# Bulletins of the International Mathematical Union



# Bulletin of the IMU, No. 61 (2011)

#### **Bulletin of the International Mathematical Union**

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# **IMU**

# BULLETIN OF THE

# INTERNATIONAL MATHEMATICAL UNION

No. 61

December 2011

# **Secretariat:**

International Mathematical Union Secretariat Markgrafenstr. 32 D-10117 Berlin, Germany

http://www.mathunion.org

#### **List of Abbreviations**

**AO** Adhering Organization

**CDC** Commission for Developing Countries

**CDE** Commission on Development and Exchange

**CEIC** Committee on Electronic Information and Communication

**DCSG** Developing Countries Strategy Group

**EC** Executive Committee

**ICHM** International Commission on the History of Mathematics

**GA** General Assembly

ICM International Congress of Mathematicians

ICM OC ICM Opening Ceremony

ICMI International Commission on Mathematical Instruction

ICSU International Council for Science

**IMU** International Mathematical Union

**IUHPS** International Union of the History and Philosophy of Science

Dear Members of the International Mathematical Union,

In 2011 the IMU leadership elected by the General Assembly (GA) in Bangalore, India, took up work. And the decision of the GA on a permanent secretariat got realized. As of January the IMU Secretariat has been hosted by the Weierstrass Institute for Applied Analysis and Stochastics (WIAS) in Berlin, Germany. An opening ceremony celebrated the inauguration of the secretariat, guests from home and abroad enjoyed the festive event. The secretariat staff started work, it runs IMU's daily business and provides support for many IMU operations. Another highlight was the opening of the IMU Archive that moved from the University of Helsinki to its new home in the IMU Secretariat.

On the occasion of the establishment of the permanent IMU Secretariat in Berlin, the Einstein Stiftung Berlin (ESB) gave a grant to the Berlin Mathematical School that initiated the IMU Berlin Einstein Foundation Program with a view to increasing interactions of young mathematicians from developing and economically disadvantaged countries with the lively mathematical environment in Berlin.

The new four year term has just started and the preparations of ICM 2014 began already. The Chair of the Program Committee was appointed by the IMU President and all members of the Program Committee were appointed by the IMU Executive Committee. The Program Committee has defined the program structure of ICM 2014. The Adhering Organizations were invited to make suggestions on the program structure of the next ICM.

Planning ahead went even as far as 2018. The call for bids for ICM 2018 was sent out. All countries interested in making a bid for ICM 2018 were invited to submit bids for hosting the International Congress of Mathematicians 2018 and the IMU General Assembly meeting prior to the congress. In 2014, the 17th IMU General Assembly in Gyeongju, Republic of Korea will decide on the location of ICM 2018.

Following the recommendation (Resolution 14) of the 16th General Assembly in Bangalore to restructure the IMU budget the IMU Treasurer drafted a proposal on the new budget and asked the Adhering Organizations to vote on this proposal. The Adhering Organizations approved the new budget structure. The financial reports for the term 2011-2014 are prepared on the basis of the approved new budget.

The International Mathematical Union and the International Council for Industrial and Applied Mathematics (ICIAM) jointly constituted a Working Group on Journal Ranking. The Working Group's report was the starting point of a blog on mathematical journals installed on IMU's Web site. The blog aimed at exploring opinions from the mathematical community on a larger scale and getting as much input as possible concerning the issue of rating

mathematical journals and finding out whether IMU (together with ICIAM) should take further action. The community was invited to contribute to the discussion and submit opinions through posting articles and comments. The blog runs until 2012.

On September 10, the International Mathematical Union celebrated its 60th anniversary after it was reborn in 1951. This day, 60 years ago, the Union was officially established since ten countries had joined (point 4 of the Enabling Resolution). The ten countries were (in alphabetic order): Austria, Denmark, France, Germany, Great Britain, Greece, Italy, Japan, the Netherlands, Norway.

A Past President of the International Mathematical Union became a delegate to ICSU (International Council for Science). John Ball from the Mathematical Institute of the University of Oxford was elected Ordinary Member of the Executive Board of ICSU at ICSU's 30th General Assembly in Rome, Italy. John Ball who was the IMU President from 2003 - 2006 is the first ever mathematician on this board. He will be in office until 2014.

With best wishes

Martin Grötschel IMU Secretary

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#### 1. Executive Committee 2011-2014

#### INTERNATIONAL MATHEMATICAL UNION

#### **Executive Committee**

January 1, 2011 – December 31, 2014

**President: Ingrid Daubechies** (USA)

**Vice-Presidents:** Christiane Rousseau (Canada)

> Marcelo Viana (Brazil)

Martin Grötschel (Germany) **Secretary:** 

Manuel de León **Members-at-Large:** (Spain)

> Yiming Long (China)

Cheryl E. Praeger (Australia)

Vasudevan Srinivas (India)

John F. Toland (United Kingdom)

Wendelin Werner (France)

**Ex-officio Member** 

(Past President)

László Lovász (Hungary)

#### **Meetings of the Executive Committee in 2011:**

81st EC Meeting, Perth, Australia, February 27/28, 2011

#### 2. Members of the Union

The following 77 countries were members of IMU through December 31, 2011:

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

The following 4 organizations were members of IMU through December 31, 2011:

Affiliate African Mathematical Union (AMU)

Membership European Mathematical Society (EMS)

South East Asian Mathematical Society (SEAMS)

Unión Matemática de América Latina y el Caribe (UMALCA)

## **3.** IMU Leadership 2011 – 2014

#### **IMU Executive Committee (EC) 2011 – 2014**

Ingrid Daubechies	IMU President	USA
Martin Grötschel	IMU Secretary	Germany
Christiane Rousseau	IMU Vice President	Canada
Marcelo Viana	IMU Vice President	Brazil
Manuel de León	IMU EC Member-at-Large	Spain
Yiming Long	IMU EC Member-at-Large	China
Cheryl E. Praeger	IMU EC Member-at-Large	Australia
Vasudevan Srinivas	IMU EC Member-at-Large	India
John F. Toland	IMU EC Member-at-Large	UK
Wendelin Werner	IMU EC Member-at-Large	France
László Lovász	IMU EC Ex-officio Member (Past President)	Hungary

#### **Commission for Developing Countries (CDC) 2011 – 2014**

José-Antonio de la Peña	CDC President	Mexico
C. Herbert Clemens	CDC Secretary Policy	USA
Srinivasan Kesavan	CDC Secretary Grants	India
Carlos Cabrelli	CDC, Latin American Member	Argentina
Wandera Ogana	CDC, African Member	Kenya
Hoang Xuan Phu	CDC, Asian Member	Vietnam
Ragni Piene	CDC Member appointed by IMU EC	Norway
Polly W. Sy	CDC Member appointed by IMU EC	Philippines
Angel Ruiz	CDC Member appointed by ICMI EC	Costa Rica
Ingrid Daubechies	CDC Ex-officio Member (IMU President)	USA

#### International Commission on the History of Mathematics (ICHM) 2011 - 2014

Jesper Lützen	ICHM	Denmark
Kim Plofker	ICHM	USA

#### **International Commission on Mathematical Instruction (ICMI) 2010 – 2012\***

William (Bill) Barton	ICMI President	New Zealand
Jaime Carvalho E Silva	ICMI Secretary-General	Portugal

Angel Ruiz	ICMI Vice President	Costa Rica
Mina Teicher	ICMI Vice President	Israel
Mariolina Bartolini Bussi	ICMLEC Mamban at Lange	Italy
Mariolina Bartolini Bussi	ICMI EC Member-at-Large	Italy
Sung Je Cho	ICMI EC Member-at-Large	Korea
Roger Howe	ICMI EC Member-at-Large	USA
Renuka Vithal	ICMI EC Member-at-Large	South Africa
Zhang Yingbo	ICMI EC Member-at-Large	China
Michèle Artigue	ICMI EC Ex-officio Member (Past President)	France
Ingrid Daubechies	ICMI EC Ex-officio Member (IMU President)	USA
Martin Grötschel	ICMI EC Ex-officio Member (IMU Secretary)	Germany

<sup>\*</sup> The transition process according to the changed election model ends in 2012, four-year terms of service start in 2013.

#### Committee on Electronic Information and Communication (CEIC) 2008 – 2014\*\*

Peter Olver	CEIC Chair (chair as of 2011)	Jul 1, 2008 – Dec 31, 2014	USA
Thierry Bouche	CEIC Member	Jan 1, 2011 – Dec 31, 2014	France
Olga Caprotti	CEIC Member	Jul 1, 2008 – Dec 31, 2012	Finland
James Davenport	CEIC Member	Jul 1, 2008 – Dec 31, 2012	UK
Carol Hutchins	CEIC Member	Jul 1, 2008 – Dec 31, 2012	USA
László Lovász	CEIC Member	Jan 1, 2011 – Dec 31, 2014	Hungary
Ravi Vakil	<b>CEIC Member</b>	Jan 1, 2011 – Dec 31, 2014	USA

 $<sup>\</sup>ensuremath{^{**}}$  CEIC terms of membership are staggered.

#### Persons representing IMU in various organizations

Body	Representative/ liaison person	(end of) Term
COSPAR	T. Padmanabhan	2011-2014
Gruber Foundation Cosmology Prize	Roger Penrose	2009-2011
ICMI (IMU EC liaison person)	Cheryl Praeger	2010-2014
CEIC (IMU EC liaison person)	László Lovász	2011-2014
IMU-Net editor	Mireille Chaleyat-Maurel	2011-2014
IMU-Net EC correspondent	Christiane Rousseau	2011-2014
Ramanujan Prize	Vasudevan Srinivas	2011-2014
Curator of the IMU archive	Guillermo Curbera	2011-2014
UNESCO	Michèle Artigue	2011-2014
ICSU	Manuel de León	2010-2014
ICSU Regional office for Latin America and the Caribbean (ROLAC)	Marcelo Viana	2011-2014

ICSU Regional office for Asia and the Pacific (ROAP)

Yiming Long

2011-2014

ICSU Regional office for Africa (ROA)

Fanja Rakotondrajao

2011-2014

# 4. Approved IMU membership dues 2011 – 2014

International Mathematical Union								
_	Approved membership dues 2011 – 2014 (Swiss Francs)							
Year	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>				
Group I	1.637	1.670	1.703	1.737				
Group II	3.274	3.340	3.406	3.474				
Group III	6.548	6.680	6.812	6.948				
Group IV	13.096	13.360	13.624	13.896				
Group V	19.644	20.040	20.436	20.844				

# 5. Approved IMU budget 2011-2014

The IMU AOs approved the new budget structure through postal ballot 01/11.

		Inte	rnatio	nal Math	nemati	cal Uni	ion					
	Propose	d new	Budget	for 2011	-2014,	in Swis	s Francs	(CHF)				
		2011			2012			2013			2014	
	General	Special	Sum	General	Special	Sum	General	Special	Sum	General	Special	Sum
INCOME												
I. General												
Membership Dues												
Sum General Income	435.442			444.220			452.998			462.042		
II. Special		20.000			20.000			20.000			20.000	
Special Development Fund Donations		<i>30.000 56.000</i>			30.000 56.000			<i>30.000 56.000</i>			30.000 56.000	
Grants		36.000			36.000			36.000			36.000	
Sum Special Income from Third Parties Income from IMU bank accounts		1.000			1.000			1.000			1.000	
Other Income		300			300			300			300	
Sum Special Income from Other Sources		300			300			300			300	
TOTAL INCOME	435,442	87.300	522.742	444,220	87.300	531.520	452.998	87.300	540.298	462.042	87.300	549.34
TOTALINCOME	433.442	87.300	<u> 322.142</u>	777.220	<i>57.300</i>	<u> </u>	432.330	67.500	340.230	402.042	87.300	343.34
EXPENDITURE												
1. Commissions & Committees (C&C)												
1.1 CDC	89.734	45.000		89.734			89.734	45.000		89.734	45.000	
1.2 CEIC	22.434			22.434			22.434			22.434		
1.3 ICMI	67.300			67.300			67.300			67.300		
1.4 Ad hoc committees	13.460			13.460			13.460			13.460		
1.5 Special support	0		227.020	0		227.020	0		227 222	0		227.00
C&C Expenditure	192.928	45.000	237.928	192.928	45.000	237.928	192.928	45.000	237.928	192.928	45.000	237.92
2. ICM												
2.1 Site Committee	4.487			4.487			4.487			4.487		
2.2 Program Committee	8.974			8.974			8.974			8.974		
2.3 Prize Committees	8.974			8.974			8.974			8.974		
2.4 Congress Subvention	22.434			22.434			22.434			22.434		
2.5 Travel Grants (Young & Senior)	31.407	30.000		31.407	30.000		31.407	30.000		31.407	30.000	
2.6 ICM related admin., outreach	22.434	50,000		22.434	30.000		22.434	50.000		22.434	50.000	
ICM Expenditure		30.000	128.710		30.000	128.710		30.000	128.710	98.710	30.000	128.71
3. Union Administration												
3.1 General Assembly	4.487			4.487			4.487			4.487		
3.2 President & Secretary	35.894			35.894			35.894			35.894		
3.3 Executive Committee	35.894			35.894			35.894			35.894		
3.4 Other	13.460	0	00 725	13.460		00 725	13.460	0	00.725	13.460		00.73
Union Administration Expenditure	89.735	0	89.735	89.735	0	89.735	89.735	0	89.735	89.735	0	89.73
4. Outreach												
4.1 ICSU Union Member Contribution	8.974			8.974			8.974			8.974		
4.2 Awards	0	11.000		0	11.000		0	11.000		0	11.000	
4.3 Website Support, Media Relations	8.974			8.974			8.974			8.974		
4.4 Bulletin	0			0			0			0		
4.5 Other	4.487			4.487			4.487			4.487		
4.6 Scientific activity support	0			0			0			0		
Outreach Expenditure	22.435	11.000	33.435	22.435	11.000	33.435	22.435	11.000	33.435	22.435	11.000	33.43
5. Overhead												
5.1 Office Expenses	4.487			4.487			4.487			4.487		
5.2 Bank Charges	4.487			4.487			4.487			4.487		
5.3 Legal Advice, Audit Fees	17.947			17.947			17.947			17.947		
5.4 Other	17.947			17.947			17.947	1.300		17.947		
Overhead Expenditure	44.868	1.300	46.168	44.868	1.300	46.168	44.868	1.300	46.168	44.868	1.300	46.16
TOTAL EXPENDITURE			535.976			535.976			<u>535.976</u>			535.97
Draw from Reserves			13.234			4.456			0			
Return to Reserves			0			0			4.322			13.36
INCOME LESS EXPENSES			0			0			0			

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

#### IMU AO Circular Letter 1/2011

#### **International Mathematical Union**

March 9, 2011

**IMU AO Circular Letter 1/2011** 

To: IMU Adhering Organizations

and to all participants of the IMU General Assembly 2010 in Bangalore, India

From: Martin Grötschel, IMU Secretary

# Report about the Bangalore GA meeting, election of an IMU Treasurer, appointment of the PC Chair

Dear colleagues,

Let me first mention that the new IMU Secretariat in Berlin has been opened on February 1, 2011 in Berlin with an official inauguration ceremony. A booklet about this event together with detailed information about the new secretariat is in preparation and will be sent to you in April.

#### 1. GA Report

Please find in the attachment the report about the 16th meeting of the IMU General Assembly that took place in Bangalore, India, August 16-17, 2010. Drafts of the report first went to the IMU Executive Committee and then for comment to all delegates of the General Assembly. All suggestions have been included into the final version of the report that was approved by the IMU Executive Committee on February 27, 2011 at its meeting in Perth, Australia. In other words, the document in the attachment is the final report about the 16th meeting of the IMU General Assembly.

