

**Bulletins of the
International
Mathematical Union**



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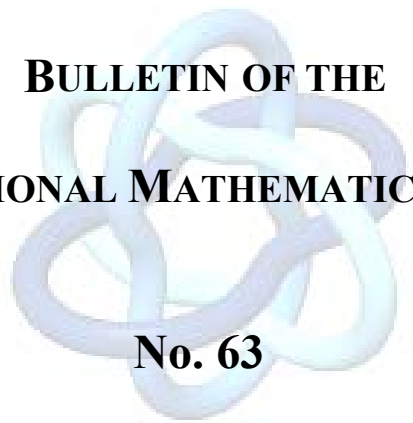
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IMU

**BULLETIN OF THE
INTERNATIONAL MATHEMATICAL UNION**



No. 63

December 2013

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,

The preparations of the International Congress of Mathematicians were successfully continued. The Program Committee determined the list of plenary and invited speakers of ICM 2014 in Seoul, Korea. This list was made available at the ICM 2014 Web site. The selection committees for the IMU Awards continued their work, and so did all the other committees and commissions responsible for the preparation of the IMU General Assembly and the ICM that will take place in Gyeongju and Seoul, Korea, in August 2014.

A particular effort was undertaken when the online application process for the ICM 2014 invitation program *NANUM 2014* (Travel grants for 1,000 mathematicians) was launched. As an act of solidarity with their colleagues in emerging nations, the Korean ICM hosts invite 1,000 mathematicians and advanced mathematics graduate students from the developing world to attend ICM 2014. The participation of these invitees in the Congress is fully paid for by Korean corporate and other donors.

A year-long initiative in 2013 was *Mathematics of Planet Earth (MPE2013)*. MPE 2013 was a joint enterprise of scientific societies, universities, research institutes, and organizations to dedicate 2013 as a special year for the Mathematics of Planet Earth. MPE's mission was to encourage research in identifying and solving fundamental questions about planet earth, to encourage educators at all levels to communicate the issues related to planet earth, and to inform the public about the essential role of the mathematical sciences in facing the challenges to our planet. MPE2013 (continued beyond 2013 as MPE) was endorsed by the International Mathematical Union. The IMU contributed to the European launch of MPE2013 at the UNESCO headquarters in Paris.

The IMU Executive Committee and IMU's commission CDC (Commission for Developing Countries) jointly decided to host (with the support of the ICM 2014 organizers) a MENAO event. MENAO stands for *Mathematics in Emerging Nations: Achievements and Opportunities*, it is a one-day symposium in Seoul, Korea, prior to the opening of the International Congress of Mathematicians (ICM) 2014. Goals: give an overview (presentations from senior economists, university professors, Fields medalists and mathematicians from developing countries) of the development of mathematics in Korea and its relationship with economic development, bring together potential sponsors and cooperation partners with projects and organizations related to mathematics in developing countries as well as highlighting past achievements and identifying future opportunities.

Two new support programs were established to support mathematicians from developing countries. The *Abel Visiting Scholar Program*, funded by the Niels Henrik Abel Board, invites mathematicians professionally based in developing countries to visit an international research collaborator. The program is designed for post doctoral mathematicians in the early stages of their professional careers. The *IMU-Simons Travel Fellowship Program*, funded by the Simons Foundations through a three years grant, supports collaborative research visits of

mathematicians working in the developing world to a center of excellence in any part of the world for collaborative research in mathematics.

The IMU was represented at the Mathematical Congress of the Americas (MCA 2013) by running a booth and offering information material about the Union and its commissions and committees and their activities.

The first Heidelberg Laureate Forum (HLF) took place. This conference gathers prominent scientists from the fields of mathematics and computer science (Abel, Fields, Turing laureates) and outstanding young researchers for a one week conference in the city of Heidelberg, Germany. This new conference format was initiated through an agreement on collaborating in the HLF between the Klaus Tschira Stiftung, the Norwegian Academy of Science and Letters, the International Mathematical Union, and the Association for Computing Machinery.

With best wishes

Martin Grötschel
IMU Secretary

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1. IMU leadership and membership information

1.1. 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)
Secretary:	Martin Grötschel	(Germany)
Members-at-Large:	Manuel de León	(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 2013:

83rd EC Meeting, Berlin, Germany, March 11-12, 2013

1.2. 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

(Three-year terms of service until 2012. Four-year terms of service according to changed election model starting in 2013.)

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	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

International Commission on Mathematical Instruction (ICMI) 2013 – 2016

Ferdinando Arzarello	ICMI President	Italy
Abraham Arcavi	ICMI Secretary-General	Israel
Cheryl E Praeger	ICMI Vice President	Australia
Angel Ruiz	ICMI Vice President	Costa Rica
Catherine P. Vistro-Yu, Ed.D.	ICMI EC Member-at-Large	Philippines
Jean-Luc Dorier	ICMI EC Member-at-Large	Switzerland
Roger Howe	ICMI EC Member-at-Large	USA
Yuriko Yamamoto Baldin	ICMI EC Member-at-Large	Brazil
Zahra Gooya	ICMI EC Member-at-Large	Iran
William (Bill) Barton	ICMI EC Ex-officio Member (Past President)	New Zealand
Ingrid Daubechies	ICMI EC Ex-officio Member (IMU President)	USA
Martin Grötschel	ICMI EC Ex-officio Member (IMU Secretary)	Germany

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

(CEIC terms of membership are staggered.)

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
Tim Cole	CEIC Member	Jan 1, 2013 – Dec 31, 2016	USA
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	CEIC Member	Jan 1, 2011 – Dec 31, 2014	USA

Persons representing IMU in various organizations

Body	Representative/ liaison person	
COSPAR	T. Padmanabhan	2011-2014
Gruber Foundation Cosmology Prize	Gerhard Huisken	2012-2014
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

1.3. Members of the Union

The following 80 countries were members of IMU through December 31, 2013:

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

The following 4 organizations were members of IMU through December 31, 2013:

Affiliate Membership	African Mathematical Union (AMU) European Mathematical Society (EMS) South East Asian Mathematical Society (SEAMS) Unión Matemática de América Latina y el Caribe (UMALCA)
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2. Financial Information

