC about potential opportunities to foster the growth of electronic infrastructure, and selectively creating tools for this purpose.

The IMU EC agreed to this.

9. Digital Mathematical Library It was noted that the European DML Initiative EuDML got funded by the EU recently: 1.6 million Euro for 3 years: <u>http://www.eudml.eu/</u>.

## **11. Independent Auditor's Report 2009**



## 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

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1 February 2010

Geschäftsführer der Komplementärin: Gregor Kunz, WP, St8 | Magdalena Riehle, WP, St8 | Helmut Schuhmann, WP, St8 | Rainer Vedder, WP, St8 | Rainer Weichhaus, WP, StB | Herst Beck, WP, StB | Gertrud R. Bergmann, WP, StB | Prof. Dr. Jens Poll, RA, WP, StB | Inge Fehlberg, WP, StB | Dr. Christoph Regierer, RA, WP, StB Dr. Reinhard Schubert, WP, StB Bernd Schult, RA, StB Gerhard Schmitt, RA, StB Uwe Ehrsam, WP, StB Dirle Ralf Gloger, WP, StB Vertretungsberechtigte Kommanditisten: Andreas Lichel, StB Uda Heckeler, WP, StB Marka Pape, WP, StB

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# **R**overBrönner

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#### A. <u>Audit Engagement</u>

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."

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## **R**overBrönner

#### B. <u>Object, Nature and Scope of the Audit</u>

#### 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.

## **R**overBronner

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:

-	Prof. Dr. Dr. h. c. mult. Martin Grötschel	Secretary of the IMU
_	Ms. Sylwia Markwardt	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

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.

## **R**overBrönner

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.

## **R**overBrönner

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

#### <u>Net Assets</u>

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	
	597	100.0	567	100.0	30	

LIABILITIES	2009		2008		Change	
	k€	%	k€	%	k€	
Net assets (own funds)	500	83.8	483	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	
	97	16.3	84	14.8	13	
			_		_	
	597	100.0	567	100.0	30	

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# 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	
		34,878.32	51,952.00	
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	
		3,991.78	6,537.00	
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	
		3,446.28	5,544.00	
Georgia	2006/2005	1,592.55	2,640.00	
EWB Georgia	2005-2008	-1,841.00	-2,740.00	
		42,087.93	63,933.00	

# **R**overBrönner

At the end of 2009, outstanding member contributions were  $k \in 44$  (kCHF 67) and at the time of the audit they amounted to  $k \in 29$  (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.

<u>Cash</u>, 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 €		220.60
		555,143.24

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	16,758.73
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.

# **R**overBrönner

#### Liabilities from restricted donations developed as follows:

	€	€
Special Development Fund		
Per 1.1.2009		33,522.72
Contribution		
<ul> <li>American Mathematical Society</li> </ul>	15,324.93	
<ul> <li>London Mathematical Society (LMS)</li> </ul>	3,562.00	
<ul> <li>Unione Matematica Italiana</li> </ul>	2,928.85	
<ul> <li>Deutsche Mathematiker-Vereinigung</li> </ul>	2,500.00	24,315.78
Per 31.12.2009		57,838.50
Ito Fund		
Per 1.1.2009		10,256.35
Contribution interest revenue 2009 less account fees		129.93
Per 31.12.2009		10.386.28
Templeton Fund		
Per 1.1.2009		20,426.56
Contribution		3,032.08
Withdrawal for expense compensation for		10 405 00
project work and reporting		-10,480.02
Per 31.12.2009		6,973.02
		75 107 90
		75,187.60

The funds shown under <u>Special Development Fund</u> 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 <u>Templeton Fund</u> 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".

# RÖVER BRÖNNER

## 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  $k \in 36$  and corresponds to the change in the amount of cash between 1 January 2009 ( $k \in 519$ ) and 31 December 2009 ( $k \in 555$ ).

#### Results of Operations

The summarized statements of income and expenditure show the following structure for the reporting year:

	2009		2008		Change
	k€	%	k€	%	k€
Revenue	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
Other expenditures	-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
Result before taxes on income	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	21,854.04
	338,503.16

The composition of member contributions is shown in Annex 3 to this report.

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# Rover Bronner

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	8,539.09
	48,896.54

<u>Other expenditures</u> 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

# RÖVER BRÖNNER

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

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## Annexes

# Annex

Statement of Assets and Liabilities as of 31 December 2009	1
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# STATEMENT OF ASSETS AND LIABILITIES as of 31 December 2009

_					
24					
ASSETS	per 31.12.2009	Prior Year	LIABILITIES	per 31.12.2009	Prior Year
	ŧ	¥		ę	¥
A. Current Assets			A. Net Assets		
I. Receivables and Other Assets			<ol> <li>Association net assets</li> </ol>	482,784.76	396,409.43
<ol> <li>Receivables from member</li> </ol>			II. Annual surplus	16,758.73	86,375.33
contributions	42,067.93	44,748.25		499,543.	9 482,784.76
<ol><li>Other assets</li></ol>	0.00	82.15			
	42,067.9	3 44,830.40	B. Provisions	18,235.(	0 13,000.00
	6 6FF 333	20 111 012	C. Liabilities	2 120 70	000
II. Dalik Dalances	333,143.2	C7110'EIC +	1. I fade payables 2. Donations	3,138./8 75,107,80	0.00
			<ol><li>Other liabilities</li></ol>	0.00	0.00
B. Prepaid Expenses	0.0	3,254.56		78,337.	9 64,205.63
			D. Deferred Income	1,095.(	9 7,105.82
Total Assets	597,211.1	7 567,096.21	Total Liabilities	597,211.	7 567,096.21