#### 2. IMU Treasurer

The General Assembly in Bangalore changed the IMU Statutes and gave the Executive Committee the possibility to appoint, instead of the Secretary, another person as the treasurer. The Executive Committee made use of this possibility at its meeting in Perth and appointed Alexander Mielke as the new IMU Treasurer. Alexander Mielke is the deputy director of the Weierstrass Institute (WIAS) in Berlin and also acts as head of the new permanent office of IMU at WIAS.

#### 3. Chair of the ICM 2014 Program Committee

It is the traditional privilege of the IMU President to select a chair of the Program Committee of the forthcoming international congress. IMU President Ingrid

Daubechies asked Carlos Kenig, university of Chicago, to act as Program Committee Chair, and I'm happy to report that Carlos accepted this important duty. Carlos Kenig was present at the EC meeting in Perth and jointly with the Executive Committee selected the further members of the ICM 2014 Program Committee. The names of these persons, as is the tradition, remain secret until the opening ceremony on August 13, 2014 in Seoul.

Sincerely yours

Martin Grötschel IMU Secretary

#### IMU AO Circular Letter 2/2011

#### **International Mathematical Union**

April 21, 2011

**IMU AO Circular Letter 2/2011** 

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

#### Address/Data Check

Dear colleagues,

This is an e-mail from the new permanent IMU Secretariat in Berlin. The persons working at this office for IMU have begun their activity. We are currently transferring the IMU Web site from Zuse Institute to the Weierstrass Institute. We are beginning an overhaul of the contents, and this e-mail is a request to you to check whether the information/data about your country, adhering organization, committee for mathematics, etc. are correct.

May we ask you to go to the following Web page:

http://www.mathunion.org/members/countries

By clicking on "sorted alphabetically" you will easily find your country. For each country we have listed whatever has been requested by the country in the past. There will be at least the contact data of the adhering organization, there may be the members of a country's Committee for Mathematics or at least the Chair of this committee, and in most cases we list the mathematical societies that operate in a country (we usually set a link to the homepage). Should we add more information?

Are the data correct?

If not, please send an e-mail with the updates to

manager@mathunion.org
with a CC to
technician@mathunion.org

so that we can update our data.

Best regards

Martin Grötschel IMU Secretary

#### IMU AO Circular Letter 3/2011

#### **International Mathematical Union**

April 21, 2011 IMU AO Circular Letter 3/2011

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

# ICM 2014 Program Structure, Support programs for maths in developing countries

Dear colleagues,

This circular letter to the IMU Adhering Organizations informs you about your opportunity to influence the structure of the scientific program of the International Congress of Mathematician 2014 in Seoul, and about two new support programs for mathematics in developing countries.

I cordially ask you to distribute this information within your community.

#### 1. ICM 2014: Structure of the scientific program

As you know, the next ICM will take place in Seoul, Republic of Korea from August 13-21, 2014. The IMU President, Ingrid Daubechies has appointed Carlos Kenig (Chicago, USA) as Chair of the Program Committee (PC), and the IMU Executive Committee has appointed all other members of the PC. The PC will meet in October, 2011 in order to define the program structure of ICM 2014.

#### According to the PC/OC Guidelines, see

http://www.mathunion.org/fileadmin/IMU/PC-OC-Guidelines.pdf, the PC is responsible for the ICM structure but is advised to use the programs of previous ICMs as rough guidelines. Of course, innovations are not ruled out, and some Adhering Organizations and individuals may have good ideas for changes to the program structure. If you have suggestions on the program structure for the Program Committee, please contact Carlos Kenig via the following e-mail address:

PC-chair-ICM2014@mathunion.org

before September 1, 2011 so that your suggestions can be considered by the ICM 2014 Program Committee.

By the way, PRE-REGISTRATION FOR ICM 2014 IS NOW AVAILABLE! Please visit the ICM 2014 Website <a href="http://www.icm2014.org">http://www.icm2014.org</a> where you will find simple instructions on how to pre-register. Once you have pre-registered, you will be included in the ICM 2014 mailing list and will receive periodic ICM E-news for the next three years.

#### 2. IMU Berlin Einstein Foundation Program (EFP)

On the occasion of the establishment of the permanent IMU Secretariat at the Weierstrass Institute for Applied Analysis and Stochastics (WIAS) in Berlin, the Einstein Stiftung Berlin (ESB) has given a grant to the Berlin Mathematical School (BMS) to support mathematics. The focus of the grant program, called IMU Berlin Einstein Foundation Program (EFP), is the increase of interactions of young mathematicians from developing and economically disadvantaged countries with the lively mathematical environment in Berlin.

Applications are invited for research visits to Berlin lasting from three to nine months. PhD students, postdoctoral as well as more senior researchers are eligible to apply.

More information is available at: http://www.math-berlin.de/efp

#### 3. Simons Foundation announces the Africa Mathematics Project

A few days ago, the Simons Foundation has announced a new initiative in support of mathematical research in Africa's institutions of higher learning. The program is designed to enhance the mathematical capacity and productivity of recipient research groups.

A planning committee consisting of Herbert Clemens (Chair), USA; Wandera Ogana, Kenya; Marie-Françoise Roy, France; and Hamidou Touré, Burkina Faso has been appointed to oversee the initial stages of the Africa Mathematics Project. Clemens and Ogana are members of IMU's Commission for Developing Countries (CDC). It is planned that requests for proposals will available to applicants by late autumn of 2011.

#### More information is available at:

https://simonsfoundation.org/africa-mathematics-project

Best regards

Martin Grötschel IMU Secretary

#### IMU AO Circular Letter 4/2011

#### **International Mathematical Union**

May 29, 2011

**IMU AO Circular Letter 4/2011** 

To: IMU Adhering Organizations

and to all participants of the IMU General Assembly 2010 in Bangalore, India

From: Martin Grötschel, IMU Secretary

#### Inauguration of the new IMU Secretariat, booklet

Dear colleagues,

You may remember that the new IMU Secretariat opened in January 2011 and that the official inauguration took place on February 1, 2011.

In the attachment please find a booklet that reports about the opening ceremony. It contains a few words about IMU and Berlin, the speeches of all persons who spoke at the inauguration ceremony, a few photos and brief information about IMU, the new staff at the IMU Secretariat and a map with the location of the office in downtown Berlin.

More than 100 persons from the world over enjoyed the festive event. Several persons attending the ceremony asked me to provide a booklet with the speeches and information about the staff. That is what the booklet is about, which I would like to send to you for your information.

Best regards,

Martin Grötschel

P.S.: The booklet can also be downloaded from

http://www.mathunion.org/fileadmin/IMU/IMU secretariat booklet.pdf
and via

http://www.mathunion.org/general/news/secretariat-inauguration/

where further information about the opening ceremony and more photos can be found.

#### IMU AO Circular Letter 5/2011

#### International Mathematical Union

July 1, 2011

IMU AO Circular Letter 5/2011

To: IMU Adhering Organizations
From: Ingrid Daubechies, IMU President
Martin Grötschel, IMU Secretary

#### Call for Bids for ICM 2018

This letter is about the International Congress of Mathematicians to be held in the year 2018 (ICM 2018).

One of the objectives of the International Mathematical Union defined in its Statutes is

"... To support and assist the International Congress of Mathematicians ...",

and in line with this, the IMU Guidelines for the Program Committee (PC) and the Organizing Committee (OC) of an ICM determine the General Purpose of ICMs as follows:

"International Congresses of Mathematicians are the most important IMU activity and need correspondingly careful preparation. Every ICM should reflect the current activity of mathematics in the world, present the best work being carried out in all mathematical subfields and different regions of the world, and thus, point to the future of mathematics. The invited speakers at an ICM should be mathematicians of the highest quality who are able to present current research to a broad mathematical audience."

The IMU Executive Committee (EC) cordially invites all Adhering Organizations and national mathematical societies in IMU member countries to submit bids for hosting

the International Congress of Mathematicians in the year 2018 and the IMU General Assembly prior to this Congress.

Submissions are requested as electronic files to be e-mailed to

secretary@mathunion.org

and as printouts to be mailed to

International Mathematical Union Secretariat Markgrafenstr. 32 D-10117 Berlin Germany.

To be considered by the Site Selection Committee (SSC) bids must be received not later than

November 30, 2012.

The Site Selection Committee will evaluate all bids received taking into account, but not restricted to, the mathematical ambience, the infrastructure and the economic conditions offered by each bidder, as well as the accessibility of the proposed site, the involvement of the local mathematical community, and the geographical distribution of places where ICMs took place in the past.

The IMU EC will prepare a recommendation based on the SSC's advice and refer this recommendation to the 17th IMU General Assembly (GA).

The 17th IMU General Assembly to take place on August 11-12, 2014 in Gyeongju, Republic of Korea, will finally decide on the location of ICM 2018. (The GA is free to consider bids placed after November 30, 2012, but the IMU EC considers most advisable that the Adhering Organizations comply with the above procedure.)

Attached hereto are guidelines for bids for ICM 2018 set up by the IMU EC providing advice and instructions to potential bidders.

All countries interested in making a bid for ICM 2018 are strongly encouraged to do so.

With best wishes

Ingrid Daubechies Martin Grötschel

Guidelines for Bids for the International Congress of Mathematicians 2018 (ICM 2018)

All IMU Adhering Organizations and national mathematical societies of IMU member countries are invited to place bids to host ICM 2018. Following the recommendation of the 1990 General Assembly in Kobe, Japan, and the explicit wish of several Adhering Organizations to be provided with more specific information than in the past, the IMU Executive Committee (EC) has set up the guidelines below concerning the placement of bids for ICM 2018 and asks all bidders to follow these instructions.

For more information on the organization of an International Congress of Mathematicians please see http://www.mathunion.org/activities/icm,

and for the Guidelines for the Program Committee (PC) and the Organizing Committee (OC) of an ICM see http://www.mathunion.org/fileadmin/IMU/PC-OC-Guidelines.pdf.

1. Submission deadline

November 30, 2012

2. Submissions are requested as electronic files to be e-mailed to

secretary@mathunion.org

and as printouts to be mailed to

International Mathematical Union Secretariat Markgrafenstr. 32 D-10117 Berlin Germany

- 3. Bids by congress centers, congress organization companies and similar institutions will not be accepted.
- 4. The IMU EC has set up an ICM 2018 Site Selection Committee (SSC) consisting of all voting members of the IMU EC and the President of the Local Organizing Committee of the previous ICM. In addition, the EC has set up an ICM 2018 Site Visiting Committee (SVC) which is composed of the following four persons:

I. Daubechies, IMU President
Raghunathan, President EOC ICM 2010
M. de Léon, President EC ICM 2006
Y. Long, Member Satellite Conf. Comm. OC ICM 2002

5. The SVC will screen all bids and determine a short list of the most serious contenders (the finalists). The members of the SVC are supposed to visit all finalists and check the local

facilities in detail, taking into account the recommendations below concerning infrastructure, financial aspects, etc. The SVC will report to the SSC on all the bids. Based on this evaluation, the SSC will make its recommendation to the EC. The EC will make its recommendation decision by May 31, 2013. The recommendation of the EC will then immediately be communicated to all IMU Adhering Organizations.

- 6. The final decision will be taken at the meeting of the IMU General Assembly to be held on August 10-11, 2014 in Gyeungju, Republic of Korea. The General Assembly is still free to consider bids placed after November 30, 2012, but the EC considers most advisable that the Adhering Organizations and SSC observe the above procedure.
- 7. While it is impossible to spell out precisely all factors that will influence the final recommendation of the SSC and EC, the decision process will take into account the mathematical ambiance, the infrastructure and the economic conditions offered by each bidder, as well as the accessibility of the proposed site and the broad geographical distribution of congresses.

More precisely, the bid should contain:

- A detailed description of the proposed congress venue, that should provide the following facilities:
  - Auditorium for the plenary lectures
  - o Rooms for the parallel sessions
  - Congress Office
  - o Speakers' preparation room
  - o Internet Corner
  - o Registration space
  - Exhibition space
  - Poster area
  - o Space for informal discussions of small groups of participants
  - o Catering areas for coffee breaks and light lunches
- Congress venue accessibility
- Accommodation:
  - Options for approximately 3.000 4.000 rooms, 3 to 5 stars. Closest metro/bus/train stations and travel times to congress venue should be indicated.
  - Cheap accommodation based, for instance, in university dormitories should also be available.
- City/Country accessibility and:
  - o Climate
  - Security
  - Visa restrictions
  - o Infrastructure
  - Social and touristic attractions
- Proposed venues for social events
- Economic/Financial conditions:
  - o A detailed budget plan as well as
  - o Convincing letters of support from the national authorities should be included
  - o Indication of support for participants from developing countries

- Reasons why the ICM should be hosted in the country:
  - Mathematical ambiance, e. g., clear support from the local mathematical community
  - A convincing local mathematical research infrastructure (universities, research centers)
  - o Details about the state of the mathematical research in the country
- The bid should indicate details about the two main social events during the congress:
  - o Opening Ceremony for approx. 4000 participants
  - o Social Dinner/Banquet for approx. 3000 participants.
- Also, information about plans for satellite congresses, exhibitions, public lectures and events around the ICM should be included.
- 8. If a bidding institution has questions concerning these instructions, the SVC member Manuel de Léon <mdeleon@imaff.cfmac.csic.es> has agreed to serve as the IMU contact person and provide the additional information needed.

#### 9. Timeline

Nov 30, 2012	Submission of bids for ICM 2018
Dec 2012 – Mar 2013	Site visits of the ICM 2018 Site Visiting Committee
May 2013	IMU EC to adopt recommendation on the ICM 2018 site to be referred to the 17 <sup>th</sup> General Assembly
Aug 10/11, 2014	Final decision of the 17 <sup>th</sup> IMU General Assembly on the site of ICM 2018
Summer 2018 (preferably August)	<ul> <li>2 days General Assembly</li> <li>1 day transfer from GA site to ICM site</li> <li>9 days ICM, including 1 free day at half time</li> </ul>

#### 10. Format (roughly) of past ICMs

Day 1	Opening Ceremony (IMU prizes), up to 4,000 persons capacity auditorium
Day 5	free
Day 9	Closing Ceremony
Expected participants:	4,000 persons

Budget:	$- \sim 2,000,000 \text{ US dollars}$
	– Subvention from IMU: ∼ 90,000 US\$
Plenary speakers (60 min lectures):	~ 20 persons
Invited speakers (45 min lectures):	<ul> <li>− ~ 160 persons, between 3 and 14 invited lectures in each session</li> </ul>
	<ul> <li>up to seven invited lectures in parallel,</li> </ul>
	<ul> <li>rooms for invited lectures for at least</li> <li>300 persons each</li> </ul>
Short communications and posters:	<ul> <li>Are associated to the sessions, may be in parallel (between 15 and 30) in each session.</li> </ul>
	<ul> <li>Each room for communications to hold at least 40 persons.</li> </ul>
Satellites conferences	- 32 conferences at ICM 2010
	- 64 conferences at ICM 2006
Proceedings, paper copy for the libraries	<ul> <li>one volume with the plenary lectures:</li> <li>around 800 pages</li> </ul>
	- two or three volumes with the invited lectures: around 3000 pages altogether
	<ul> <li>one (optional in paper copy form)</li> <li>volume with the communications: 400- 500 pages</li> </ul>
General Assembly:	<ul> <li>Expected participants: 200 persons</li> <li>Budget: ~ 180,000 US dollars</li> </ul>
	− Subvention from IMU: ~ 18,000 US\$

#### IMU AO Circular Letter 6/2011

### **International Mathematical Union**

July 1, 2011

**IMU AO Circular Letter 6/2011** 

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

#### IMU Bulletin No. 59, Oct 2010

Dear colleagues,

In line with the preceding IMU AO CL 5/2011 that was dealing with ICM 2018 to come, this circular letter refers to the previous ICM 2010.