2.1. 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

2.2. Approved IMU budget 2011-2014

International Mathematical Union												
Proposed new Budget for 2011-2014, in Swiss 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												
Special Development Fund		30.000			30.000			30.000			30.000	
Donations		56.000			56.000			56.000			56.000	
Grants												
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												
TOTAL INCOME	435.442	87.300	522.742	444.220	87.300	531.520	452.998	87.300	540.298	462.042	87.300	549.342
EXPENDITURE												
1. Commissions & Committees (C&C)												
1.1 CDC	89.734	45.000		89.734	45.000		89.734	45.000		89.734	45.000	
1.2 CEIC	22.434			22.434			22.434			22.434		
1.3 ICM	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			0			0			0		
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	237.928
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			22.434			22.434			22.434		
ICM Expenditure	98.710	30.000	128.710	98.710	30.000	128.710	98.710	30.000	128.710	98.710	30.000	128.710
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			13.460			13.460			13.460		
Union Administration Expenditure	89.735	0	89.735	89.735	0	89.735	89.735	0	89.735	89.735	0	89.735
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	33.435
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	1.300		17.947	1.300		17.947	1.300		17.947	1.300	
Overhead Expenditure	44.868	1.300	46.168	44.868	1.300	46.168	44.868	1.300	46.168	44.868	1.300	46.168
TOTAL EXPENDITURE			535.976			535.976			535.976			535.976
Draw from Reserves			13.234			4.456			0			0
Return to Reserves			0			0			4.322			13.366
INCOME LESS EXPENSES			0			0			0			0

2.3. Independent Auditor's Report 2013



Berlin, 12 May 2014

Report No.: 65600/E

International Mathematical Union
Berlin

Audit Report on the
Annual Financial Statements as of 31 December 2013

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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 2013.

The IMU is an international association. According to German law, the IMU is an "ideal" association (§ 21 German Civil Code (BGB) non-profit association) 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 ("Statement of Income and Expenditure for 2013") included in Appendix 4 was, per agreement, not audited.

The performance of the audit and our liability, including any third-party liability, is controlled by the "General Engagement Terms for German Public Auditors and Public Audit Firms as of January 1, 2002" enclosed as an Appendix.

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 2013 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 in Berlin and is affiliated with the *Weierstraß-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 in the amount of approximately k€ 500 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, in our experience, non-compliance may result in risks that 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 January 2014 in the premises of the IMU Secretariat. Subsequently the audit report was prepared in our office.

Our audit commenced with our unqualified independent auditor's report dated 16 April 2013 on the annual financial statements for the year ended 31 December 2012. The Statutes do not provide for an adoption of the annual financial statements. Instead, on the basis of every fourth annual financial statement (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 16th 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 Orłowsky | 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 2013 Version 14.04 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 analogous application 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 62, dated December 2012, was published in December 2013 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.



We have not found any changes to the material measurement bases (exercise of accounting and measurement options as well as scopes of discretion) or grooming transactions significantly affecting the net assets, financial position and results of operations of the Union within the framework of our audit.

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.

2.2. Significant Measurement Principles

The exercise of accounting and measurement elective options and the use of discretion correspond to the prior year and 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 Statement

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:

	31 Dec 2013		31 Dec 2012		Change
	k€	%	k€	%	k€
A S S E T S					
Current assets					
Receivables from member contributions	122	8.4	119	9.4	3
Other assets (including prepaid expenses)	5	0.3	5	0.4	0
Cash and cash equivalents	1,323	91.2	1,139	90.2	184
	1,450	100.0	1,263	100.0	187
L I A B I L I T I E S					
Net assets (own funds)					
	1,349	93.0	1,199	94.9	150
Borrowed capital					
Provisions	8	0.6	8	0.6	0
Liabilities from restricted donations	81	5.6	47	3.7	34
Other liabilities (incl. deferred income)	12	0.8	9	0.7	3
	101	7.0	64	5.1	37
	1,450	100.0	1,263	100.0	187



Receivables from member contributions are as follows:

Country	Year	Amount	
		€	CHF
Argentina	2013	1,324.55	1,493.00
Bosnia & Herzegovina	2013	1,410.42	1,703.00
Bulgaria	2013	1,410.42	1,703.00
Cameroon	2013	1,410.42	1,703.00
Cuba	2013	1,410.42	1,703.00
France	2013	16,925.10	20,436.00
Greece	2013	1,410.42	1,703.00
Iran	2013	5,641.69	6,812.00
Ivory Coast	2013	1,410.42	1,703.00
Latvia	2013	1,410.42	1,703.00
Montenegro	2013	1,410.42	1,703.00
Pakistan	2013	1,410.42	1,703.00
Peru	2013	1,410.42	1,703.00
Philippines	2013	1,410.42	1,703.00
Saudi Arabia	2013	1,410.42	1,703.00
Slovakia	2013	2,820.84	3,406.00
Spain	2013	11,283.40	13,624.00
Venezuela	2013	1,410.42	1,703.00
		56,331.04	67,910.00
Algeria	2012	1,270.46	1,270.46
Argentina	2012	2,743.71	3,340.00
Bosnia & Herzegovina	2012	1,371.85	1,670.00
Bulgaria	2012	1,371.85	1,670.00
Cameroon	2012	1,371.85	1,670.00
Cuba	2012	1,371.85	1,670.00
Egypt	2012	2,743.71	3,340.00
Greece	2012	1,371.85	1,670.00
Hungary	2012	5,487.42	6,680.00
Kazakhstan	2012	1,371.85	1,670.00
Latvia	2012	1,371.85	1,670.00
Montenegro	2012	1,371.85	1,670.00
Nigeria	2012	1,371.85	1,670.00
Pakistan	2012	1,371.85	1,670.00
Peru	2012	1,371.85	1,670.00
Philippines	2012	1,371.85	1,670.00
Serbia	2012	1,371.85	1,670.00
Spain	2012	10,974.80	13,360.00
Venezuela	2012	1,371.85	1,670.00
Saudi Arabia	2012	1,371.85	1,670.00
		43,797.85	53,040.46
Carry forward:		100,128.89	120,950.46

Country	Year	Amount	
		€	CHF
Carry forward		100,128.89	120,950.46
Bosnia & Herzegovina	2011	1,311.29	1,637.00
Bulgaria	2011	1,311.29	1,637.00
Cameroon	2011	1,311.29	1,637.00
Cuba	2011	1,311.29	1,637.00
Hungary	2011	5,245.14	6,548.00
Ivory Coast	2011	1,311.29	1,637.00
Montenegro	2011	1,311.29	1,637.00
Pakistan	2011	1,311.29	1,637.00
Peru	2011	1,311.29	1,637.00
Philippines	2011	1,311.29	1,637.00
		17,046.75	21,281.00
Cameroon	2010	1,080.82	1,605.00
Cuba	2010	1,080.82	1,605.00
Montenegro	2010	414.04	535.00
Nigeria	2010	1,080.82	1,605.00
Peru	2010	1,080.82	1,605.00
Peru	2008	477.43	717.00
		5,214.75	7,672.00
		122,390.39	149,903.46
Specific allowance Peru	2008	-292.44	-358.50
Exchange rate loss as of 31 December		-109.64	
		121,988.31	149,544.96

At the end of 2013, outstanding member contributions were k€ 122 (kCHF 150), of which k€ 28 had been settled at the time of the audit. The membership contribution of Peru for 2008 remains outstanding. The impairment of 50 % is retained.