 $57^{\rm th}$  Bulletin of the International Mathematical Union

# International Mathematical Union, Berlin

# Statemer of Income and Expenditure for 2009

		P	er 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 Administrative Expenses		-127,727.83	-326,302.93	-226,415.57 -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	-4,411.99			-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	-6,627.20			-1,327.25
Interest and Similar Income			4,715.32	7,195.88
Interest and Similar Expenditures		-	-0.41	0.00
Result of Association Activities			16,915.14	86,375.33
Taxes		-	-156.41	0.00
Annual Surplus		_	16,758.73	86,375.33

# International Mathematical Union

Annex 3

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# Schedule of Member Contributions 2009

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 Union

<u>Annex 3</u> - 2 -

## Schedule of Member Contributions 2009

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

#### 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: 15,234 Secretarial help, IMU office 22,660 ٥ ٥ 1,968 Secretarial help, President 1,323 5,150 3,462 Accountant 9,270 ٥ 6,232 ٥ ICMI 15,378 10,337 15,450 10,387 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 ICSU 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 ٥ 2,770 ٥ World Directory of Mathematicians 0 • 0 2.060 22.708 1.385 15,264 Contingencies Subtotal of Schedule A 138,430 104,225 81,718 70,067 Schedule B: 13,445 IMU non-CDE conference support 20,000 ٥ ٥ 27,682 18,607 ICMI scientific activities 27,810 18,696 CDE scientific activities 115,000 128,918 77,311 86,656 56,000 86,029 37,647 57,827 CDE support staff 16,807 CEIC scientific activities 25,000 1.535 1.032 Website support 6,253 2,150 4,204 1,445 ICM Site Committee 2,000 4,495 1,345 3.022 rogram 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 ٥ 15,621 ٥ 10,500 Travel grants (young & senior) 61,000 ٥ 41,008 0 Media Relations 3,500 2 353 п Subtotal of Sohedule B 384,743 381,448 245,208 268,402 Total Expenses (A & B) 601,173 486,673 338,924 328,480 Income Membership dues 371,304 398,360 249,617 267,753 ICSU Grant 0 0 Special Development Fund 32,000 36,175 21,513 24,316 16,000 7,015 10,756 4,715 Interest on bank accounts Donations 59,220 60,039 39,812 40,357 Other Income 0 45,039 0 30,393 Draw from Reserves 22,649 ٥ 15,226 ٥ Return to Reserves ٥ ٥ ٥ ٥ 601,173 646,628 338,924 387,635 Total Income Income less Expenses 0 60,955 0 41.075

Transition to P&L Statement:

Transfer to liabilities from donations not yet spent Excess (deficit) of income over expenditure: -24,318 18,769

Actual Euro Income and Expenses converted to Swiss Franc, using the December 31, 2009 rate of 1 Euro = 1,4877 Swiss Franc

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

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## 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.

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## 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)

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- 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 2008:

- 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 27/640/57572.

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.

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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.

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[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

and the second second

This is an English translation of the German text, which is the sole authoritative version

#### 1. Soope

(1) These engagement terms are applicable to contracts between Witschaftsprüfer [German Public Auditons] or Witschaftsprüfungsgesellschaften [German Public Audit Firms] (hereinafter collectively referred to as the "Witschaftsprüfer") 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 computary due to legal resultments.

(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 egreed services – not a perfocular economic result. The engagement is performed in accordance with the Grundsätze ordnungsmäßliger Berufseusblung [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 witten agreement.

(3) The engagement does not entend - to the extent it is not directed thereto - to an examination of the issue of whether the requirements of lax law or special regulations, such as, for example, laws on price controls, laws limiting competition and Bewirtscheftungsrecht (laws controlling ontain aspects of aspecific 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 defection of books and records and other imgularities 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 atatement, the Wirtscheftsprüfer 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 Wittschaftsprüfer's staff. This perticularly 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 witting, only that written presentation is authoritative. For audit angagements the longform 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 catculations - expecially quantity and cost computations - prepared by the Wintschaftsprüfer 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 Witschaftsprüfer's written consent to the extent that the permission to transmit to a certain third party does not result from the engagement terms. The Witschaftsprüfer 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 entities the Wirtschaftsprüfer to immediately cancel all engagements not yet conducted for the client.