Attached hereto is IMU Bulletin No. 59 reporting on the meeting of the 16th General Assembly which took place on August 16-17, 2010 in Bangalore, India, and the Opening and Closing Ceremonies of the International Congress of Mathematicians 2010, August 19-27, 2010, Hyderabad, India.

This bulletin is also available on the IMU Web site at

http://www.mathunion.org/publications/bulletins/archive/.
(No print edition will be distributed.)

Apologies for the delay in providing this publication.

With best wishes

Martin Grötschel

#### IMU AO Circular Letter 7/2011

#### **International Mathematical Union**

July 20, 2011

**IMU AO Circular Letter 7/2011** 

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. IMU appoints, jointly with ICTP and the Norwegian Academy, the selection committee.

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.

October 30, 2011

is the deadline for nominations for the 2011 prize.

Nominations are to be sent to director@ictp.trieste.it.

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 2011. The call can also be found at

http://www.ictp.it/about-ictp/prizes-awards/the-ramanujan-prize.aspx.

Sincerely,

Martin Grötschel IMU Secretary

P.S.: I apologize for a typo in my Circular Letter 5/2011. The date of the next meeting of the IMU General Assembly was incorrect. The correct date is:

August 10-11, 2014

The GA will be held in in Gyeongju, Republic of Korea.

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

ICTP has created the Ramanujan Prize for young mathematicians from developing countries. The Prize is funded by the Niels Henrik Abel Memorial Fund.

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. 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 is usually awarded to one person, but may be shared equally among recipients who have contributed to the same body of work.

ICTP awards the prize through a selection committee of five eminent mathematicians appointed in conjunction with the <u>International Mathematical Union</u> (IMU). The first winner was announced in 2005.

#### The deadline for receipt of nominations for the 2011 Prize is 30 October 2011.

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

#### IMU AO Circular Letter 8/2011

#### International Mathematical Union

September 10, 2011 IMU AO Circular Letter 8/2011

To: IMU Adhering Organizations
From: Ingrid Daubechies, IMU President
Martin Grötschel, IMU Secretary

#### 60th anniversary of IMU after rebirth in 1951

On Saturday, September 10, 2011 the International Mathematical Union celebrates its

60th anniversary

after it was reborn in 1951.

Olli Lehto wrote in his book "Mathematics without borders, a history of the International Mathematical Union" on page 86, see attachment:

"... By point 4 of the Enabling Resolution, the Union was officially established as soon as ten countries had joined. On 10 September 1951, Jessen could announce to the National Adhering Organizations that this goal had been reached ... The IMU was officially in existence again. ...".

Congratulations to all of us!

This is also an appropriate occasion to announce that IMU's first two Associate Members, Ecuador and Kyrgyzstan, have applied for renewal of their memberships and that the IMU Executive Committee has approved this application for the period October 2011 to September 2015. IMU is looking forward to Ecuador's and Kyrgyzstan's application for full IMU membership in 2015.

With best wishes

Ingrid Daubechies Martin Grötschel

#### **IMU AO Circular Letter 9/2011**

#### **International Mathematical Union**

September 25, 2011 IMU AO Circular Letter 9/2011

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

#### Facebook, Library Assistance, Africa Mathematics Project

Dear colleagues,

This circular letter addresses the following issues:

- 1. IMU on Web 2.0 platform Facebook
- 2. CDC launches the IMU Mathematics Library Assistance Scheme for Developing Countries
- 3. The Simons Foundation announces the Africa Mathematics Project

IMU hopes that you forward the information to the mathematics community in your country, in particular, that this e-mail generates a lot of new IMU friends on Facebook, that the library assistance scheme reaches those in need of literature, and that the Africa Mathematics Project funded by the Simons Foundations will enhance the mathematical capacity and productivity in sub-Saharan Africa. Get ready to apply!

Details can be found below.

Martin Grötschel IMU Secretary

#### 1. IMU on Web 2.0 Social Network Facebook

IMU is now alive and active on Facebook under the name "IMU Secretariat (Mathunion)" as well as under "International Mathematical Union".

If you want to know the latest updates of IMU (and have a Facebook page or profile):

- become friends of the IMU Facebook account; you just have to search for :

http://www.facebook.com/mathunion

- click the button LIKE at the institutional webpage:

http://www.facebook.com/pages/International-Mathematical-Union/190457414332948?sk=wall

Please distribute this information to everyone interested in your own networks.

# <u>2. CDC launches the IMU Mathematics Library Assistance Scheme for Developing Countries</u>

The Commission for Developing Countries (CDC) of the International Mathematical Union (IMU) has launched a new support scheme where the shipment of textbooks to universities in less economically developed countries is supported.

CDC offers limited financial support for shipment costs for individual scientists or institutions wishing to donate books in the mathematical sciences to libraries in developing countries. Libraries in universities/research institutions in developing countries can apply for to receive donated books. For more information please go to: http://imuweb.mathunion.org/cdc/further-cdc-activities/library-assistance-scheme/

have a look at the press release

 $\frac{\text{http://imuweb.mathunion.org/cdc/further-cdc-activities/library-assistance-scheme/library-assistant-scheme-press-release/}{}$ 

or contact, Lena Koch, the CDC Administrator in the IMU Secretariat in Berlin: icmi.cdc.administrator@mathunion.org.

#### 3. The Simons Foundation announces the Africa Mathematics Project

The program is designed to enhance the mathematical capacity and productivity of recipient research groups.

The project will focus on mathematicians and their graduate students at institutions of higher learning in sub-Saharan Africa. The Foundation will make competitive awards that, taken together, will total approximately 400,000 USD per year for each of the next 10 years.

More information: https://simonsfoundation.org/mps-africa-mathematics-project.

#### IMU AO Circular Letter 10/2011

#### **International Mathematical Union**

October 11, 2011

IMU AO Circular Letter 10/2011

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

#### **IMU's future budget structure**

Dear colleagues,

This circular letter to the IMU Adhering Organizations concerns the future IMU budget structure. According to Resolution 14 adopted at the Bangalore General Assembly 2010 the IMU Executive Committee (EC) was requested to submit a new budget for 2012-2014 by the end of 2011. Moreover, the GA invited the EC, see GA Resolution 15, to revise the Statutes concerning the distinction between general expenses (Schedule A) and special expenses (Schedule B).

The EC will make the concrete proposal for Statute changes asked for at the 2014 General Assembly. The new budget, however, reflects already the revisions that the IMU EC is going to propose. The distinction between the two Schedules will be eliminated, and the allocation of the budget will follow "general rules" that are explained by the IMU Treasurer Alexander Mielke in his document "IMU\_BudgetStructure.pdf" attached to this circular letter (see below).

Below and attached to this letter is the proposal by the IMU Treasurer for IMU's future budget structure.

Please vote on the proposal for IMU's future budget structure through the enclosed postal ballot and return the ballot by mail or fax

by December 11, 2011

to the address indicated on the ballot form.

Sincerely yours,

Martin Grötschel IMU Secretary

PS:

This e-mail is just an announcement of the postal ballot.

The postal ballot sheet to be filled out and signed is not attached. It is only forwarded 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 (in many cases with multiple recipients) this could lead to multiple voting of one member country (with possibly contrary votes - as has happened in the past).

\_\_\_\_\_

To: IMU Adhering Organizations

From: IMU Treasurer

Proposal for IMU's future budget structure

Dear colleagues,

as decided at IMU's last General Assembly, the budget structure has to be revised in 2011. Enclosed is a proposal for a new IMU budget structure. The IMU Executive Committee has considered this proposal and recommends to approve it.

The main idea of this proposal is to install a few clear rules on how to distribute the money to the different tasks. In particular, this concerns the "general income" (= sum of all membership fees), in contrast to "special income" (e.g., donations, award money, special development fund) which is dedicated to an obvious purpose anyway.

Hence, the expenditure to be paid by the general income was restructured in five major items with several subitems, and to each item a certain percentage of the total was associated. Thus, additional funding via special income is really added to the annual budget of the corresponding item.

The file <IMU\_BudgetStructure> contains "Rules 0 to 5". These will serve as guidelines and not as "laws", to maintain the same flexibility as we have now.

Attachments to this letter are:

(1) <IMU\_BudgetStructure.pdf>
Proposal for a New Budget Structure

(Figures are only for "general income" for 4 years)

- (2) <Budget2011-14StrategicPlan.pdf>
  Strategic plan 2011-2014 (4-years budget plan 2011-2014)
  (Figures include general and special income)
- (3) <Budget2011-14\_4years.pdf>
  Proposed new Budget for 2011-2014 (in Swiss Francs)
  (New budget plan for individual years 2011, 2012, 2013, 2014)
- (4) <Budget2011-14\_Bangalore.pdf>
  Old budget plan (as accepted at GA in Bangalore 2010) for comparison

Again, please observe, what are called rules here, are just guidelines for the GA. E. g., the specific percentages allotted to each budget item may have to and most likely will be reviewed at every GA meeting. The GA retains, of course, the full right and responsibility to establish the IMU budget.

With best regards,

Alexander Mielke IMU Treasurer

#### IMU AO Circular Letter 11/2011

#### **International Mathematical Union**

November 18, 2011

IMU AO Circular Letter 11/2011

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

#### **Blog on Mathematical Journals**

Dear colleagues,

In implementation of Resolution 18 adopted by the IMU General Assembly in 2010:

"The General Assembly of the IMU asks the EC to create, in cooperation with ICIAM, a Working Group that is charged with considering whether or not a joint ICIAM/IMU

method of ranking mathematical journals should be instituted, and what other possible options there may be for protecting against the inappropriate use of impact factors and similar manipulable indices for evaluating research."

the IMU and the ICIAM have created a joint working group to study the issue. The working group which was composed of N. Joshi, D. N. Arnold, C. Hutchins, J. D. S. Jones, M. MacCallum, P. Michor, S. Mueller, and T. Tang has finished its work and come up with a report that is attached to this circular letter and can be found on IMU's Web page at the following URL: <a href="http://www.mathunion.org/publications/reports-recommendations">http://www.mathunion.org/publications/reports-recommendations</a>.

The working group examined the issue of why a rating of mathematical journals is desirable and submitted a detailed proposal for IMU/ICIAM journal rating. Before going ahead and taking any further action the IMU and ICIAM want to explore opinions on a larger scale and get as much input as possible from the mathematical community. That is why a "Blog on Mathematical Journals" (URL: <a href="http://www.mathunion.org/journals">http://www.mathunion.org/journals</a>) has been installed. The blog is moderated by a group of 6 persons (D. Arnold, C. Hutchins, N. Joshi, P. Olver (chair), F. Planchon, T. Tang).

Everyone interested can submit his/her opinion through posting an article (e-mail to: journal.blog@mathunion.org) and/or forwarding a comment (add a comment to a posted article by typing in the "comments" window or sending e-mail to journal.blog@mathunion.org).

Please go the mathematical journals blog and join the discussion of the issue.

IMU and ICIAM particularly ask you to spread the information about the report and blog on mathematical journals widely in your community. Input from a wide range of persons is necessary to discuss this important issue and prepare for the final decision process.

Best regards

Martin Grötschel IMU Secretary

IMU AO Circular Letter 12/2011

International Mathematical Union

#### IMU AO Circular Letter 12/2011

To: IMU Adhering Organizations

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

From: Martin Grötschel, IMU Secretary

#### - Postal Ballot 02/11 Application for full Membership of Algeria

- Algeria has applied for full membership of the IMU. The Executive Committee of the IMU recommends to favor the application. The enclosed document gives a survey of the level of research and activities in mathematics which have been done in Algeria during the last ten years (e.g., conferences and other events at Algerian universities, research papers, mathematical departments of Algerian universities, mathematicians in Algeria).

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

by January 29, 2012

to the address indicated on the ballot form.

Sincerely,

Martin Grötschel IMU Secretary

Encl.

PS: Please observe that your Adhering Organization votes on the proposed future budget structure of IMU and that the respective ballot is returned to the IMU Secretariat by Sunday, December 11, 2011.

IMU AO Circular Letter 13/2011

**International Mathematical Union** 

<sup>\*</sup>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).

December 15, 2011 IMU AO Circular Letter 13/2011

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

#### IMU Bulletin No. 60, December 2010

Dear colleagues,

Attached hereto is IMU Bulletin No. 60 reporting about the IMU activities in 2010. A printed copy is sent by regular mail to the Adhering Organizations.

Bulletin No. 60 is also available on the IMU Web server at http://www.mathunion.org/publications/bulletins/archive/.

Due to organizational reasons the release of this publication was delayed, please accept our apologies.

With best wishes

Martin Grötschel IMU Secretary

#### IMU AO Circular Letter 14/2011

#### **International Mathematical Union**

December 21, 2011

IMU AO Circular Letter 14/2011

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

- IMU's future budget structure
- ICME-12 Twelfth International Congress on Mathematical Education

#### Dear colleagues,

- The vote on IMU's future budget structure yielded a positive result. The Adhering Organizations approved the new budget structure that was developed in accordance with Resolution 14 of the 16<sup>th</sup> General Assembly in Bangalore, 2010. Thus, the financial reports for the term 2011-2014 will be prepared by the IMU Executive Committee on the basis of the approved new budget.
- ICME-12, the Twelfth International Congress on Mathematical Education will take place from July 8-15, 2012 in Seoul, Republic of Korea.

The International Congress on Mathematical Education is held every four years under the auspices of the International Commission on Mathematical Instruction (ICMI). The aim of the Congress is to present the current states of, and trends in mathematics education research and in the practice of mathematics teaching at all levels and from international perspectives. The Congress will gather a broad spectrum of participants such as researchers in mathematics education, teacher educators, practicing teachers, mathematicians, and everyone interested in mathematics education from all over the world.

ICME-12 offers a broad scientific program including plenary activities, regular lectures, survey teams, topic study groups, discussion groups, etc. Detailed information on registration, financial aid programs, accommodation, invited speakers, scientific and social events can be found on the ICME-12 official Web site: <a href="http://www.icme12.org/">http://www.icme12.org/</a> as well as on the ICMI webpage: <a href="http://www.mathunion.org/icmi/">http://www.mathunion.org/icmi/</a>.

Please help make the Congress a great success and spread this information through all the channels that may target this event.

With best wishes

Martin Grötschel IMU Secretary

PS: Attached is the 3rd ICME-12 Announcement

#### 7. International Commission on Mathematical Instruction (ICMI)

http://www.mathunion.org/icmi

#### Report on ICMI activities in 2011

Bill Barton, Jaime Carvalho e Silva

#### 1. Organisation

The second meeting of the 2010-2012 EC took place in Beijing, China 21-25. February 2011. IMU was represented by Cheryl Praeger. The major decision was the continued expansion of ICMI development activities in the form of the CANP (see below). The next ICMI EC meeting will take place in July 2012, prior to ICME -12. The **new 2013-2016 ICMI EC** will be elected at the General Assembly prior to ICME-12.

ICMI is supported by Lena Koch, a half- time staff person responsible for all administrative and organizational issues regarding ICMI. Other staff members at Berlin also assist ICMI, including the accountant, the IT and technical support as well as the IMU archivist.

#### 2. ICMI members

In 2011 ICMI had 90 member countries of ICMI, 69 of which are also members of IMU and eight are associate members of IMU.