Cash and cash equivalents, 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)		151,140.31
Account in CHF (5113915 01)	CHF 666,712.43	543,855.00
Account in USD (5113915 00)	USD 81,872.64	66,785.70
Account in USD (5113915 06)	USD 29,474.99	<u>21,408.50</u>
Carry forward		783,189.51



Carry forward	783,189.51
Account in € - Ito Fund (5113915 01)	10,498.75
Account in € (5113915 00)	159,904.86
Account in € (5113915 05)	190,099.21
Account in € (5113915 04)	177,652.71
Cash in KRW	1,717.47
Cash in €	<u>1.97</u>
	<u>1,323,064.48</u>

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 - 2012	725	
– Annual surplus 2013	150	
– ICMI und CDC (Commission Fund)	<u>167</u>	<u>1,042</u>
		<u>1,349</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. The General Assembly takes decision regarding the allocation of reserves every four years.

Reserves are allocated as follows:

	k€
Travel support	
– Fields Medal 2014	10
– ICM 2014 in Korea	60
MENAO Conference 2014	<u>100</u>
Carry forward	170

Carry forward	170
Project CANP 2014 in Tanzania	50
Co-financing joint workshops with other ICSU members 2012-2014	10
ICMI and CDC 2014	177
ICM default reserve	362
Free reserve	<u>273</u>
	<u>1,042</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 in the coming year. The restricted reserves for ICMI amount to € 62,000.00 and to € 115,000.00 for CDC.

Liabilities from restricted donations developed as follows:

	€
Special Development Fund	
Per 1 Jan 2013	25,838.46
Contributions	
– London Mathematical Society (LMS)	<u>3,774.00</u>
Per 31 Dec 2013	29,612.46 -----
Ito Fund	
Per 1 Jan 2013	10,485.95
Contribution interest revenue 2013 less account fees	<u>12.80</u>
Per 31 Dec 2013	10,498.75 -----
Simons Foundation	
Per 1 Jan 2013	0.00
Contribution (kUSD 25)	<u>18,661.74</u>
Per 31 Dec 2013	18,661.74 -----
Carry forward	58,722.95 -----



Carry forward	58,722.95

IMU Developing Country Fund	
Per 1 Jan 2013	10,787.60
Contribution FIMU	<u>11,378.14</u>
Per 31 Dec 2013	22,165.74

	<u>80,938.69</u>

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.

The cash received from the **Simons Foundation** during the reporting year is designated as a Travel Fellowship for research stays of mathematicians from developing countries.

The cash received from the Friends of IMU (FIMU) included in the **IMU Developing Country Fund** are for the promotion of mathematical research and scholarships in developing countries.

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€ 184 and corresponds to the change in the amount of cash between 1 January 2013 (k€ 1,139) and 31 December 2013 (k€ 1,323).

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:

	2 0 1 3		2 0 1 2		Change
	k€	%	k€	%	k€
Revenue	470	100.0	449	100.0	21
Administrative expenses	-53	-11.3	-24	-5.3	-29
Expenses for scientific activities	-269	-57.2	-253	-56.3	-16
Other expenditures	-322	-68.5	-277	-61.7	-45
Operating result	148	31.5	172	38.3	-24
Interest	2	0.4	3	0.7	-1
Result before taxes on income	150	31.9	175	39.0	-25
Taxes on income	0	0.0	0	0.0	0
Annual surplus	150	31.9	175	39.0	-25
Allocation to reserves (net)	-150	-31.9	-175	-39.0	25
Unallocated cash balance	0	0.0	0	0.0	0

The IMU had **revenue** of k€ 470 in the reporting year, consisting largely of member contributions. In addition, the IMU received donations which, as a rule, come from scientific organizations.

Revenue is composed of the following:

	€
Member contributions	377,993.54
Third-party contributions	77,115.40
Other income	<u>15,261.98</u>
	<u>470,370.92</u>

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



Third-party donations are composed of the following:

	€
Niels Henrik Abel Memorial Fund, Norway (thereof approx. k€ 11.6 [kUSD 15] to be used for Abel Visiting Scholar Program)	47,115.40
ICSU grant	<u>30,000.00</u>
	<u>77,115.40</u>

Other income (k€ 15) largely involves revenue for ICMI (k€ 7) and from publications (k€ 2).

Other expenditures of approximately k€ 322 (prior year: k€ 277) are shown in detail in the statement of income and expenditure (Appendix 2) as well as in the Budget Comparison (Appendix 4).

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 for the annual financial statements as of 31 December 2013 of the International Mathematical Union, Berlin. The annual financial statements are enclosed in this report under Appendices 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 and 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 2013 to 31 December 2013. 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 analogous application 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, for the reporting year from 1 January 2013 to 31 December 2013 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, 12 May 2014
RBS RoeverBroennerSusat GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft

In the original German version signed by:

Helmut Schuhmann
Wirtschaftsprüfer

International Mathematical Union, Berlin

STATEMENT OF ASSETS AND LIABILITIES as of 31 December 2013

ASSETS	per 31.12.2013	Prior Year	LIABILITIES	per 31.12.2013	Prior Year
	€	€		€	€
A. Current Assets			A. Net Assets		
I. Receivables and other assets			I. Association net assets	307.465,98	307.465,98
1. Receivables from member contributions	121.988,31	118.899,31	II. Reserves	1.042.236,56	891.814,18
2. Other assets	2.449,13	5.139,10		1.349.702,54	1.199.280,16
		124.437,44	B. Provisions	7.735,00	7.735,00
II. Cash-in-hand, bank balances*			C. Liabilities		
			1. Liabilities from restricted donations	80.938,69	47.112,01
B. Prepaid Expenses			2. Other liabilities	6.281,44	6.677,92
				87.220,13	53.789,93
			D. Deferred Income	5.398,00	2.716,20
Total Assets	1.450.055,67	1.263.521,29	Total Liabilities	1.450.055,67	1.263.521,29