#### **B.** Correction of deficiencies

(1) Where there are deficiencies, the client is entitled to subsequent fulfiment (of the contract). The client may demand a reduction in fees or the cancellation of the contract. The client may demand a module of 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 easert his claim for the correction of deficiencies in writing without delay. Claims pursuant to the first paragraph not arising from an intentional tort cause 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 formelie Mangel [deficiencies associated with technicalities] contained in a Wittschaftsprüfer's professional atatements (long-form reports, expert opinions and the like) may be connected – and also be applicable versus third parties – by the Wittschaftsprüfer at any time. Errors which may call into question the conclusions contained in the Wittschaftsprüfer's professional statements entitle the Wittschaftsprüfer to withdraw – also versus third parties – such statements. In the cases noted the Wittschaftsprüfer should first hear the dient, if possible.

#### 9. Liability

- (1) The fiability limitation of § ["Article"] 323 (2)["peragraph 2"] HGB ["Handelsgesatzbuch": 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 ("Withcheftsprüherortnung". Law regulating the Profession of Withcheftsprüher) the liability of the Withcheftsprüher 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 6 4 million; this also applies if liability to a person other then the client should be established. An individual case of damages resulting from negligence is limited to 6 4 million; this also applies if liability to a person other then the client should be established. An individual case of damages also exists in neiston to a uniform damage arbing 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 of in a number of successive years. In this case multiple acts or omissions of ects based on a similar source of error or 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 cleim against the Withscheftsprüfer is limited to 6 5 million. The limitation to the fivefold of the minimum amount insured does not apply to compulsory audits required by lew.

#### (3) Preclusive deedlines

A compensatory damages claim may only be lodged within a preclusive deadline of one year of the rightful claimset 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 refusel 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.

Annex 6

#### 10. Supplementary provisions for audit engagements

(1) A subsequent amendment or abridgement of the financial statements or management report audited by a Wittschaftsprüfer and accompanied by an auditor's report requires the written consent of the Wittschaftsprüfer even if these documents are not published. If the Wittschaftsprüfer has not issued an auditor's report, a reference to the audit conducted by the Wittschaftsprüfer in the management report or elsewhere specified for the general public is permitted only with the Wittschaftsprüfer'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 Wirtschaftsprüfers 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 Wirtschaftspröfer 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 angagement does not encompass procedures required to meet deadlines, unless the Witschaftsprüfer has explicitly accepted the angagement for fins. In this event the client must provide the Witschafts prtfer, on a timely basis, all supporting documents and records – especially tax assessments – material to meeting the deadlines, so that the Witschafts prtfer has an appropriate time period available to work therewith.

(3) In the absence of other written agreements, continuous tax edvice encompasses the following work during the contract period:

- a) 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 achedules and evidence required for tax purposes to be submitted by the client.
- b) examination of tax assessments in relation to the taxes mentioned in (a) regotiations with tax authorities in connection with the returns and assessments mentioned in (a) and (b)
- d) participation in tax audits and evaluation of the results of tax audits with respect to the taxes mentioned in (a)
- e) perticipation in Einspruchs- und Beschwerderverfahren [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, weges tax, other taxes and dues require a special engagement. This also applies to:

- e) the treatment of nonrecurring tax matters, e. g. in the field of estate tax, cepital transactions tax, real estate acquisition tax
- b) participation and representation in proceedings before tax and administrative courts and in ortminal proceedings with respect to taxes, and
- c) 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 prerequisities 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 Wittschaftsprüfer 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 subless 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 Wittschaftsprüfer 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 Wittschaftsprüfer or if the client does not provide the assistance incumbent on him pursuent to No. 3 or otherwise, the Wittschaftsprüfer is entitled to cancel the contract immediately. The Wittschaftsprüfer'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 Wittschaftsprüfer does not exercise his right to cancel.

#### 14. Remuneration

(1) In addition to his claims for fees or remuneration, the Wirtscheftsprüfer is entitled to reimbursement of his outlays: seles tax will be billed separately. He may claim appropriate edvances for remuneration and reimbursement of outlays and make the rendering of his services dependent upon the complete satisfaction of his claims. Multiple clients awarding engagements are jointly and serverally liable.

(2) Any set of equinal the Wirtscheitsprüfer'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 Wrtscheftsprüfer 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 angagement, the Wittschaftsprüfer, 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 angagement. This does not, however, apply to correspondence exchanged between the Wittschaftsprüfer and his client and to any documents of which the client already has the original or a copy. The Wittschaftsprüfer may prepare and return copies or photocopies of supporting documents and records which he returns to the client.

#### 18. Applicable law

Only German law applies to the engagement, its conduct and any claims arising therefrom.

# 12. Special Development Fund

Contributions to the IMU Special Development Fund 2009

American Mathematical Society	15,324.93 Euros
London Mathematical Society	3,562.00 Euros
Unione Matematica Italiana	2,928.85 Euros
Deutsche Mathematiker-Vereinigung	2,500.00 Euros

# 13. IMU Bank accounts

as of January 1, 2007:

International Mathematical Union, Takustr. 7, D-14195 Berlin, Germany Berliner Bank, Hardenbergstr. 32, D-10623 Berlin, Germany BIC (SWIFT) code: BEBEDEBB

CHF transfer to account No.:	EUR transfer to account No.:	USD transfer to account No.:
IBAN code:	IBAN code:	IBAN code:
DE5610020000093025115	DE45100200003591211100	DE6510020000093025050