#### 3. ICME

Seoul, Korea will host **ICME-12** in 2012 in the COEX Convention Centre on July 8-15, 2012. The **International Programme Committee (IPC)** chaired by Professor Sung Je Cho, Seoul National University, had its second meeting in February 2011 in Jeju, Korea. The programme is already completely structured and all activities are well under way. Information about the congress is available at http://www.icme12.org.

A call for bids for **ICME-13**, to be held in 2016, was made in 2008. Formal bids were due by November 1, 2010, and three bids were received. The site visits were conducted in 2011 and the decision for ICME-13 was announced by the end of 2011. **Hamburg, Germany will host ICME-13 in 2016.** 

#### 4. ICMI Studies

The 2010-2012 Executive Committee launched a new Study in 2010 on Task Design, and is preparing another study on a Primary Mathematics topic. **ICMI Study 18**: *Statistics Education in School Mathematics: Challenges for Teaching and Teacher Education* was published under the editorship of Carmen Batanero, chair of the International Programme Committee, together with Gail Burrill and Chris Reading in August 2011. (NISS 14)

ICMI is currently working on the following ICMI Studies:

- ICMI Study 19: The Role of Mathematical Reasoning and Proving in Mathematics Education
  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 March 2012. (NISS 15)
- ICMI Study 20: Educational Interfaces between Mathematics and Industry is organised jointly with the International Council for Industrial and Applied Mathematics (ICIAM). The IPC is co-chaired by

Alain Alabamian (Université Paris-Est) and Rudolf Sträßer (Justus-Liebig-Universität Gießen). The Study was presented during the 7th International Congress on Industrial and Applied Mathematics (ICIAM 2011), held in July 2011, in Vancouver, Canada by the Secretary-General of ICMI and the two co-chairs of the Study. The NISS volume is currently in preparation under the editorship of Alain Damlamian, Rudolf Sträßer and José Francisco Rodrigues with publication expected in 2012/13. (NISS 16).

- ICMI Study 21: Mathematics Education and Language Diversity, had Co-chairs Mamokgethi Setati (University of Pretoria) and Maria do Carmo Domite (Universidade de São Paulo). The Study Conference took place in Águas de Lindóia, São Paulo, Brazil, on 16-20 September, 2011. Both Cochairs have since stepped down due to personal reasons. The preparation of the Study Volume is in the hands of the IPC. The website is http://www.icmi-21.co.za.
- ICMI Study 22: The 2010-2012 Executive Committee launched a new Study late in 2010 on Task Design. The co-chairs are Anne Watson (Oxford University) and Minoru Ohtani (University of Kanazawa, Japan). The IPC had its first meeting in January 2012 in Oxford, UK.
- **ICMI Study 23**: EC members Mariolina Bussi and Roger Howe are preparing a proposal that will support the launching a new Study on Primary School Mathematics in its meeting in 2012.

#### 5. ICMI Regional Conferences

Launched in the mid-seventies, ICMI Regional Conferences aim to facilitate wider discussion of mathematical education issues in particular regions. They foster reflection, action and co-operation among mathematicians, mathematics educators and teachers. These meetings are supported morally by ICMI, sometimes with a modest financial contribution. One ICMI Regional Conference was held in the year 2011.

• XIII CIAEM (Conferencia interamericana de educación matemática), took place in Recife, Brazil, on June 26-30, 2011. This meeting coincided with the 50th anniversary of the *Comité Interamericano de Educación Matemática* (CIAEM), an organization recently affiliated to ICMI. The ICMI EC was represented on the International Programme Committee by Michèle Artigue and Bernard Hodgson. More than 1800 math educators, mathematicians and teachers from 33 countries met for five days and could follow five plenary talks, four plenary round tables (one of them dedicated to the work of Ubiratan D'Ambrosio), 30 parallel talks, six parallel round tables, and more than 700 contributed papers. In this meeting ICMI Study 18 was launched and an update of the Klein Project was presented to the participants.

The ICMI EC has granted the status of ICMI Regional Conference to the following conference in 2012 and 2013:

- EMF 2012 (Espace Mathématique Francophone), held in Geneva, Switzerland, in February 2012. The ICMI EC is represented on the International Programme Committee of EMF 2012 by Bernard Hodgson and Jaime Carvalho e Silva.
- ICMI-EARCOME-6 conference (the Fifth ICMI East Asia Regional Conference in Mathematics Education), to be held in Phuket, Thailand in March 2013. The ICMI EC will be represented on the International Programme Committee of this conference by Zhang Yingbo.

#### 6. The Klein Project

The Klein Project has turned its primary focus to the production, dissemination, and trialling (with teachers) of Klein Vignettes. Two Klein meetings were held in 2011, one in Sweden in March, and a major week-long workshop of 30 people funded by AIM in Palo Alto (USA), 7-11 November 2011. As well as the website, the Vignettes are being distributed via a Blog (www.blog.kleinproject.org) and are being trialled both in Brazil under the coordination of Yuriko Baldin, and in New Zealand under the

coordination of a part-time Research Assistant Rebecca Fowler. Another Research Assistant, Antoine Nectoux, is undertaking French translations and revisions.

#### 7. CANP: Capacity and Networking Project

**CANP** is the major development project of ICMI in conjunction with IMU (CDC), UNESCO and International Congress of Industrial and Applied Mathematics, ICIAM. It aims to enhance mathematics education in developing countries by developing the educational capacity of those responsible for mathematics teachers, and to create sustained regional networks of teachers, mathematics educators and mathematicians, linking them to international support.

CANP consists of a program in a different developing region each year. The first program was very successfully held in Mali in September, 2011. The second will be in held in Costa Rica in August 2012. The third will be in Cambodia in 2013.

The Mali CANP project was financially supported by UNESCO, the IMU Commission for Developing Countries, ICMI, the International Centre for Pure and Applied Mathematics (CIMPA), the SCAC of the Embassy of France in Mali, Joseph Fourier University in Grenoble and substantial support from the Ministry of Education, Literacy and National Languages of Mali. In addition, the FAST University of Bamako made freely available an Amphitheatre for the opening ceremony, a large room and a computer room for training and provided wireless internet access for participants. More information can be found at:

http://www.mathunion.org/icmi/other-activities/outreach-to-developing-countries/canp-project-2011-mali/

#### 8. Commission for Developing Countries

The ICMI EC also appoints one member of the IMU Commission for Developing Countries (CDC). The ICMI 2010-2012 EC nominated Angel Ruiz as member of this Commission (2010-2014).

#### 9. ICMI Solidarity Fund

The ICMI Solidarity Fund was established by ICMI in 1992. Its purpose is to help the development of mathematics education in countries in which there is a need for it that justifies international assistance. It currently holds approximately USD 34.000 (Euro 26.000).

#### 10. ICMI Affiliate Organizations

ICMI's organizational outreach includes multi-national organizations with interest in mathematics education, operating consistently with the aims and values of the Commission. Affiliated organizations are independent from ICMI and are self-financed. They collaborate with ICMI on specific activities, such as the ICMI Studies or CANP. The ICMI Affiliate Organizations produce reports for the General Assembly of ICMI. There are currently four multi-national Mathematical Education Societies (one affiliated in 2011) and six international Study Groups which have obtained affiliation to ICMI.

The multi-national Mathematics Education Societies currently affiliated to ICMI, with year of affiliation, are:

- CIAEM: Inter-American Committee on Mathematics Education (2009)
- CIEAEM: Intl. Commission for the Study and Improvement of Mathematics Teaching (2010)
- ERME: European Society for Research in Mathematics Education (2010)
- MERGA: Mathematics Education Research Group of Australasia (2011)

The Study Groups currently affiliated to ICMI, with their year of affiliation, are:

 HPM: The Intl. Study Group on Relations between the History and Pedagogy of Mathematics (1976)

- ICTMA: The International Study Group for Mathematical Modelling and Applications (2003)
- IOWME: The International Organization of Women and Mathematics Education (1987)
- MCG: The International Group for Mathematical Creativity and Giftedness (2011)
- PME: The International Group for the Psychology of Mathematics Education (1976)
- WFNMC: The World Federation of National Mathematics Competitions (1994)

#### 11. ICMI Awards

The ICMI awards each in the form of a certificate and a medal, to recognize outstanding accomplishments in mathematics education research:

- Hans Freudenthal Award, for a major programme of research on mathematics education,
- Felix Klein Award, for lifelong achievement in mathematics education research.

The 2011 awards were announced in February, 2012. Alan Schoenfeld received the Felix Klein Medal for lifetime achievement and Luis Radford for the Hans Freudenthal Medal for a major cumulative programme of research. Carolyn Kieran is the chair the ICMI Award Committee 2010-2014. In addition, two other members were elected in 2010. Only the name of the Chair is publicly known.

#### 12. IMU/ICMI Digitization Program

The **ICMI Digital Library** was officially launched on July 1, 2009, with the posting online of the Proceedings of the symposium organized in 2000 on the occasion of the centennial of *L'Enseignement Mathématique*, the official organ of ICMI. A contract was signed with Cambridge University Press in June, 2010 to make this material available online and negotiations with Springer are still in progress. All Bulletins digitised with the help of IMU, the most recent Proceedings of ICMI Study meetings, and the ICMI Studies edited by CUP are all available online for the ICMI community.

#### 13. Database Project

The ICMI Executive Committee decided in its February 2011 meeting to launch another major project, called the Database Project, whose ultimate goal is to build and update a database of the mathematics curricula all over the world. For the first phase of this project, all ICMI representatives were asked to send a link to the webpage(s) of their country where official mathematics curricula at all levels of instruction (pre-primary, primary, elementary, middle, secondary, vocational, etc.) could be found. We have currently received information for 20 countries. The database is already in use by researchers and curriculum-developers.

#### 14. Information and Communication

Communication within ICMI is by direct email contact with the ICMI Representatives, and, for individuals, through **ICMI News** appearing every two months, alternating with *IMU-Net*. An **ICMI Facebook page** was established in 2011 (it currently has more than 1100 'friends' and 360 'likes'). An annual **ICMI Bulletin** is the official organ of ICMI activities.

The ICMI website, now hosted on the IMU server in Berlin, will receive some updates in 2012: http://www.mathunion.org/icmi/

All communications are under the Editorship of the Secretary-General.

Jaime Carvalho e Silva, Secretary-General jaimecs@mat.uc.pt

**Bill Barton,** President b.barton@auckland.ac.nz

### **ICMI Balances**

## (in EURO)

IMU Support 2010 and 2011	81.068,80 €
ICMI Balances 2010 as of 31.12.2010	75.316,18 €
ICMI Income: CIMPA Grant (for EdiMath/CANP)	1.800,00 €
ICMI Income: CDC Grant (for EdiMath/CANP)	3.830,83 €
ICMI Income: UNESCO Grant (for EdiMath/CANP)- 3rd payment	3.808,94€
ICMI Income: Australian Mathematical Society for Klein Project 2010	2.694,05 €
ICMI Solidarity Fund	26.767,60 €
Bank Interest	171,89 €
TOTAL BUDGET available for 2011:	195.458,29 €
ICMI Expenses:	
Klein Project 2010	2.584,89 €
ICM 2010	1.258,63 €
ICMI EC Meeting 2010	2.602,05 €
ICMI Study 20, Conference Lisboa	2.252,70 €
IMU Secretariat Inauguration, Berlin, 2011	239,64 €
ICMI EC Meeting 2011	4.484,40 €
CANP/ Edimath Mali	26.660,68 €
ICMI Study 18	100,00 €
ICIAM Conference	1.647,90 €
ICMI Study 21	2.060,21 €
Administrative Costs	356,70 €
Total Spending 2011	44.247,80 €
ICMI Balances as of 31.12.2011	151.210,49 €

## 8. Commission for Developing Countries (CDC)

http://www.mathunion.org/cdc/

## Report on CDC activities in 2011

Herb Clemens & Lena Koch



Since the early 1970s, the International Mathematical Union (IMU) has maintained a program of cooperation with and in support of mathematical institutions and individual mathematicians in the developing world. Support activities include research travel and conference grants, as well as volunteer lectures, joint research projects and grants to local initiatives. Until 2011 these activities were managed by the Commission for Development and Exchanges (CDE) and the Developing Countries Strategy Group (DCSG).

As part of this increased attention to the mathematical needs of developing and economically disadvantaged countries, IMU and its adhering organizations decided in August 2009 to merge the CDE and the DCSG into one commission, the Commission for Developing Countries (CDC).

At the meeting of the General Assembly in Bangalore 2010 the <u>CDC Terms of Reference</u> were approved and the CDC leadership 2011-2014 was elected, which activated the CDC on 1st January 2011 and led it to hold its first meeting on the 30th and 31st January 2011 in Berlin, Germany.

During 2011 the Commission for Developing Countries (CDC) continued to use the funds it receives to support mathematics research and advanced mathematical learning in developing countries.

Guided by its mandate and terms of reference, CDC supported five categories in 2011:

#### A) Project Support

Under this category CDC mainly supported education and capacity building projects and programs as well as local initiatives in developing countries.

#### B) Volunteer Lecturer Program

The goal of this program is to offer universities in the developing world lecturers for intensive 3-4 week courses in mathematics at the advanced undergraduate or master's level to build up local capacity.

#### C) Library Assistant Scheme

The IMU - CDC Library Assistant Scheme matches donors of mathematical materials with libraries in universities/research institutions in developing countries where there is a need for mathematical research literature. CDC offers limited financial support for shipment costs to individual scientists or institutions wishing to donate books in the mathematical sciences to libraries in developing countries.

#### D) Grants for Conferences and Individual Research Travel Support

The Conference Support Program gives partial support to conferences organized in developing and economically disadvantaged countries. The Program also supports a few major international conferences occurring in developed countries that would like to invite mathematicians from developing countries. The funds are for academic use only (travel or living expenses of invited speakers or participants coming from developing countries).

The Individual Support Program supports travel costs for research visits (minimum stay is four weeks) by mathematicians based in developing and economically disadvantaged countries.

#### E) Support for research and graduate education

CDC is issuing three reports on the current state of mathematics in Africa, Asia and Latin America and on opportunities for new initiatives to support mathematical development.

#### **Administrative Costs**

The CDC administrative spending was much lower than in the past since the CDC Administrator as well as most of the expenses of the CDC member meeting which was held January 30 – 31, 2011 in Berlin were covered through the IMU Secretariat budget.

#### A) Project Support

1. As in the previous years the Africa Mathematics Millennium Science Initiative (AMMSI) received CDC support for its graduate student scholarship program. The African Mathematics Millennium Science Initiative (AMMSI) is a distributed network of mathematics research, training and promotion throughout sub-Saharan Africa. In 2011 the amount of USD 20,000 was awarded to AMMSI. CDC believes that funding this program has a really high benefit-to-cost ratio. It is an example of a program that, like many in mathematics, requires more constancy than innovation and needs to be maintained until alternative sources of funding can be found. It will be much harder to start up again if continuity is interrupted and reliability is lost.

More information can be found here: http://www.ammsi.org/

2. The Ecuadoran Mathematical Society received USD 2,000 to support the 3rd Inter University Ibero-American Mathematics Competition (IMMC) held from October 3 -8, 2011 in Quito, Ecuador. IIMC is a regional competition for undergraduate math students. It was organized for the first time in

2009 and its goal is to reach universities from all Ibero-American countries (while teams from other regions are welcomed as well) with the aim of fostering the interest and motivation in the study of mathematics.

3. The Mentoring African Research in Mathematics (MARM) program received support for John Elgin to coordinate the MARM program from January until June, 2011. The total support was USD 3,409.25. The MARM scheme supports mathematics and its teaching in the countries of sub-Saharan Africa. The program is designed to counter the mathematics "brain-drain" from sub-Saharan Africa by supporting qualified mathematics professionals in situ. The scheme concentrates on the creation of joint research partnerships between UK mathematicians, their colleagues in sub-Saharan Africa, and doctoral students of those colleagues.