* contained therein ICM I € 190.098,29 and CDC € 177.652,71

International Mathematical Union, Berlin

STATEMENT OF INCOME AND EXPENDITURE for 2013

			2013	Prior Year
	€	€	€	€
Revenues			470.370,92	449.335,02
Member contributions	377.993,54			367.387,09
Donations - international	77.115,40			75.583,50
Other income	15.261,98			6.364,43
Other Expenditures			-321.583,59	-277.107,78
Administrative Expenses		-52.797,95		-24.132,07
Reimbursement personnel expenses	-10.581,51			-2.484,09
Travel expenses	-6.582,26			-406,91
Audit fees	-7.790,00			-7.735,00
Member contributions	-9.991,00			-9.700,00
Postage	-118,52			-400,51
Bank fees	-1.169,41			-480,78
Other	<u>-16.565,25</u>			<u>-2.924,78</u>
Expenditures for Scientific Promotion and Activities		-268.785,64		-252.975,71
Promotion of scientific activities	-228.622,51			-235.579,92
Expenditures ICM	-34.409,74			-5.175,49
Expenditures for prize awards	<u>-5.753,39</u>			<u>-12.220,30</u>
Interest and Similar Income			1.635,05	2.731,67
<u>Result of Association Activities</u>			150.422,38	174.958,91
Taxes			0,00	0,00
<u>Annual Surplus</u>			150.422,38	174.958,91
Allocation to Reserves			-150.422,38	-174.958,91
<u>Unallocated Cash Balance</u>			0,00	0,00

International Mathematical Union
Schedule of Member Contributions 2013

Country	Amount EUR	Amount CHF
Algeria	1.410,42	1.703,00
Argentina	2.820,84	3.406,00
Armenia	1.410,42	1.703,00
Australia	5.641,69	6.812,00
Austria	2.820,84	3.406,00
Belgium	5.641,69	6.812,00
Bosnia & Herzegovina	1.410,42	1.703,00
Brazil	11.283,40	13.624,00
Bulgaria	1.410,42	1.703,00
Cameroon	1.410,42	1.703,00
Canada	16.925,10	20.436,00
Chile	2.820,84	3.406,00
CMS, Beijing	10.155,40	12.261,60
Math Society, Taipei	6.769,69	8.174,40
Colombia	1.410,42	1.703,00
Croatia	1.410,42	1.703,00
Cuba	1.410,42	1.703,00
Czech Republic	5.641,69	6.812,00
Denmark	2.820,84	3.406,00
Egypt	2.820,84	3.406,00
Estonia	1.410,42	1.703,00
Finland	5.641,69	6.812,00
France	16.925,10	20.436,00
Georgia	1.410,42	1.703,00
Germany	16.925,10	20.436,00
Greece	1.410,42	1.703,00
Hong Kong	1.410,42	1.703,00
Hungary	5.641,69	6.812,00
Iceland	1.410,42	1.703,00
India	11.283,40	13.624,00
Indonesia	1.410,42	1.703,00
Iran	5.641,69	6.812,00
Ireland	2.820,84	3.406,00
Israel	16.925,10	20.436,00
Italy	16.925,10	20.436,00
Ivory Coast	1.410,42	1.703,00
Japan	16.925,10	20.436,00
Kazakhstan	1.410,42	1.703,00
Korea, Repub of	11.283,40	13.624,00

Latvia	1.410,42	1.703,00
Lithuania	1.410,42	1.703,00
Mexico	2.820,84	3.406,00
Montenegro	1.410,42	1.703,00
Netherlands	11.283,40	13.624,00
New Zealand	1.410,42	1.703,00
Nigeria	1.410,42	1.703,00
Norway	5.641,69	6.812,00
Pakistan	1.410,42	1.703,00
Peru	1.410,42	1.703,00
Philippines	1.410,42	1.703,00
Poland	11.283,40	13.624,00
Portugal	2.820,84	3.406,00
Romania	1.410,42	1.703,00
Russia	16.925,10	20.436,00
Saudi Arabia	1.410,42	1.703,00
Serbia	1.410,42	1.703,00
Singapore	1.410,42	1.703,00
Slovakia	2.820,84	3.406,00
Slovenia	1.410,42	1.703,00
South Africa	2.820,84	3.406,00
Spain	11.283,40	13.624,00
Sweden	11.283,40	13.624,00
Switzerland	11.283,40	13.624,00
Tunisia	1.410,42	1.703,00
Turkey	1.410,42	1.703,00
Ukraine	2.820,84	3.406,00
United Kingdom	16.925,10	20.436,00
Uruguay	1.410,42	1.703,00
USA	16.925,10	20.436,00
Venezuela	1.410,42	1.703,00
Vietnam	1.410,42	1.703,00
Total	377.993,54	456.404,00