More information can be found here:

http://www.lms.ac.uk/content/mentoring-african-research-mathematics/

4. As in the previous years, an education and capacity workshop called "Finding Online Information in Mathematics", held in Cambodia and headed by Anders Wändahl, member of the European Mathematical Society - Committee for Developing Countries, was supported with 1,000 USD. After two successful workshops held in Addis Ababa, Ethiopia and in Bamako, Mali in 2010, the 2011 workshop took place at the Ministry of Education, Youth and Sport and the Royal University of Phnom Penh, Cambodia, from Aug 8 -12, 2011.

More information can be found here: http://workshop.ems-cdc.org/doku.php/

5. A grant of USD 5,000 will be given to ICMI in support of teacher workshops in Costa Rica as part of the

CANP project. The workshops are mathematics-intensive, modeled in part after the mathematics teacher workshops conducted annually by the IAS/Park City Mathematics Institute in the U.S.

6. The CDC members approved the amount of USD 15,000 for travel and administrative costs for the Mathematics in Emerging Nations: Achievements and Opportunities (MENAO) Project. The CDC subcommittee consisting of Wandera Ogana, Ragni Piene and Herb Clemens will begin to work on the pre-ICM 'developing country event' with a visit to Seoul to meet with the ICM planning committees in June of 2012.

#### B) Volunteer Lecturer Program

CDC supported five lectures under the Volunteer Lecturer Program and agreed to support four courses in 2012/13 in Erbil, Iraq as well as two student lecturers in Laos.

Brigitte Lucin (Université Pierre et Marie Curie Paris 6, France) offered an intensive course on
 "Introduction to Partial Differential Equations and their Approximations" at the l'Institut de
 Mathematiqes et de Sciences Physiques (IMSP) de l'Université d'Abomey Calavi, Benin, from November 7
 25, 2011. USD 1,535.26 was provided for flight and living costs.

More information can be found here:

http://www.mathunion.org/cdc/volunteer-lecturer/vlp-benin/

2. Padmanabhan Seshaiyer (George Mason University, USA) gave a course on "Applied Mathematics," from

10th August - 5th September, at Nelson Mandela African Institute of Science and Technology. All the costs were covered by USNCM.

More information can be found here: http://www.mathunion.org/cdc/volunteer-lecturer/vlp-tanzania/vlp-tanzania-2011/

- 3. Britgitte Lucin (Université Pierre et Marie Curie Paris 6, France) taught the course "Partial differential equations and approximations" in the Masters program at the Royal University of Phnom Penh (RUPP), Cambodia from 23 January 2012 10 February 2012. The cost were 2852,72 (USD 1,955.82 flight cost + USD 896, 90 additional costs).
- 4. Gonzalo Aranda Pino (Universidad de Málaga, Spain) offered a course on "Applied Functional Analysis (MT 619)", January 28 February 27, 2012 at University of Dar ES Salaam in Dar es Salaam, Tanzania. His stay was supported with USD 5,000.
- 5. Four Volunteers will give courses in 2012/13 in Erbil, Iraq, supported with a total of USD 8,000. The first lecturer is Chandan Singh Dalawat who will teach a course on Number Theory in spring 2012.
- 6. In 2012 CDC will support two students from Singapore who will teach at the NUOL in Laos. The planned and maximum supported costs are USD 5,000.

#### C) Library Assistant Scheme

 Sir John Ball, former IMU president, donated and shipped mathematics books to the University of Tibet in

Lhasa. The shipment costs were USD 3,000.

2. Robert Pour, who had previously been to the National University of Laos as part of the Volunteer Lecture

Program (VLP), collected mathematics textbooks for the university library after seeing how miniscule their collection was and still is. Dr. Pour personally delivered the books to the Laotian Embassy in Washington DC, who assisted in shipping the textbooks to the university. The shipment costs were USD 1,090.00.

3. The Pan African Centre of Mathematics, in in Dar es Salaam, Tanzania, will receive Mathematical Reviews

from January 1964 to December 1983, from Oxford. The shipment costs are approx. USD 3,200.

More information can be found here: <a href="http://www.mathunion.org/cdc/further-cdc-activities/library-assistance-scheme/library-assistant-scheme-press-release/">http://www.mathunion.org/cdc/further-cdc-activities/library-assistant-scheme-press-release/</a>

#### D) Grants for Conferences and Individual Research Travel Support

During the interval 1 January - 31 December 2011, the Grant Selection Committee of the Commission for Developing Countries received a total of 44 applications for financial support, in the three existing categories:

- (i) Conferences in developing countries<sup>1</sup>
- (ii) Conferences in developed countries<sup>2</sup>
- (iii) Individual research travel support

A total of 29 awards were made, for a total value of USD 47.787.

#### (i) Conferences in developing countries

Support was granted in 18 cases for conferences taking place in the following developing countries:

Country	Number of Awards	Total value of awards
		(USD)
Armenia	1	1,500
Bangladesh	1	2,000
Botswana	1	2,500
Cameroon	1	1,000
Colombia	2	4,000
India	4	6,000
Indonesia	1	2,500
Madagascar	1	1,500
Morocco	3	4,250
Pakistan	1	2,500
Tunisia	2	3,000
Total	18	30,750

#### (ii) Conferences in Developing Countries

Support was granted in 6 cases for conferences taking place in the following developed countries:

Country	Number of Awards	Total value of awards (USD)
Argentina	1	1,500
Hungary	1	2,000
Mexico	1	1,500
Turkey	1	2,000
Uruguay	1	2,000
Venezuela	1	3,000

<sup>1</sup> In 2010, the IMU/CDC 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 7,500 (World Development Indicators database, World Bank, revised 9 July 2010.)

<sup>&</sup>lt;sup>2</sup> CDC 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 CDC by an equal amount from other sources also dedicated to the participation of mathematicians from developing countries.

Total	6	12,000
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(iii) Individual research travel support

#### Individual research travel support was granted in 5 cases, to mathematicians from

Country	Number of Awards	Total value of awards (USD)
Cameroon	1	1,000
Iran	1	1,100
Uzbekistan	3	2,937
Total	5	5,037

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

#### **Grants Selection Committee: Income vs. Expenses:**

Income vs. Expenses 2011	
Total Income (Transfer from CDC)	\$55,000
Expenditures Grants	\$47,787
Savings 2011	\$7,213

#### E) Research

CDC is currently issuing three reports; two reports on the state of mathematics in Latin America, selected countries in Asia as well as updating the existing report on the state of mathematics in Africa.

The results are expected to be released by December 2013. The expected total costs of the reports are USD 19,000.

#### **Administrative Expenses:**

1. Janhavi Joshi met with Herb Clemens and Lena Koch in Columbus, Ohio, USA, to discuss and hand over

CDC administration (USD 979, 33).

2. Bank Charges for transfers were USD 1.462,66 (this includes bank charges for all grants).

## CDC 2011 Budget and Spending Total Overview (in USD)

Total Income:	155.044,79
Total Spending	
A) Project Support	46.409.25
B) Volunteer Lecturer Program	22.387,98
C) Library Assistant Scheme	7.290
D) Grants for Conferences and Individual Research Travel Support	55.000,00
E) Research	19.000,00
Administrative Costs	2.441,99

Total Spent/ Committed in 2011	152.529,22
Unspent/ Uncommitted Budget	2.515,57

Detailed CDC Budget 2011			1			
		Year of Activity		Amount	Account Bala 2011	ance
Income						
CDE and DCSG Savings 2010	income		\$	4.258,58		
IMU allocation CDC for 2011 including Abel Grant in USD	income		\$	148.306,00		
Japanese Mathematical Society Donation (retrospectively for 2010)	income		\$	1.771,59		
Swiss Mathematical Society Donation (retrospectively for 2010)	income		\$	708,62		
Total Budget 2011 CDC			\$	155.044,79		
Expenditure/ Transaction						
CDC allocation to GSC (former CDE)	Grants Program CDC	2011	\$	45.000,00	\$ 110	0.044,79
Additional GSC Support	Grants Program CDC	2011	\$	10.000,00	\$ 100	.044,79
MARM (for John Elgin, to coordinate the MARM program Jan-June 2011)	Project Support	2011	\$	3.409,25	\$ 90	5.635,54
AMMSI Support	Project Support	2011	\$	20.000,00	\$ 70	5.635,54
Ecuadoran Mathematical Society Support for Ibero American Mathematical Competition	Project Support	2011	\$	2.000,00	\$ 74	1.635,54
Support for Anders Wändahl on remote workshops on using the internet for mathematicians	Project Support	2011	\$	1.000,00	<b>\$</b> 73	3.635,54
Robert Pour, support shipment of books to Laos	Library Assistant Scheme	2011	\$	250,00	<b>\$</b> 73	3.385,54
John Ball, support shipment of books to Tibet	Library Assistant Scheme	2011	\$	3.000,00	\$ 70	0.385,54
Support shipment of books to Laos from Washington D.C. Laos Embassy (Robert Pour)	Library Assistant Scheme	2011	\$	840,00		).545,54
Shipment support Oxford> Pan African Centre of Mathematics, in in Dar es Salaam, Tanzania*	Library Assistant Scheme	2011	\$	3.200,00	\$ 60	5.345,54
Brigitte Lucquin, VLP Benin flight 2011-2012	VLP	2011	\$	1.211,00	\$ 65	5.134,54
Brigitte Lucquin, VLP Benin additional cost	VLP	2011	\$	324,26		1.810,28
Janhavi Joshis travel cost for hand over to Lena Koch (California- >Ohio>back)	Administrative Cost	2011	\$	979,33		3.830,95
Regional report Latin America 2011-2012*	Research/ MENAO	2011/2012		5.000,00		3.830,95 3.830,95
Regional Report Africa 2011-2012*	Research/ MENAO	2011/2012		2.000,00		5.830,95
Regional Report South East Asia 2011-2012*	Research/ MENAO	2011/2012	\$	12.000,00	\$ 44	1.830,95
VLP Tanzania Gonzalo Pino*	VLP	2012	\$	5.000,00	\$ 39	0.830,95
VLP Cambodia, Brigitte Lucquin flight 2012	VLP	2012	\$	1.955,82	\$ 37	7.875,13

VLP Cambodia, Brigitte Lucquin additional cost 2012	VLP	2012	\$ 896,90	\$ 36.978,23
4 VLP's to Iraq/ Erbil 2012/13*	VLP	2012/13	\$ 6.916,31	\$ 30.061,92
VLP 1 Iraq Chandan Dalawat, flight to Erbil	VLP	2012	\$ 1.083,69	\$ 28.978,23
Laos NUOL (VLP of 2 Singapore Students in Vientienne) 2012/13*	VLP	2012/13	\$ 5.000,00	\$ 23.978,23
ICMI Support for CANP 2 in Costa Rica, 2012	Project Support	2012	\$ 5.000,00	\$ 18.978,23
Sub Commission For Menao*	Project Support/ MENAO	2012	\$ 15.000,00	\$ 3.978,23
Bank Charges	Administrative Cost	2011	\$ 1.462,66	\$ 2.515,57
Unspent/ Uncommitted Budget 2011				\$ 2.515,57

<sup>\*</sup>Amount has been approved by CDC but has not been transferred to receiver.

#### Acknowledgements

The members of CDC most gratefully acknowledge the support provided by IMU, the Board of the Niels Henrik Abel Memorial Fund, the Japanese Mathematical Society, the Swiss Mathematical Society as well as the IMU Secretariat in Berlin.

We look forward to future collaboration.

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

## **Report on ICHM Activities in 2011**

Craig Fraser, Chair

#### **Activities:**

The Executive Council of the ICHM had four e-meetings in 2011. In addition, several members of the EC met to discuss ICHM business at the joint mathematics meetings in New Orleans, Louisiana in January of 2011

#### **Projects:**

- 1. The ICHM continues to maintain a webpage of its activities and of matters of interest to historians of mathematics internationally. See the ICHM website http://www.unizar.es/ichm/home.htm
- 2. The ICHM continues actively to solicit and to co-sponsor special sessions and conferences internationally.
- 3. The ICHM is overseeing the organization of several symposia on the history of mathematics for the 24th International Congress of History of Science, Technology and Medicine that will be held in Manchester, UK in July of 2013.

#### **Publications:**

Historia Mathematica is the official journal of the ICHM. It appears four times annually and publishes roughly 525 pages of original research in the history of mathematics from all times and cultures. The journal is currently edited by Niccolò Guicciardini (Italy) and June Barrow-Green (United Kingdom). It is published by Elsevier Science and is available electronically to subscribers of IDEAL.

#### Conferences co-sponsored by the ICHM in 2011 or planned for 2012

Sessions on history of mathematics

Joint Mathematics Meeting of the American Mathematical Society and the Mathematical Association of America

January 6-7, 2011, New Orleans, Louisiana

Organizers: Craig Fraser, Deborah Kent, Sloan Despeaux

Joint meeting of the British Society for the History of Mathematics and the Canadian Society for the History and Philosophy of Mathematics

July 15-17, 2011, Dublin, Ireland

Organizers: Adrian Rice and Tony Mann

Joint Brazil-Portugal conference on the history of mathematics

August 28-31, 2011, S. João del Rei, Minas Gerais, Brazil.

Organizers: Sérgio Nobre and Luis Saraiva

Editing historical mathematics: techniques and traditions since 1900

Research symposium

December 15-16, 2011. All Souls College, Oxford

Organizer: Benjamin Wardhaugh

Sessions on history of mathematics

Joint Meeting of the American Mathematical Society and the Mathematical Association of America

January 6-7, 2012, Boston, MA

Organizers: Craig Fraser, Deborah Kent and Sloan Despeaux

Philosophy and Mathematics of Bernard Bolzano

May 3-7, 2012, Prague.

Organizer: Steve Russ

## 10. Committee on Electronic Information and Communication (CEIC)

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

## **CEIC Activity Report 2011**

Peter Olver, Chair

#### Members and terms

- Peter Olver, 2008-2014 (Chair)
   School of Mathematics, University of Minnesota, Minneapolis, USA
- Thierry Bouche, 2011-2014
   UFR de Mathématiques, Institut Fourier, Université de Grenoble I, Grenoble, France
- Olga Caprotti, 2008-2012
   Department of Computer Science and Engineering, Chalmers University of Gothenburg, Sweden
- James Davenport, 2008-2012
   Department of Computer Science, University of Bath, UK
- Carol Hutchins, 2008-2012
   Courant Institute, New York University, USA
- Courant Institute, New York University, USA

   László Lovász, 2011-2014
- Department of Computer Science, Eötvös Loránd University, Budapest, Hungary Ravi Vakil, 2011-2014
- Department of Mathematics, Stanford University, USA

## Meetings

The annual Meeting of the CEIC took place in New York on May 6-8, 2011. Attending: Peter Olver (Chair), Thiery Bouche, Olga Caprotti, James Davenport, Carol Hutchins, László Lovász, Ravi Vakil.

Minutes can be found on the CEIC web page (see below).

The next meeting of CEIC will take place in Berlin, July 19-20, 2012.

#### **CEIC Email List**

For the purposes of discussions among committee members and email from IMU and elsewhere, it was decided to establish a moderated e-mail distribution list:

#### ceic14@mathunion.org.

The recipients of the list are the members of CEIC, along with the IMU technician. People who can post to the list without requiring explicit approval are members of the IMU EC, the IMU staff, and three former CEIC members: Ulf Rehmann, John Ball, and Michael Doob. Messages from others to the list need the approval of the CEIC Chair. The list became operational on February 21, 2011.

#### **CEIC** web site

After much discussion about the out-of-date CEIC web site still in existence at the beginning of 2011, it was decided that, pending the full revamping of the IMU web site occasioned by the establishment of the permanent headquarters in Berlin, Peter Olver would, with the help of the Committee, design and host a new CEIC web site. This was put online on January 13, 2012, with a link from the IMU home page, and can be found directly at <a href="http://math.umn.edu/~olver/ceic.html">http://math.umn.edu/~olver/ceic.html</a>. A link to the historical CEIC pages is included. Eventually, the CEIC pages will be incorporated in the Berlin web site (this was implemented in 2012, the URL of CEIC now is <a href="http://www.mathunion.org/ceic/">http://www.mathunion.org/ceic/</a>).

#### e-Archiving

The February 22, 2010 Interim Report of the IMU e-Archiving Committee was transmitted to the archiving office in Berlin. How to proceed will be a topic of discussion at the next CEIC meeting in Berlin.

#### **IMU-Net**

IMU-Net is edited by Mireille Chaleyat-Maurel. Six regular issues plus a special issue on the journal blog (see below) appeared in 2011. One issue has so far appeared in 2012. It was further decided to have informal cooperation with Steven Krantz, who is editing the new Notices of the American Mathematical Society column on journals and publishing issues.

#### **IMU Bulletins**

It was noted during the year that the currently archived IMU Bulletins are extremely large files (for example #58 is 7.55MB), perhaps because of the fancy watermarking and graphics contained therein. This causes problems for users with limited bandwidth or storage. It has been suggested that the IMU technicians find a way to produce a much smaller size version for users in such situations. Also, it was noted that the current .pdf files do not open properly in Preview on a Macintosh, and so a more universal .pdf format should be used.

#### **FWDM and EWDM**

It was decided at the 2011 meeting that, because they were no longer relevant in the current form of the Internet, CEIC will no longer support the Federated World Directory of Mathematicians (FWDM) and the Electronic World Directory of Mathematicians (EWDM). Thus, links to these do not appear on the new CEIC web pages, although a link to FWDM does still appear on the main IMU web page, as well as the historical CEIC pages.

#### Journal blog

As a result of the IMU and the International Council for Industrial and Applied Mathematics (ICIAM) establishment of a Working Group to study the issue of Ranking of Mathematical Journals, the IMU and ICIAM approved a blog on mathematical journals to be hosted by the IMU. The original moderators of the blog were

Doug Arnold (ICIAM), Carol Hutchins (IMU), Nalini Joshi (ICIAM), Peter Olver (IMU), Fabrice Planchon (IMU), Tao Tang (ICIAM),

and Peter Olver was assigned the role of chairing the group.

Originally the blog was to be devoted to the question of journal ranking, but it was later decided to open the blog to all matters involving journals. The blog went live on November 18, 2011, and can be found at

http://www.mathunion.org/journals

The blog moderators have struggled with the difficulty of using the Typo3 software implemented by the IMU technician. While some initial difficulties have been successfully resolved, the consensus is that any future blog or social media activity needs to be done in a more supportive and adaptable software environment, and also soliciting advice from mathematicians who are actively involved in social media platforms.

On January 12, 2012, because Tao Tang was too busy to play an active role, he was replaced by Ming-Chih Lai. As of April 1, 2012, the blog has 4 main posts and a number of comments, although activity has been slowing down considerably in the previous month.

#### **DML Workshop**

In fall, 2011, the CEIC wrote a proposal to the Sloan Foundation for a \$73,000 grant to support a symposium about the World Digital Mathematics Library, a long time initiative of the IMU and CEIC. The project was funded, and the workshop, titled

The Future World Heritage Digital Mathematics Library: Plans and Prospects

will take place June 1-3 at the National Academy of Sciences (NAS) in Washington DC. The organizing committee consists of the members of CEIC along with R. Keith Dennis (Cornell University), Michael Doob (University of Manitoba, Canada), and Ulf Rehmann (University of Bielefeld, Germany). The goal of the meeting is to "develop a viable plan of action to realize the long standing dream of a universally accessible library for the world's mathematics literature". Attendance is by invitation only in order to keep the workshop sessions small and focussed. Details can be found on the evolving workshop wiki

http://ada00.math.uni-bielefeld.de/dml

The grant funds will be administered by the Friends of the International Mathematical Union (FIMU).

In addition, the NAS received notification from Sloan that their concurrent proposal to assemble a committee of experts to further develop the WDML, to produce a report and to plan prototypes and implementation, has also been funded. The two organizations — CEIC and NAS — are coordinating their activities in this regards.

Social Media: Facebook, Wikipedia, Twitter

In 2010, prior to the India Congress, Manwinder Kaur, a research student from Thapar University Patiala, India created an IMU Facebook page on his own initiative:

http://www.facebook.com/pages/International-Mathematical-Union

which, as of April 1, 2012, contains just a copy of the Wikipedia article on the IMU. There was some discussion about CEIC assuming administration of this page and adding content, but no action has so far been taken. Similarly for the discussions on expanding the IMU Wikipedia article and possibly starting an IMU Twitter account.

#### **World Data System**

A letter expressing the IMU's interest in joining the International Council for Science (ICSU)'s World Data System (WDS) had been sent in 2010. Since no reply had been forthcoming, on April 12, 2011, Peter Olver wrote to the ICSU, the Criteria for WDS Membership, stating that the IMU represents mathematicians throughout the world, many of whom maintain their own data sets and/or conduct research on mathematical methods for analyzing large data sets. However, apart from the IMU archives, the CEIC maintains no data sets of its own.

Following further correspondence, in August, the application of CEIC to become a partner member of WDS was completed. At that time, it was decided not to send an IMU representative to the 1st ICSU World Data System Conference in Kyoto, Japan, September 3-6, 2011. On April 2, 2011, Jean-Bernard Minster of ICSU wrote that an invitation to join WDS had been issued on February 15, but this did not reach CEIC. The matter is under investigation.

#### **Finances**

EUR 905.50 was received from the IMU to cover expenditure related to meeting activities.

## 11. Independent Auditor's Report 2011



Berlin, 24 April 2012 Report No.: 60903/E

# **International Mathematical Union**Berlin

Audit Report on the Annual Financial Statement as of 31 December 2011



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General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms] as of January 1, 2002



#### A. Audit Engagement

We were engaged by the Secretary of the

## International Mathematical Union Berlin

(hereinafter "IMU" or "Union")

to audit and report on the annual financial statements for the reporting year ending 31 December 2011.

The IMU is an international association. According to German law, the IMU is an "ideal" association (§ 21 German Civil Code (BGB)) since it pursues ideal purposes rather than financial purposes. The Union does not have legal capacity in Germany because it is not registered with the German Register of Associations.

The Union 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.

In performing our audit, we observed the rules on independence under § 321 (4a) HGB.

This report was prepared under the auditing standard of the *Institut der Wirtschaftsprüfer in Deutschland e. V.* IDW PS 450 "Generally Accepted Standards for the Issuance of Longform Audit Reports for the Audit of Financial Statements".



#### B. Object, Nature and Scope of the Audit

#### **Object of the Audit**

We audited the annual financial statements of the IMU as of 31 December 2011 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 Union's Treasurer. Our responsibility is to provide an opinion on the annual financial statements based on our audit.

As of 1 January 2011, the IMU has kept its permanent office (secretariat) in Berlin and is affiliated with the *Weierstraße Institut für Angewandte Analysis und Stochastik* (WIAS), Berlin, for organisational purposes. The Federal Republic of Germany and the State of Berlin grant the IMU annual financial support, in particular by assuming personnel and material costs of the secretariat in the amount of approximately € 500,000 borne directly by the WIAS.

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 Union 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) and administrative offences occurring beyond the scope of the financial accounting.

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), in particular observing IDW PS 750 "Audits of Associations". Therein, an audit has to be planned and performed such that material misstatements affecting the bookkeeping and annual financial statements are to be detected with reasonable assurance.



The evidence supporting the disclosures in the accounting and annual financial statements is to be examined on a test basis. The audit includes assessing the accounting, measurement and classification principles used and significant estimates made by management, as well as evaluating the overall presentation of the annual financial statements. We believe that our audit provides a reasonable basis for our opinion.

We conducted our audit in February 2012 in the premises of the IMU Secretariat. The audit report was prepared in our office.

Our audit commenced with our unqualified independent auditor's report dated 28 January 2011 on the annual financial statements for the year ended 31 December 2010. 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 2009), the preparation of a budget for the following four-year-period is anticipated. The budget for the period from 1 January 2011 to 31 December 2014 was approved by the 16<sup>th</sup> General Assembly in Bangalore/India on 16 and 17 August 2010.

We received information from:

Prof. Dr. Alexander Mielke
 Treasurer of the IMU

Ms Sylwia Markwardt
 Manager, IMU Secretariat

Ms Anita Orlowsky
 Accountant, IMU Secretariat

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 Union. 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 Union.



#### C. Findings and Explanations on Accounting

#### 1. Proper Accounting

#### 1.1. Bookkeeping and Other Audited Documents

Financial bookkeeping is performed applying the principles of double-entry bookkeeping, using Lexware professional 2012 Version 12.02 software. Wage and salary accounting is not necessary because personnel expenses are borne by the *Weierstraß-Institut*, the organisation that employs the staff of the IMU Secretariat.

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.

#### **Recognition 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 the provisions of §§ 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 Union does not have a legal obligation to prepare notes to the annual financial statements. Accordingly, the IMU has permissibly waived the preparation of notes.

#### Contingent Liabilities, Off-balance Sheet Transactions and Other Financial Commitments

As per the information provided to us and our own findings, contingent liabilities requiring disclosure within the meaning of § 251 HGB, off-balance sheet transactions within the meaning of § 285 No. 3 HGB and other financial commitments within the meaning of § 285 No. 3a HGB did not exist on the balance sheet date.

#### 1.3. Management Report

The Union 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 60, dated December 2010, was published in December 2011 and a printed version was provided to members. It is also available as an electronic document (http://www.mathunion.org/publications/bulletins/archive/).

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. Findings 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 Union 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 results of operations as a whole.

The influence of material measurement principles and changes thereto in the presentation of the net assets, financial position and results of operations are explained in section 2.2.

General explanations of the net assets, financial position and results of operations are provided in sections D.1. - D.3.

#### 2.2. Significant Measurement Principles

The exercise of accounting and measurement elective options and the use of discretion do not indicate any tendency to improve or worsen the result or in any way influence the total disclosures of the annual financial statements.

Foreign currency receivables and payables are recorded in the bookkeeping in Euro at the exchange rate valid on the date of their accrual. Measurement on the balance sheet date is at the lower (for receivables), or higher (for liabilities), exchange rate valid on that date.



# D. Other Classifications and Explanations to the Annual Financial Statements

#### 1. Net Assets

In order to evaluate the net assets and changes thereto, the balance sheets of the last two financial years are compared in condensed form:

	04.40	0044	04.40	0040	01
	31.12.	2011	31.12.	.2010	Change
	k€	%	k€	%	k€
Assets					
Current assets					
Receivables from member contributions	80	7.4	25	3.6	55
Cash	995	92.6	666	95.8	329
Prepaid expenses	0	0.0	4	0.6	-4
	1,075	100.0	695	100.0	380
Liabilities					
Net assets (own funds)	1,024	95.3	628	90.4	396
Current liabilities					
Provisions	20	1.9	54	7.8	-34
Liabilities from restricted donations	28	2.6	10	1.4	18
Other liabilities					
(including deferred income)	3	0.3	3	0.4	0
	51	4.7	67	9.6	-16
	1,075	100.0	695	100.0	380



#### Receivables from member contributions are as follows:

Country	Year	Amou	ınt
		€	CHF
Argentina	2011	2,690.44	3,274.00
Bosnia & Herzegovina	2011	1,345.22	1,637.00
Bulgaria	2011	1,345.22	1,637.00
Cameroon	2011	1,345.22	1,637.00
Canada	2011	16,142.66	19,644.00
Cuba	2011	1,345.22	1,637.00
Denmark	2011	585.68	712.71
Hungary	2011	5,380.89	6,548.00
Ivory Coast	2011	1,345.22	1,637.00
Montenegro	2011	1,345.22	1,637.00
Pakistan	2011	1,345.22	1,637.00
Peru	2011	1,345.22	1,637.00
Philippines	2011	1,345.22	1,637.00
Russia	2011	16,142.66	19,644.00
Saudi Arabia	2011	1,345.22	1,637.00
Spain	2011	10,761.77	13,096.00
		65,156.31	79,288.71
Argentina	2010	2,637.85	3,210.00
Cameroon	2010	1,318.93	1,605.00
Cuba	2010	1,318.93	1,605.00
Hungary	2010	5,275.70	6,420.00
Montenegro	2010	439.64	535.00
Nigeria	2010	1,318.93	1,605.00
Peru	2010	1,318.93	1,605.00
		13,628.89	16,585.00
Kazakhstan	2009	1,255.65	1,528.00
Peru	2008	589.20	717.00
Kazakhstan	2007	1,138.96	1,386.00
		2,983.81	3,631.00
		81,769.01	99,504.71
Impairments: Kazakhstan and Peru	2007-2009	-1,491.91	-1,815.50
		80,277.10	97,689.21



At the end of 2011, outstanding member contributions were  $k \in 82$  (kCHF 100), of which  $k \in 16$  had been settled at the time of the audit. The membership contributions of Kazakhstan for 2007 and 2009 as well as for Peru for 2008 remain outstanding. Impairments of 50 % were taken on these receivables.

**Cash**, part of which is in foreign currency, is located in accounts with the Berliner Bank AG and is composed of the following:

	Foreign currency	€
Account in € (5113915 10)		426,299.21
Account in CHF (5113915 01)	CHF 279,013.43	229,246.00
Account in USD (5113915 00)	USD 74,317.59	57,387.70
Account in € - Ito Fund (5113915 01)		10,459.97
Account in € (5113915 00)		29,921.08
Account in € (5113915 05)		153,573.69
Account in € (5113915 04)		84,936.69
Cash in €		2,716.97
		994,541.31

The conversion of foreign currency into Euro occurs at the period-end exchange rate.

Net assets (own funds) at the period-end date are composed of the following:

	k€	k€
Association capital		307
Reserves		
Annual surplus 2007 - 2010	321	
Annual surplus 2011	228	
ICMI and CDC (Commission Fund)	<u>168</u>	<u>717</u>
		<u>1,024</u>

The Statutes do not make reference to association net assets.

A total of € 307,465.98 of net assets of the IMU was accumulated prior to the transfer of the IMU legal domicile to Germany as of 1 January 2007. As per the suggestion of the Secretary, Prof. Dr. Grötschel, and the Treasurer, Prof. Dr. Mielke, net assets accrued as of 2007 are allocated to reserves at the end of the financial year.



#### Reserves are allocated as follows:

	k€
<ul> <li>Project CANP 2012 in Costa Rica and 2013 in Cambodia</li> </ul>	60
<ul> <li>Travel support</li> </ul>	
<ul> <li>ICME 2012 in Seoul/Korea</li> </ul>	10
<ul><li>Fields-Medal 2014</li></ul>	10
- ICM 2014 in Korea	150
<ul> <li>Co-financing of an ICSU funded Project 2013</li> </ul>	90
<ul> <li>Co-financing MPE2013 Exhibition at UNESCO in Paris/France</li> </ul>	15
<ul> <li>MENAO Conference 2014</li> </ul>	50
<ul> <li>Co-financing joint workshops with other ICSU Member States</li> </ul>	
2012 - 2014	<u>35</u>
	<u>420</u>

Funds are shown under **ICMI and CDC (Commission Fund)** that the IMU has made available to its ICMI and CDC commissions for their work and which for reasons of bookkeeping clarity, were transferred in 2011 to bank accounts of the IMU with the Berliner Bank AG. The return of the bank account balances from the ICMI and CDC to IMU bank accounts resulted in balance sheet changes in the reporting year.