INTERNATIONAL MATHEMATICAL UNION

Budget Comparison

Statement of Income and Expenditure for the year ended 31 December 2013

	Budget 2013 CHF			Actual 2013 CHF			Budget 2013 EUR			Actual 2013 EUR		
	General	Special	Sum	General	Special	Sum	General	Special	Sum	General	Special	Sum
INCOME												
I. General												
I.a Membership Dues	452.998						369.607			377.994		
Sum General Income	452.998			463.277			369.607			377.994		
II. Special												
II.a Special Development Fund		30.000			4.626			24.477			3.774	
II.b Donations		56.000			57.745			45.691			47.115	
II.c Grants					73.586						60.040	
Sum Special Income from Third Parties					135.957						110.929	
II.d Income from IMU bank accounts		1.000			2.004			816			1.635	
II.e Other Income		300			18.705			245			15.262	
Sum Special Income from Other Sources					20.709						16.897	
TOTAL INCOME	452.998	87.300	540.298	463.277	156.666	619.943	369.607	71.229	440.836	377.994	127.826	505.820
EXPENDITURE												
1. Commissions & Committees (C&C)												
1.1 CDC	89.734	45.000		67.414	57.745		73.215	36.716		55.004	47.115	
1.2 CEIC	22.434			10.555			18.304			8.612		
1.3 ICMi	67.300			85.459			54.911			69.727		
1.4 Ad hoc committees	13.460			0			10.983			0		
1.5 Special support	0			22.262	36.769		0			18.164	30.000	
C&C Expenditure	192.928	45.000	237.928	185.690	94.514	280.204	157.413	36.716	194.129	151.507	77.115	228.622
2. ICM												
2.1 Site Committee	4.487			7.541			3.661			6.153		
2.2 Program Committee	8.974			13.557			7.322			11.061		
2.3 Prize Committees	8.974			21.076			7.322			17.196		
2.4 Congress Subvention	22.434			0			18.304			0		
2.5 Travel Grants (Young & Senior)	31.407	30.000		0			25.626	24.477		0		
2.6 ICM related admin., outreach	22.434			0			18.304			0		
ICM Expenditure	98.710	30.000	128.710	42.174	0	42.174	80.539	24.477	105.016	34.410	0	34.410
3. Union Administration												
3.1 General Assembly	4.487			0			3.661			0		
3.2 President & Secretary	35.894			17.389			29.286			14.188		
3.3 Executive Committee	35.894			1.871			29.286			1.526		
3.4 Other	13.460			1.777			10.983			1.450		
Union Administration Expenditure	89.735	0	89.735	21.037	0	21.037	73.216	0	73.216	17.164	0	17.164
4. Outreach												
4.1 ICSU Union Member Contribution	8.974			12.245			7.322			9.991		
4.2 Awards	0	11.000		7.051			0	8.975		5.753		
4.3 Website Support, Media Relations	8.974			0			7.322			0		
4.4 Bulletin	0			0			0			0		
4.5 Other	4.487			0			3.661			0		
4.6 Scientific activity support	0			0			0			0		
Outreach Expenditure	22.435	11.000	33.435	19.296	0	19.296	18.305	8.975	27.280	15.744	0	15.744
5. Overhead												
5.1 Office Expenses	4.487			5.024	1.593		3.661	0		4.099	1.300	
5.2 Bank Charges	4.487			40	1.393		3.661	0		33	1.136	
5.3 Legal Advice, Audit Fees	17.947			7.954	1.593		14.643	0		6.490	1.300	
5.4 Other	17.947	1.300		12.034	1.798		14.643	1.061		9.819	1.467	
Overhead Expenditure	44.868	1.300	46.168	25.052	6.377	31.429	36.608	1.061	37.669	20.441	5.203	25.644
TOTAL EXPENDITURE			535.976			394.140			437.310			321.584
Draw from Reserves			0			0			0			0
Return to Reserves			4.322			0			3.526			0
Income less expenses			0			225.803			0			184.236
											Transfer to liabilities from donations not yet spent	-33.814
											Excess of income over expenditure	EUR 150.422

Actual Euro Income and Expenses converted to Swiss Franc, using the December 31, 2013 rate of 1 Euro = 1,22562 Swiss Franc.

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 International 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 16th General Assembly. The amendments included article 28 (Treasurer) and article 29 (Legal Domicile). A certified German translation is on file.

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 2013, the IMU had 70 regular members (voting), 10 associate members (non-voting) and 4 affiliate members (non-contributory and non-voting).

Executive Committee

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

- Ms. Ingrid Daubechies, USA (President)
- Mr. Martin Grötschel, Germany (Secretary)
- 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, Switzerland (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 27 and 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.

2. Tax Information

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

At the time of the audit, no tax assessment notifications had been issued for the Association, which has had its legal domicile in Germany since 2007.

The Association is non-profit. After common inquiries on 16 April 2007 at the Finanzamt für Körperschaften I, Berlin, the formal requirements for the recognition as a non-profit organization were fulfilled. The final certification of the non-profit status will be made after actual fulfillment of the requirements.

The Finanzamt für Körperschaften I, Berlin, issued a preliminary certification on 4 May 2007. This was done upon the instruction of the Senatsverwaltung für Finanzen, Berlin, before it issued a notice of exemption for 2007 and 2008 on 9 June 2009.

On 28 November 2012 it issued a notice of exemption for 2009 to 2011 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 2016. The IMU is entitled to issue donation confirmations.

[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 - especially quantity and cost computations - prepared by the Wirtschaftsprüfer within the scope of the engagement will be used only for his own purposes.

7. Transmission of the Wirtschaftsprüfer's professional statement

(1) The transmission of a Wirtschaftsprüfer's professional 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 sentence are given.

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

8. Correction of deficiencies

(1) Where there are deficiencies, the client is entitled to subsequent fulfilment [of the contract]. The client may demand a reduction in fees or the cancellation of the contract only for the failure to subsequently 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 Mängel [deficiencies associated with technicalities] contained in a Wirtschaftsprüfer's professional statements (long-form reports, expert opinions and the like) may be corrected - and also be applicable versus third parties - by the Wirtschaftsprüfer at any time. Errors which may call into question the conclusions contained in the Wirtschaftsprüfer's professional statements entitle the Wirtschaftsprüfer to withdraw - also versus third parties - such statements. In the cases noted the Wirtschaftsprüfer should first hear the client, if possible.

9. Liability

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

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

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

(3) *Preclusive deadlines*

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

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

10. Supplementary provisions for audit engagements

(1) A subsequent amendment or abridgement of the financial statements or management report audited by a Wirtschaftsprüfer and accompanied by an auditor's report requires the written consent of the Wirtschaftsprüfer even if these documents are not published. If the Wirtschaftsprüfer has not issued an auditor's report, a reference to the audit conducted by the Wirtschaftsprüfer in the management report or elsewhere specified for the general public is permitted only with the Wirtschaftsprüfer's written consent and using the wording authorized by him.

(2) If the Wirtschaftsprüfer revokes the auditor's report, it may no longer be used. If the client has already made use of the auditor's report, he must announce its revocation upon the Wirtschaftsprüfer's request.

(3) The client has a right to 5 copies of the long-form report. Additional copies will be charged for separately.

11. Supplementary provisions for assistance with tax matters

(1) When advising on an individual tax issue as well as when furnishing continuous tax advice, the Wirtschaftsprüfer is entitled to assume that the facts provided by the client - especially numerical disclosures - are correct and complete; this also applies to bookkeeping engagements. Nevertheless, he is obliged to inform the client of any errors he has discovered.

(2) The tax consulting engagement does not encompass procedures required to meet deadlines, unless the Wirtschaftsprüfer has explicitly accepted the engagement for this. In this event the client must provide the Wirtschaftsprüfer, on a timely basis, all supporting documents and records - especially tax assessments - material to meeting the deadlines, so that the Wirtschaftsprüfer has an appropriate time period available to work therewith.

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

- 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 Wirtschaftsprüfer is obliged to treat all facts that he comes to know in connection with his work as confidential, irrespective of whether these concern the client himself or his business associations, unless the client releases him from this obligation.

(2) The Wirtschaftsprüfer may only release long-form reports, expert opinions and other written statements on the results of his work to third parties with the consent of his client.

(3) The Wirtschaftsprüfer is entitled - within the purposes stipulated by the client - to process personal data entrusted to him or allow them to be processed by third parties.

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

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

14. Remuneration

(1) In addition to his claims for fees or remuneration, the Wirtschaftsprüfer is entitled to reimbursement of his outlays: sales tax will be billed separately. He may claim appropriate advances for remuneration and reimbursement of outlays and make the rendering of his services dependent upon the complete satisfaction of his claims. Multiple clients 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 arising therefrom.

2.4. IMU Special Development Fund

Contributions to the IMU Special Development Fund.

2013

London Mathematical Society, UK 3,774.00 EUR

2.5. Third-Party Donations (monetary contributions)

2013

American Mathematical Society, US	11,378.14 EUR
ICSU	30,000.00 EUR
Mathematical Society of Japan, Japan	1,037.78 EUR
Niels Henrik Abel Memorial Fund, Norway	47,115.40 EUR
Simons Foundation, US	18,661.74 EUR
Swiss Mathematical Society, Switzerland	525.39 EUR

2.6. 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

3. Commissions and committees

3.1. International Commission on Mathematical Instruction (ICMI)

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

Activity and Financial Report 2013

Ferdinando Arzarello, Abraham Arcavi, Lena Koch



2013 at a glance

Key activities:

Administration and Governance

The ICMI Executive Committee (2013-2016) held its first meeting Berlin, Germany from May 22-24, 2013.

Members

As of 2013 ICMI has 92 member countries.

ICMI Regional Conferences

AFRICME-4 (the Fourth Africa Regional Congress of ICMI on Mathematical Education) was held in Lesotho in 2013. The Congress was hosted by the Lesotho College of Education - Faculty of Science on the 11-14 June 2013.

The Sixth East Asia Regional Conference in Mathematics Education “Innovations and Exemplary Practices in mathematics education” (EARCOME-6) was held in Phuket, Thailand from March 17-22, 2013.

ICMI Studies

ICMI Study 20 “Educational Interfaces between Mathematics and Industry” has been published in December 2013. The co-chairs of this ICMI Study were Alain Damlamian (France) and Rudolf Sträßer (Germany). The book was edited by Alain Damlamian, Rudolf Sträßer and José Francisco Rodrigues (Portugal).

ICMI Study 21 “Mathematics Education and Language Diversity” The volume is jointly edited by members of the IPC, coordinated by IPC member Richard Barwell (Canada) and is progressing well.

ICMI Study 22 “Task Design” The Study Conference was held from July 22-26 2013 at the Department of Education, University of Oxford, UK. The Study Chairs are Anne Watson (UK) and Minori Ohtani (Japan).

ICMI Study 23 “The Primary Mathematics Study on Whole Numbers” was launched in 2012. The IPC has been appointed and started working in 2013. The IPC meeting was held in January 2014, co-chaired by Mariolina Bartolini Bussi (Italy) and Sun Xuhua (China).

Outreach to Developing Countries

The following activities under the umbrella of the Capacity and Network Project (CANP) were held in 2013:

CANP 2 Central America and the Caribbean: The First Central American and Caribbean Congress in Mathematics Education (I CEMACYC) was held November 6-8 in Santo Domingo, Dominican Republic. This Network has been formed during the CANP workshop in Costa Rica in 2012.

CANP 3 South East Asia: The Third Capacity and Network Project (CANP) was held from 14-25 October, 2013 in Phnom Penh, Cambodia with more than 40 participants from Cambodia, Laos, Thailand and Vietnam.

CANP 4 East Africa: The IPC and Local Organizing committee has been formed and started working in 2013. The fourth CANP will be held in 1-12 September 2014.

Klein Project

Antoine Nectoux presented the Klein Project in Phnom Penh, Cambodia in March 2013.

A Klein Workshop, a teacher training day and a meeting for the design team, were held in Berlin, Germany from 17-20 of September 2013.

ICMI Awards

The ICMI 2013 Awards were announced in November 2013. The recipients for 2013 of the Felix Klein and Hans Freudenthal Awards are:

Michèle Artigue (France) - The Felix Klein Medal for lifetime achievement,

Frederick Leung (China) - The Hans Freudenthal Medal for a major cumulative programme of research.

2013 in Detail

Administration and Governance

Organisation

ICMI Members and Representatives

As of 2013 ICMI has 92 member countries, 70 of which are also IMU members and 10 are IMU associate members. Each member country is required to elect an ICMI Representative who represents the ICMI member country at the ICMI General Assembly and has the (sole) voting right for the ICMI Executive Committee (ICMI EC). The ICMI representatives also inform the national communities of developments within ICMI.

Executive Commission 2013-2016

The members of the EC 2013-2016 are:

PRESIDENT: Ferdinando Arzarello (Italy)

SECRETARY-GENERAL: Abraham Arcavi (Israel)

VICE-PRESIDENTS (2): Cheryl Praeger (Australia) and Angel Ruiz (Costa Rica)

MEMBERS AT LARGE (5):

Jean-Luc Dorier (Switzerland)

Yuriko Baldin (Brazil)

Roger Howe (USA)

Catherine P. Vistro-Yu (Philippines)
Zahra Gooya (Iran)
Ex officio: Bill Barton (New Zealand) (Past President of ICMI)
Ingrid Daubechies (President of IMU)
Martin Grötschel (Secretary of IMU)

The first meeting of the 2013-2016 Executive Commission took place in Berlin, Germany May 22-24, 2013. The major conclusion reached were the continued expansion of ICMI development activities in the form of the Capacity and Network Project (CANP), the expansion of the Klein Project; ICMI's involvement in the IMU symposium "Mathematics in Emerging nations, Achievements and Opportunities (MENA0)" in August 2014 and to strengthen the cooperation with Springer (ICMI Studies Publishing House). Furthermore the guidelines of ICMI Studies were finalized. Additionally the ICMI channels of communication were reorganized.



ICMI EC 2013-2016, EC Meeting May 2013, IMU Secretariat, Berlin, Germany
Roger Howe, Cheryl E Prager, Jean-Luc Dorier, Yuriko Yamamoto Baldin, Angel Ruiz, Ferdinando Arzarello, Abraham Arcavi, Zahra Gooya, Bill Barton (from left to right)

IMU Secretariat

The IMU Secretariat in Berlin, Germany supports the ICMI activities. Lena Koch is the ICMI administrator and responsible for all administrative and organisational issues regarding ICMI. Other staff members in Berlin also assist ICMI, including the IMU Secretariat manager, the accountant, the IT and technical support staff as well as the IMU archivist.

In 2013 two important ICMI events were held in the premises of the IMU Secretariat: The ICMI EC meeting in May as well as the Klein Meeting in September 2013. Both were financially supported by funds of the IMU Secretariat (German Ministry of Education and Research and the City of Berlin).

ICMI General Assembly

The next ICMI General Assembly will take place in Hamburg, Germany Saturday, 23rd July 2016.