The amounts shown contain funds from the prior years to the extent that the allocated budgets were not exhausted as well as unused funds of the reporting year. The unused funds can be brought forward to subsequent years and then used. The restricted reserves for ICMI of  $\leqslant$  131,641.90 and of  $\leqslant$  36,741.67 for CDC correspond fundamentally to the respective bank accounts.



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

	€	€
Special Development Fund		
Per 1.1.2011		0.00
Contributions		
<ul> <li>American Mathematical Society (AMS)</li> </ul>	13,680.80	
<ul> <li>London Mathematical Society (LMS)</li> </ul>	3,658.26	<u>17,339.06</u>
Per 31.12.2011		17,339.06
Ito Fund		
Per 1.1.2011		10,428.07
Contribution interest revenue 2011 less account fees		31.90
Per 31.12.2011		10,459.97
		27,799.03

The funds shown under **Special Development Fund (SDF)** are for the support of mathematicians from developing countries for travel to International Congresses of Mathematicians (ICM). An international committee decides on the grant applications. The last congress took place in Hyderabad/India in August 2010; the cash of the SDF collected between 2007 and 2010 was fully expended for this congress. The next congress shall take place in Seoul/Korea in 2014. The Korean Mathematical Society (KMS) is committed to providing kUSD 2,000 for travel assistance for mathematicians from developing countries. If additional travel costs for ICM participants from developing countries have to be financed, the IMU may expend additional funds from the SDF. Cash of SDF not required for ICM 2014 are to be used for the ICM 2018.

#### 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  $k \in 329$  and corresponds to the change in the amount of cash between 1 January 2011 ( $k \in 666$ ) and 31 December 2011 ( $k \in 995$ ).



### 3. Results of Operations

The summarized statements of income and expenditure for the past two financial years show the following structure and changes in the results of operations:

	20	1 1	20	1 0	Change
	k€	%	k€	%	k€
Revenue	474	100.0	455	100.0	19
Administrative expenses	-43	-9.1	-105	-23.1	62
Expenditures for scientific activities	-206	-43.5	-225	-49.5	19
Other expenditures	-249	-52.5	-330	-72.5	81
Operating result	225	47.5	125	27.5	100
Interest	3	0.6	3	0.7	0
Result before taxes on income	228	48.1	128	28.1	100
Taxes on income	0	0.0	0	0.0	0
Annual surplus	228	48.1	128	28.1	100
Allocation to reserves	-228	-48.1	-128	-28.1	-100
	0	0.0	0	0.0	0

The IMU had **revenue** of k€ 474 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	350,266.92
Third-party donations	65,194.13
Other revenue	<u>58,801.75</u>
	<u>474,262.80</u>

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



#### Third-party donations are composed of the following:

item "liabilities from restricted donations")

€

International

Niels Henrik Abel Memorial Fund, Norway (thereof approx. k€ 11.6 [kUSD 15] for awarding the Ramanujan Prize) AMS, LMS, MSJ, SMG (see explanation to statement of assets and liabilities

44,531.20

20,662.93

65,194.013

Other income (k€ 59) largely involves exchange rate gains (k€ 55).

**Other expenditures** of approximately k€ 249 (prior year: k€ 330) are shown in detail in the statement of income and expenditure (Annex 2).

Interest represents the interest paid on the bank balances by the Berliner Bank AG.

## E. Reproduction of the Independent Auditor's Report and Concluding Statement

We have issued the following unqualified opinion dated 24 April 2012 for the annual financial statements as of 31 December 2011 of the International Mathematical Union, 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, consisting of the statement of assets an liabilities and the statement of income and expenditure, together with the bookkeeping system of the International Mathematical Union for the reporting year from 1 January 2011 to 31 December 2011. 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 Union'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 generally accepted standards for the audit of financial statements promulgated by the *Institut der Wirtschaftsprüfer* (IDW). Those standards require that we plan and perform



the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the annual financial statements in accordance with German principles of proper accounting are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Union 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 Union in accordance with German principles of proper accounting."

The above audit report is submitted in compliance with statutory provisions and Generally Accepted Standards for the Issuance of Long-form Audit Reports for the Audit of Financial Statements (IDW PS 450).

Use of the above independent auditor's report outside of this audit report requires our prior consent. Publication or distribution of the annual financial statements of the International Mathematical Union, Berlin, 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, 24 April 2012

RBS RoeverBroennerSusat GmbH & Co. KG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft

Helmut Schuhmann Wirtschaftsprüfer **Annexes** 

Annex 1

International Mathematical Union, Berlin

STATEMENT OF ASSETS AND LIABILITIES as of 31 December 2011

ASSETS	per 31.12.2011	.2011	Prior Year	LIABILITIES	per 31.12.2011	2.2011	Prior Year
	Э	€	€		Э	€	€
A. Current Assets				A Net Assets			
I. Receivables and other				I. Association net assets	307.465,98		307.465,98
assets Receivables from member				II. Reserves	717.077,55	•	320.496,57
contributions	80.277,11		25.476,14			1.024.543,53	627.962,55
II. Bank Balances	994.541,31*		665.666,46				
	1	1.074.818,42	691.142,60	691.142,60 B. Provisions		19.317,90	53.750,00
B. Prepaid Expenses		00,0	4.237,50	C. Liabilities 1. Liabilities from restricted donations 4.237,50 2. Other liabilities	27.799,03 1.793,98		10.428,07
						29.593,01	10.648,42
				D. Deferred Income		1.363,98	3.019,13
Total Assets	+	1.074.818,42	695.380,10	Total Liabilities		1.074.818,42	695.380,10

\* contained therein ICMI € 153,573.69 und CDC € 84,936.69

# International Mathematical Union, Berlin

# STATEMENT of INCOME and EXPENDITURE for 2011

			2011	Prior Year
	€	€	€	€
Revenues			474.262,80	454.746,26
Member contributions	350.266,92			290.991,90
Donations - national	0,00			9.032,65
Donations - international	65.194,13			79.186,14
Other income	58.801,75			75.535,57
Other Expenditures Administrative Expenses		-42.256,55	-248.788,68	-329.462,54 -104.651,57
Reimbursement personnel expenses	-405,22			-44.699,34
Travel	-17.117,73			-27.715,57
Print	0,00			-1.195,95
Advisory fees	-628,64			0,00
Audit fees	-7.735,00			-7.735,00
Other activities CDE / ICMI	0,00			-13.497,96
Member contributions	-7.020,00			-6.815,00
Postage	-83,62			-573,59
Bank fees	-1.317,75			-839,17
Other	-7.948,59			-1.579,99
Expenditures for Scientific Activities		-206.532,13		-224.810,97
Promotion of scientific activities	-169.835,24			-85.738,25
Expenditures ICM	-6.752,64			-29.559,26
Travel grants	-17.339,06			-72.571,19
Expenditures Prize Awards	-11.582,90			-11.318,20
Other	-1.022,29			-25.624,07
Interest and Similar Income			2.723,29	3.135,34
Interest and Similar Expenditures		-	0,00	0,00
Result of Association Activities			228.197,41	128.419,06
Taxes		-	0,00	0,00
Annual Surplus			228.197,41	128.419,06
Allocation to Reserves		-	-228.197,41	-128.419,06
Unallocated Cash Balance		<u>-</u>	0,00	0,00
		_		

Annex 3/1

# **International Mathematical Union**

## **Schedule of Member Contributions 2011**

Country	Amount EUR	Amount CHF	
Argentina	2.622,57	3.274,00	
Armenia	1.311,29	1.637,00	
Australia	5.245,14	6.548,00	
Austria	2.622,57	3.274,00	
Belgium	5.245,14	6.548,00	
Bosnia & Herzegovina	1.311,29	1.637,00	
Brazil	10.490,29	13.096,00	
Bulgaria	1.311,29	1.637,00	
Cameroon	1.311,29	1.637,00	
Canada	15.735,43	19.644,00	
Chile	2.622,57	3.274,00	
CMS, Beijing	9.440,94	11.786,00	
Math Society, Taipei	6.294,17	7.858,00	
Colombia	1.311,29	1.637,00	
Croatia	1.311,29	1.637,00	
Cuba	1.311,29	1.637,00	
Czech Republic	5.245,14	6.548,00	
Denmark	2.622,57	3.274,00	
Egypt	2.622,57	3.274,00	
Estonia	1.311,29	1.637,00	
Finland	5.245,14	6.548,00	
France	15.735,43	19.644,00	
Georgia	1.311,29	1.637,00	
Germany	15.735,43	19.644,00	
Greece	1.311,29	1.637,00	
Hong Kong	1.311,29	1.637,00	
Hungary	5.245,14	6.548,00	
Iceland	1.311,29	1.637,00	
India	10.490,29	13.096,00	
Indonesia	1.311,29	1.637,00	
Iran	5.245,14	6.548,00	
Ireland	2.622,57	3.274,00	
Israel	15.735,43	19.644,00	
Italy	15.735,43	19.644,00	
lvory Coast	1.311,29	1.637,00	
Japan	15.889,23	19.836,00	

Kazakhstan	1.311,29	1.637,00
Korea, Repub of	10.490,29	13.096,00
Latvia	1.311,29	1.637,00
Lithuania	1.311,29	1.637,00
Mexico	2.622,57	3.274,00
Montenegro	1.311,29	1.637,00
Netherlands	10.490,29	13.096,00
New Zealand	1.311,29	1.637,00
Nigeria	1.311,29	1.637,00
Norway	5.245,14	6.548,00
Pakistan	1.311,29	1.637,00
Peru	1.311,29	1.637,00
Philippines	1.311,29	1.637,00
Poland	10.490,29	13.096,00
Portugal	2.622,57	3.274,00
Romania	1.311,29	1.637,00
Russia	15.735,43	19.644,00
Saudi Arabia	1.311,29	1.637,00
Serbia	1.311,29	1.637,00
Singapore	1.311,29	1.637,00
Slovakia	2.622,57	3.274,00
Slovenia	1.311,29	1.637,00
South Africa	2.622,57	3.274,00
Spain	10.490,29	13.096,00
Sweden	10.490,29	13.096,00
Switzerland	10.490,29	13.096,00
Tunisia	1.311,29	1.637,00
Turkey	1.311,29	1.637,00
Ukraine	2.622,57	3.274,00
United Kingdom	15.735,43	19.644,00
Uruguay	1.311,29	1.637,00
U.S.A.	15.735,43	19.644,00
Venezuela	1.311,29	1.637,00
Vietnam	1.311,29	1.637,00
Total	350.266,92	437.271,00

Annex 4

### INTERNATIONAL MATHEMATICAL UNION

### **Budget Comparison** Statement of Income and Expenditure\* for the year ended 31 December 2011

	Budget 2011		Budget 2011	
	CHF (Swi	CHF (Swiss Franc)		Euro)
Expenses				
Schedule A:				
Secretarial help, IMU office	20.000	0	16.433	0
Secretarial help, President	8.000	493	6.573	405
Accountant	9.500	0	7.805	0
ICMI	16.000	19.523	13.146	16.045
CDC	6.300	1.380	5.176	1.134
Office expenses (including postage)	16.800	263	13.803	216
Travel expenses of the EC	32.000	13.680	26.292	11.243
President's and Secretary's expenses	5.000	3.043	4.108	2.501
Contribution to ICSU	9.785	8.542	8.040	7.020
IMU Bulletin	2.200	0	1.808	0
Audit fee	17.000	9.411	13.967	7.735
General Assembly	5.000	0	4.108	0
IMU office transfer	17.500	2.708	14.379	2.226
Contingencies	50.000	13.276	41.082	10.911
Subtotal of Schedule A	215.085	72.319	176.720	59.436
Schedule B:				
IMU non-CDC conference support	3.750	15.633	3.081	12.848
ICMI scientific activities	40.000	35.142	32.865	28.882
CDC scientific activities	120.000	133.867	98.596	110.020
CDC support staff	7.500	0	6.162	0
CEIC scientific activities	21.000	1.102	17.254	906
Website support	8.000	0	6.573	0
ICM Site Committee	3.000	0	2.465	0
Program Committee for ICM	10.000	8.217	8.216	6.753
Subvention to ICM	29.420	0	24.172	0
Prize Committees (subvention)	12.000	1.113	9.860	915
Awards	0	14.094	0	11.583
Travel grants (young & senior)	62.220	0	51.122	0
Media Relations	4.000	130	3.287	107
Subtotal of Schedule B	320.890	209.298	263.653	172.014
Total Expenses (A & B)	535.975	281.617	440.373	231.450
Total Expenses (A & D)	000.070	201.017	440.070	201.400
Income				
Membership dues	435.442	426.187	357.772	350.267
ICSU Grant	0	0	0	0
Special Development Fund	30.000	21.097	24.649	17.339
Interest on bank accounts	1.000	3.313	822	2.723
Donations (Abel Fund)	56.000	54.183	46.011	44.531
Other income	0	75.593	0	62.126
Draw from Reserves	13.533	0	11.119	0
Return to Reserves	0	0	0	0
Total Income	535.975	580.373	440.373	476.986
			_	
Income less Expenses	0	298.756	0	245.536

Transition to P&L Statement:

Transfer to liabilities from donations not yet spent -17.339 Excess (deficit) of income over expenditures:

228.197

Actual Euro Income and Expenses converted to Swiss Franc, using the 31 December 2011 rate of 1 Euro = 1,21675 Swiss Franc

<sup>\*</sup> This statement of income and expenditure is made on the basis of the IMU budget applied so far. Starting with the year ending 31 December 2012, the statement of income and expenditure will be prepared on the basis of the new budget structure approved by postal ballot No. 01/11.

## **Legal and Tax Position**

## 1. Legal Position

## Association, Legal Domicile

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)) since 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 legal domicile of the IMU was located in Princeton/USA, until 31 December 2006. According to article 29 of the IMU Statutes, as amended in 2010, the legal domicile of the Union shall be located at the offices of the Union.

The permanent Secretariat shall be located in Berlin/Germany as of 1 January 2011.

### **Place of Management**

IMU Secretariat Markgrafenstrasse 32, 10117 Berlin/Germany.

The IMU Secretariat transacts the entire routine operative business of the IMU. This includes the administrative support of the Commission on Mathematical Instruction (ICMI) and the Commission for Developing Countries (CDC). In addition, the IMU Secretariat is also responsible for bookkeeping and monetary transactions, it prepares the annual financial statements and operates the IMU archives.

### **Statutes**

The Statutes were amended on 16 and 17 August 2010 in Bangalore/India by the 16<sup>th</sup> General Assembly. The amendments included article 28 (Treasurer) and article 29 (Legal Domicile).

Annex 5/2

### **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 k€ 307 on 1 January 2007, the time when the legal domicile 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 institution or association of institutions, or an appropriate agency of its government. At the end of 2010, the IMU had 69 regular members (voting), 8 associate members (non-voting) and 4 affiliate members (non-contributory).

### **Executive Committee**

Since January 2011, the Executive Committee consists of the following persons:

- Ms. Ingrid Daubechies, USA (President)
- Mr. Martin Grötschel, Germany (Secretary and until 27 February 2011 Treasurer)
- Ms. Christiane Rousseau, Canada (Vice-President)
- Mr. Marcelo Viana, Brazil (Vice-President)
- Mr. Manuel de León, Spain (Member-at-Large)
- Mr. Yiming Long, China (Member-at-Large)

- Ms. Cheryl E. Praeger, Australia (Member-at-Large)
- Mr. Vasudevan Srinivas, India (Member-at-Large)
- Mr. John Francis Toland, Great Britain (Member-at-Large)
- Mr. Wendelin Werner, France (Member-at-Large)
- Mr. László Lovász, Hungary (Ex-officio, because he is the former President of the IMU)

Prof. Dr. Alexander Mielke was appointed Treasurer of the IMU at the meeting of the Executive Committee in Perth, Australia on 28 February 2011.