ICMI Affiliate Organizations

ICMI's organisational outreach includes ten multi-national organisations and study groups with interest in mathematics education.

Affiliated organisations 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 Organisations also 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: International 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 International 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)

The International Congress on Mathematical Education (ICME)

ICME-13

Hamburg, Germany will host ICME-13 from 24-31 July 2016. More than 3000 participants from 80 countries are expected to participate. Professor Gabriele Kaiser, of the University of Hamburg, is chairing the International Programme Committee (IPC).

The first IPC meeting was held from June 15-21, 2013 in Schlossgut Gross Schwansee, on the Baltic Sea near Hamburg. Ferdinando Arzarello and Abraham Arcavi were present at the meeting.

Information about the congress is available at: <http://icme13.org>.

Each ICME devotes at least 10 per cent of the registration fees to the **ICME Solidarity Fund** that allows organizers to give support to some participants from developing countries. The composition of the ICME-13 Solidarity Fund Committee will consist of three ex-officio members: the Chairperson of the IPC, the Chairperson of the LOC and the ICMI Secretary-General and three other members representing the IPC (chosen by the IPC Chairperson), the LOC (chosen by the LOC Chairperson) and the ICMI EC (chosen by the EC). In 2013 the ICMI EC decided that ICMI Vice President Angel Ruiz and Abraham Arcavi, ICMI Secretary-General will represent the ICMI EC in this important committee. Other members of the grant committee are Gabrielle Kaiser (Chair of IPC), Marianne Nolte (Chair of LOC), one person representing the IPC (chosen by the chair of IPC), and one person representing the LOC (chosen by the chair of the LOC). The grants committee will meet in February 2016 to make decisions.

ICME-14

The call for intention to bid for ICME-14 in 2020 was distributed globally and resulted in three “declarations of intent to host ICME-14 2020”.

ICMI Studies

A major ICMI programme is the series of ICMI Studies. Each Study addresses an issue or topic of particular significance in contemporary mathematical education, and is conducted by an international team of leading scholars and practitioners. Built around an international conference, it is directed towards the preparation of a published volume to promote discussion and action at the international, regional or institutional level. More than 21 volumes have been published between 1986 and 2012.

The series editors 2013-2016 are ICMI President Ferdinando Arzarello and Secretary-General Abraham Arcavi as well as Vice President Cheryl Praeger.

Current Studies are:

ICMI Study 20: Educational Interfaces between Mathematics and Industry has been organised jointly with the International Council for Industrial and Applied Mathematics (ICIAM). The IPC was co-chaired by Alain Damlamian (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). The Study volume has been published under the editorship of Alain Damlamian, Rudolf Sträßer and José Francisco Rodrigues in December 2013 by Springer (NISS 16).

ICMI Study 21: Mathematics Education and Language Diversity was presented at the Study Conference place in Águas de Lindóia, São Paulo, Brazil, on 16-20, September 2011. The Study Volume has entered the editing process and will be published in 2014 or 2015 (NISS 17).

ICMI Study 22: The study on **Task Design** was launched 2010. The co-chairs are Anne Watson (Oxford University) and Minoru Ohtani (University of Kanazawa, Japan). The Study conference was held 2013 in Oxford, UK and Ferdinando Arzarello and Abraham Arcavi represented the ICMI EC.

ICMI Study 23: Primary Mathematics Study on Whole Numbers was launched in 2012, Co-Chairs are Mariolina Bartolini Bussi, University Modena e Reggio Emilia, Italy, and Sun Xuhua of the University of Macau, China. The IPC has been appointed and started working in 2013.

ICMI Regional Conferences

Launched in the mid-seventies, ICMI Regional Conferences aim to facilitate wider discussion of mathematical education issues in particular regions.

ICMI-EARCOME-6 was held in Phuket, Thailand in March 2013. Bill Barton (New Zealand) and Bernard Hodgson (Canada) participated in the conference on behalf of the ICMI EC. During the conference the upcoming CANP workshop in Cambodia (October 2013) was discussed with members of the IPC and LOC.

AFRICME the Africa Regional Congress of ICMI on Mathematical Education was launched in 2005 and aims at offering a forum for mathematics educators throughout Africa. AFRICME-4 was held June 2013 in Lesotho.

EMF (Espace Mathématique Francophone) - The sixth EMF conference, (EMF-2015) will be held 2015 in Algeria. Jean-Luc Dorier and Ferdinando Arzarello represented the ICMI-EC on the International Programme Committee (IPC) of EMF 2015, which met in Alger in April 2013.

CIAEM (Conferencia interamericana de educacion matematica) CIAEM-14 will be held in Mexico in May 2015.

The Klein Project

The Klein Project, inspired by Felix Klein's Elementary Mathematics from an Advanced Standpoint, provides contemporary mathematics for mathematics teachers.

A workshop "Elementary Mathematics from an Advanced Standpoint - Felix Klein and Mathematics for Teachers" was held in Berlin, Germany from September 17-20, 2013. The Klein workshop had 27 participants from 10 countries. Additionally a public day with secondary school teachers from Berlin and the region was held on Thursday, September 19, 2013 at the Humboldt Universität zu Berlin and more than 80 school teachers participated.

More information about the workshop can be found here:

<http://www.mathunion.org/icmi/activities/klein-project/klein-workshop-berlin-2013/>.

The Vignettes are being distributed via a Blog (<http://blog.kleinproject.org/> under the coordination of Bill Barton. The workshop was supported by the IMU Secretariat and the German Research Foundation (DFG).

Presentation of the Klein Project in Cambodia

Antoine Nectoux presented the Klein Project in Phnom Penh, Cambodia in March 2013.

Further Klein Workshops and Activities worldwide

Several Klein Workshops have been held in Brazil and Sweden in 2013.

Outreach to Developing Countries

Capacity and Networking Project (CANP)

CANP aims to enhance mathematics education in developing countries by supporting the educational capacity of those responsible for mathematics teachers, and creating sustained regional networks of teachers, mathematics educators and mathematicians, linking them to international support.

The first CANP Program, CANP EDIMath Sub Sahara Africa, was held for two weeks in 2011 in Mali with about 40 participants from five countries in the region. The follow up meeting of CANP Sub-Sahara EDIMath was successfully held in September 2012 in Senegal.

The second CANP Program, CANP Central America and the Caribbean, held its two-week workshop in 2012 with 67 researchers and educators from Colombia, Panama, Venezuela, Dominican Republic, Spain, Mexico, Cuba and host country Costa Rica. The most important result of CANP Costa Rica 2012 was the founding of the *Mathematics Education Network of Central America and the Caribbean*, which seeks to enhance capacities in Mathematics and Mathematics Education in the region. The website is: <http://redumatematicacyc.net>. In 2013 the Network met (as a follow up) in November 6th-8th in Santo Domingo, Dominican Republic.