### **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 2014.

### **General Assembly**

The General Assembly resolved the following in August 2010:

- Appointments to various committees and commissions
- Budget for the time between 2011 and 2014
- Amendments to the IMU Statutes (see "Statutes")
- Increase in member contributions
- The next General Assembly will take place in 2014 in Gyeongju/Republic of Korea.

Annex 5/4

### 2. Tax Information

The Association is registered with the Finanzamt für Körperschaften I, Berlin, under the tax number 27/640/57572.

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

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

#### 1. Scope

(1) These engagement terms are applicable to contracts between Wirtschaftsprüfer [German Public Auditors] or Wirtschaftsprüfungsgesellschaften [German Public Audit Firms] (hereinafter collectively referred to as the "Wirtschaftsprüfer") and their clients for audits, consulting and other engagements to the extent that something else has not been expressly agreed to in writing or is not compulsory due to legal requirements.

(2) If, in an individual case, as an exception contractual relations have also been established between the Wirtschaftsprüfer and persons other than the client, the provisions of No. 9 below also apply to such third parties.

#### 2. Scope and performance of the engagement

(1) Subject of the Wirtschaftsprüfer's engagement is the performance of agreed services - not a particular economic result. The engagement is performed in accordance with the Grundsätze ordnungsmäßiger Berufsausübung [Standards of Proper Professional Conduct]. The Wirtschaftsprüfer is entitled to use qualified persons to conduct the engagement.

(2) The application of foreign law requires - except for financial attestation engagements - an express written agreement.

(3) The engagement does not extend - to the extent it is not directed thereto-to an examination of the issue of whether the requirements of tax law or special regulations, such as, for example, laws on price controls, laws limiting competition and Bewirtschaftungsrecht [laws controlling certain aspects of specific business operations] were observed; the same applies to the determination as to whether subsidies, allowances or other benefits may be claimed. The performance of an engagement encompasses auditing procedures aimed at the detection of the defalcation of books and records and other irregularities only if during the conduct of audits grounds therefore arise or if this has been expressly agreed to in writing.

(4) If the legal position changes subsequent to the issuance of the final professional statement, the Wirtschaftsprüfer is not obliged to inform the client of changes or any consequences resulting therefrom.

#### 3.The client's duty to inform

(1) The client must ensure that the Wirtschaftsprüfer — even without his special request — is provided, on a timely basis, with all supporting documents and records required for and is informed of all events and circumstances which may be significant to the performance of the engagement. This also applies to those supporting documents and records, events and circumstances which first become known during the Wirtschaftsprüfer's work.

(2) Upon the Wirtschaftsprüfer's request, the client must confirm in a written statement drafted by the Wirtschaftsprüfer that the supporting documents and records and the information and explanations provided are complete.

#### 4. Ensuring independence

The client guarantees to refrain from everything which may endanger the independence of the Wirtschaftsprüfer's staff. This particularly applies to offers of employment and offers to undertake engagements on one's own account.

#### 5. Reporting and verbal Information

If the Wirtschaftsprüfer is required to present the results of the work in writing, only that written presentation is authoritative. For audit engagements the long-form report should be submitted in writing to the extent that nothing else has been agreed to. Verbal statements and information provided by the Wirtschaftsprüfer's staff beyond the engagement agreed to are never binding.

### 6. Protection of the Wirtschaftsprüfer's intellectual property

The client guarantees that expert opinions, organizational charts, drafts, sketches, schedules and calculations - expecially quantity and cost computations - prepared by the Wirtschaftsprüfer within the scope of the engagement will be used only for his own purposes.

#### 7. Transmission of the Wirtschaftsprüfer's professional statement

(1) The transmission of a Wirtschaftsprüfer's professional statement (long-form reports, expert opinions and the like) to a third party requires the Wirtschaftsprüfer's written consent to the extent that the permission to transmit to a certain third party does not result from the engagement terms. The Wirtschaftsprüfer is liable (within the limits of No. 9) towards third parties only if the prerequisites of the first serbence are given.

(2) The use of the Wirtschaftsprüfer's professional statements for promotional purposes is not permitted; an infringement entitles the Wirtschaftsprüfer to immediately cancel all engagements not yet conducted for the client.

#### 8. Correction of deficiencies

(1) Where there are deficiencies, the client is entitled to subsequent fulfilment [of the contract]. The client may demand a reduction in fees or the cancellation of the contract only for the failure to subsequently fulfill [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 fulfill [the contract]. No. 9 applies to the extent that claims for damages exist beyond this.

(2) The client must assert his claim for the correction of deficiencies in writing without delay. Claims pursuant to the first paragraph not arising from an intentional tort cease to be enforceable one year after the commencement of the statutory time limit for enforcement.

(3) Obvious deficiencies, such as typing and arithmetical errors and formelle Mangel [deficiencies associated with technicalities] contained in a Writschaftsprüfer's professional statements (long-form reports, expert opinions and the like) may be corrected - and also be applicable versus third parties by the Writschaftsprüfer at any time. Errors which may call into question the conclusions contained in the Writschaftsprüfer's professional statements entitle the Wirtschaftsprüfer to withdraw - also versus third parties - such statements. In the cases noted the Wirtschaftsprüfer should first hear the client if inossible

### 9. Liability

(1) The liability limitation of § ["Article"] 323 (2)["paragraph 2"] HGB [, Handelsgesetzbuch". German Commercial Code] applies to statutory audits required by law.

(2) Liability for negligence; An individual case of damages

(2) Lability for negligence, An individual case of damages

If neither No. 1 is applicable nor a regulation exists in an individual case, pursuant to § 54a (1) no. 2 WPO ["Wirtschaftsprüferordnung": Law regulating the Profession of Wirtschaftsprüfer] the liability of the Wirtschaftsprüfer for claims of compensatory damages of any kind — except for damages resulting from injury to life, body or health — for an individual case of damages resulting from negligence is limited to € 4 million, this also applies if liability to a person other than the client should be established. An individual case of damages also exists in relation to a uniform damage arising from a number of breaches of duty. The individual case of damages encompases all consequences from a breach of duty without taking into account whether the damages occurred in one year or in a number of successive years. In this case multiple acts or omissions of acts based on a similar source of error or on a source of error of an equivalent nature are deemed to be a uniform breach of duty if the matters in question are legally or economically connected to one another. In this event the claim against the Wirtschaftsprüfer is limited to € 5 million. The limitation to the fivefold of the minimum amount insured does not apply to compulsory audits required by law.

#### (3) Preclusive deadlines

A compensatory damages claim may only be lodged within a preclusive deadline of one year of the rightful claimant having become aware of the damage and of the event giving rise to the claim - at the very latest, however, within 5 years subsequent to the event giving rise to the claim. The claim expires if legal action is not taken within a six month deadline subsequent to the written refusal of acceptance of the indemnity and the client was informed of this consequence.

The right to assert the bar of the preclusive deadline remains unaffected. Sentences 1 to 3 also apply to legally required audits with statutory liability limits.

#### 10. Supplementary provisions for audit engagements

- (1) A subsequent amendment or abridgement of the financial statements or management report audited by a Wirtschaftsprüfer and accompanied by an auditor's report requires the written consent of the Wirtschaftsprüfer even if these documents are not published. If the Wirtschaftsprüfer has not issued an auditor's report, a reference to the audit conducted by the Wirtschaftsprüfer in the management report or elsewhere specified for the general public is permitted only with the Wirtschaftsprüfer's written consent and using the wording authorized by him.
- (2) If the Wirtschaftsprüfer revokes the auditor's report, it may no longer be used. If the client has already made use of the auditor's report, he must announce its revocation upon the Wirtschaftsprüfer's request.
- (3) The client has a right to 5 copies of the long-form report. Additional copies will be charged for separately.

#### 11. Supplementary provisions for assistance with tax matters

- (1) When advising on an individual tax issue as well as when furnishing continuous tax advice, the Wirtschaftsprufer is entitled to assume that the facts provided by the client especially numerical disclosures are correct and complete; this also applies to bookkeeping engagements. Nevertheless, he is obliged to inform the client of any errors he has discovered.
- (2) The tax consulting engagement does not encompass procedures required to meet deadlines, unless the Wirtschaftsprüfer has explicitly accepted the engagement for this. In this event the client must provide the Wirtschaftsprüfer, on a timely basis, all supporting documents and records especially tax assessments material to meeting the deadlines, so that the Wirtschaftsprüfer has an appropriate time period available to work therewith.
- (3) In the absence of other written agreements, continuous tax advice encompasses the following work during the contract period:
  - 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 schedules 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)
- c) negotiations 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) participation in Einspruchs- und Beschwerdeverfahren [appeals and complaint procedures] with respect to the taxes mentioned in (a).

In the afore-mentioned work the Wirtschaftsprüfer takes material published legal decisions and administrative interpretations into account.

- (4) If the Wirtschaftsprüfer receives a fixed fee for continuous tax advice, in the absence of other written agreements the work mentioned under paragraph 3 (d) and (e) will be charged separately.
- (5) Services with respect to special individual issues for income tax, corporate tax, business tax, valuation procedures for property and net worth taxation, and net worth tax as well as all issues in relation to sales tax, wages tax, other taxes and dues require a special engagement. This also applies to:
- a) the treatment of nonrecurring tax matters, e. g. in the field of estate tax, capital transactions tax, real estate acquisition tax
- b) participation and representation in proceedings before tax and administrative courts and in criminal 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 prerequisites nor of the issue as to whether all potential legal sales tax reductions have been claimed. No guarantee is assumed for the completeness of the supporting documents and records to validate the deduction of the input tax credit.

#### 12. Confidentiality towards third parties and data security

- (1) Pursuant to the law the Wirtschaftsprufer is obliged to treat all facts that he comes to know in connection with his work as confidential, irrespective of whether these concern the client himself or his business associations, unless the client releases him from this obligation.
- (2) The Wirtschaftsprüfer may only release long-form reports, expert opinions and other written statements on the results of his work to third parties with the consent of his client.
- (3) The Wirtschaftsprüfer is entitled within the purposes stipulated by the client to process personal data entrusted to him or allow them to be processed by third parties.

#### 13. Default of acceptance and lack of cooperation on the part of the client

If the client defaults in accepting the services offered by the Wirtschaftsprüfer or if the client does not provide the assistance incumbent on him pursuant to No. 3 or otherwise, the Wirtschaftsprüfer is entitled to cancel the contract immediately. The Wirtschaftsprüfer's right to compensation for additional expenses as well as for damages caused by the default or the lack of assistance is not affected, even if the Wirtschaftsprüfer does not exercise his right to cancel.

#### 14. Remuneration

- (1) In addition to his claims for fees or remuneration, the Wirtschaftsprüfer is entitled to reimbursement of his outlays: sales tax will be billed separately. He may claim appropriate advances for remuneration and reimbursement of outlays and make the rendering of his services dependent upon the complete satisfaction of his claims. Multiple clients awarding engagements are jointly and severally liable.
- (2) Any set off against the Wirtschaftsprüfer's claims for remuneration and reimbursement of outlays is permitted only for undisputed claims or claims determined to be legally valid.

### 15. Retention and return of supporting documentation and records

- (1) The Wirtschaftsprüfer retains, for ten years, the supporting documents and records in connection with the completion of the engagement that had been provided to him and that he has prepared himself as well as the correspondence with respect to the engagement.
- (2) After the settlement of his claims arising from the engagement, the Wirtschaftsprüfer, upon the request of the client, must return all supporting documents and records obtained from him or for him by reason of his work on the engagement. This does not, however, apply to correspondence exchanged between the Wirtschaftsprüfer and his client and to any documents of which the client already has the original or a copy. The Wirtschaftsprüfer may prepare and retain copies or photocopies of supporting documents and records which he returns to the client.

### 16. Applicable law

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

# 12. Special Development Fund

Contributions to the IMU Special Development Fund 2011

American Mathematical Society EUR 13,680.80 London Mathematical Society EUR 3,658.26 Total EUR 17,339.06

### 13. The IMU Secretariat

On January 1, 2011, the International Mathematical Union opened its permanent secretariat at Weierstrass Institute in Berlin (<a href="http://www.wias-berlin.de/imu/index.jsp">http://www.wias-berlin.de/imu/index.jsp</a>). The IMU Secretariat is supported by a grant of about half a million euros per year provided by the German Federal Ministry of Education and Research (BMBF) and the Berlin Senate. Head of the IMU Secretariat is Professor Alexander Mielke, deputy director of WIAS, the secretariat staff is composed of the manager (S. Markwardt), the administrator for ICMI and CDC affairs (L. Koch), the accountant (A. Orlowsky), the technician (G. Telschow), and the archivist (B. Seeliger). The IMU Secretary Professor M. Grötschel is responsible for conducting the Union's ordinary business and for keeping its records.

Under the supervision of the IMU Executive Committee, the secretariat runs IMU's daily business, such as finances and membership handling, and provides support for many IMU operations, including administrative assistance for the International Commission on Mathematical Instruction (ICMI) and the Commission for Developing Countries (CDC).

The formal opening of the IMU Secretariat was celebrated on February 1, 2011. More than 100 persons from the world over enjoyed the festive event. IMU President Professor I. Daubechies of Duke University (USA) together with Dr. G. Schütte, State Secretary at the German Federal Ministry of Education and Research, and Dr. K. Nevermann, State Secretary, Berlin Senate for Education, Science and Research jointly cut a blue ribbon and inaugurated the IMU office.

The IMU Secretariat also hosts the IMU archive. The IMU archive has been set up by former IMU Secretary O. Lehto/Finland, the archive was hosted and maintained for 17 years at the University of Helsinki. After all documents have been moved from Helsinki to Berlin and the new archive has preliminarily been set up an opening celebration on a limited scale took place

on November 10, 2011 in the IMU Secretariat. The archive opening was part of a small workshop entitled "Archiving IMU Material".

IMU Secretariat staff

Alexander Mielke: Head of the Secretariat and IMU Treasurer( treasurer@mathunion.org)

Sylwia Markwardt: Manager of the Secretariat (⋈ manager@mathunion.org)

Lena Koch: ICMI/CDC Administrator (☐ icmi.cdc.administrator@mathunion.org)

Anita Orlowsky: IMU Accountant (⋈ accountant@mathunion.org)

Birgit Seeliger: IMU Archivist (⋈ archive@mathunion.org)

Gerhard Telschow: IT and Technical Support ( technician@mathunion.org)

IMU Secretary:

Martin Grötschel (⋈ secretary@mathunion.org)

Address of the IMU secretariat:

International Mathematical Union Secretariat Markgrafenstr. 32 10117 Berlin, Germany

Email: office@mathunion.org

## 14. IMU Bank accounts

International Mathematical Union, Markgrafenstr. 32, D-10117 Berlin, Germany

Berliner Bank

Niederlassung der Deutsche Bank Privat- und Geschäftskunden AG

Hardenbergstr. 32, D-10623 Berlin, Germany

BIC (SWIFT) code: DEUTDEDB110

<u>CHF transfer</u> to account No.: <u>EUR transfer</u> to account No.: <u>USD transfer</u> to account No.:

IBAN code: IBAN code: IBAN code:

DE58100708480511391501 | DE85100708480511391500 | DE85100708480511391500

# 15. Impressum

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