CANP 3, South East Asia: The Third Capacity and Network Project (CANP) started with a two week workshop which was held from 14th to 25th October, 2013 in Phnom Penh, Cambodia with more than 40 participants from Cambodia, Laos, Thailand and Vietnam.

CANP 4, East Africa: The fourth CANP will be held in September 2014. The IPC and Local Organizing committee has been formed and started working in 2013.

IMU Commission for Developing Countries (CDC)

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).

In 2013 ICMI received a project grant from CDC for the Capacity and Network Project in Cambodia. Ferdinando Arzarello participated in the CDC meeting in Berlin in March 2013, where the MENAO (Mathematics in Emerging Nations: Achievements and Opportunities) symposium was discussed.

ICMI Awards

In 2003 ICMI created two awards in mathematics education research: the Felix Klein Award, for lifelong achievement in mathematics education research, and the Hans Freudenthal Award, for a major programme of research on mathematics education. These awards are announced every two years and conferred at the opening ceremonies of ICMEs. The ICMI 2013 Awards were announced in November 2013.

The recipients for 2013 of the Felix Klein and Hans Freudenthal Awards are:

Michèle Artigue (France) - The Felix Klein Medal for lifetime achievement.

Frederick Leung (China) - The Hans Freudenthal Medal for a major cumulative programme of research.



They will be presented at the ICME opening ceremony in Hamburg in July 2016.

Communication and Outreach

In 2013 ICMI has decided to reorganize its channels of communication with professional organizations and the general public, as follows:

- Issue a Newsletter (ICMI News) three times a year (July 1, November 1, March 1) in order to post news, announce activities, and present reports. The newsletter will include a short editorial and will serve to disseminate ICMI information.
- Re-negotiate with *L'Enseignement Mathématique*, traditionally linked with ICMI, to become the scientific outlet.
- Actively maintain the existing website.
- Annual report to IMU

These channels of communication will cover all our outreach and archival needs and fulfill ICMI's statutory obligations. It was unanimously decided to discontinue the production of the Bulletin, whose functions will be fully covered by the four channels described above.

The ICMI website, now hosted on the IMU server in Berlin is updated regularly. The ICMI Facebook page was established in 2011 and has more than 2450 'friends' and 780 'likes'.

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

Further Activities

ICMI Digitization Program

The ICMI Digital Library Project aims at providing open access to all ICMI publications and thematic Studies. Currently proceedings of the symposium organized in the year 2000 on the occasion of the centennial of *L'Enseignement Mathématique*, the official organ of ICMI, the first five ICMI Studies, ICMI Bulletins, and proceedings various meetings and conferences are available for free download on the ICMI website.

<http://www.mathunion.org/icmi/digital-library/introduction/>

Database Project

The Database Project, launched in 2011 has as its ultimate goal to build up a free access database of the mathematics curricula (ranging from pre-primary, primary, elementary, middle, secondary to vocational and undergraduate university level) from all over the world. Useful web links can be sent to the ICMI Secretary General. Currently information from 28 countries is available on the ICMI website. The database is already in use by researchers and curriculum-developers.

Further International Cooperation and Outreach

Ferdinando Arzarello met with Juste Jean-Paul Ngome Abiaga, UNESCO contact person, in Paris in March 2013 where he also attended the opening of the Mathematics of Planet Earth exhibition.

Ferdinando Arzarello attended the conference "21st Century Mathematics" in Stockholm, in April 2013. This meeting is considered as very important (funded by Bill Gates, attended by prominent scholars), but resulted without a definite agenda for action.

Ferdinando Arzarello attended a meeting in Moscow 2-6 October 2013 by Guenter Toerner (ICMI representative Germany) of the EMS Commission for didactics.

IMU Commission for Developing Countries and Friends of Mathematics Education Initiative

Ferdinando Arzarello participated in the IMU-CDC meeting, which was held 9-10 March 2013 in Berlin. Afterwards he also participated in the Friends of Mathematics Education (an initiative by EMS Committee for Education Symposium and supported by the Telekom Foundation) that was held March 14-15, 2013 also in Berlin, Germany.

IMU Committee on Electronic Information and Communication (CEIC)

Bill Barton participated on behalf of ICMI in the 2013 CEIC meeting in June 2013 in the UK.

Financial Summary

	ICMI Budget 2013		Sum of Category/ spending	Balances ICMI bank account
	ICMI INCOME			
	IMU Support to ICMI in 2013	€ 54,105.30		
	ICMI Balances (ICMI bank account in Berlin as o 01.01.2013)	€ 141,208.12		
	Springer Royalties for 2013	€ 328.93		
	Bank Interest 2013	€ 315.31		
	Grant from IMU - CDC 2013 CANP SEA 2013 ICMI	€ 8,000.00		
	Transfer ICMI finances from B. Hodgson	€ 7,398.94		
	ICMI additional funds for CANP 2014 Tanzania from IMU	€ 50,000.00		
	TOTAL BUDGET available for 2013:	€ 261,356.60		€ 261,356.60
	Total budget available without CANP TANZANIA	€ 211,356.60		
	ICMI EXPENSES 2013	Expenses		€ 261,356.60
ICMI President	Ferdinando Arzarello	€ 3,202.88	€ 3,202.88	€ 258,153.72
ICMI Secretary General	Abraham Arcavi	€ 1,159.50	€ 1,159.50	€ 256,994.22
ICME 12	ICME-12 Final payments	€ 1,193.76	€ 1,193.76	€ 255,800.46
ICMI Grants	MPE exhibition at UNESCO (1000 USD)	€ 764.36		
	Science Festival US	€ 407.81		
	ICMI 2013 Distribution Accromath magazine Africa (1000 USD)	€ 764.45		
		€ 1,936.62	€ 1,936.62	€ 253,863.84
Adminis- trative Cost	Annual fee credit card Service Fee	€ 47.75	€ 47.75	€ 253,816.09
ICMI Studies 19 and 22	ICMI 2013, Study 19 launch	€ 747.04		
	Transfer fees ICMI 2013, Study 19 launch	€ 36.55		
	ICMI Study 22, Grant (USD 5000) for Oxford meeting	€ 3,905.91		
		€ 4,689.50	4,689.50 €	€ 249,126.59
ICMI Study 23 IPC Meeting Berlin	Travel cost IPC member	€ 291.60	€ 291.60	€ 248,834.99
CANP Central America	CANP Central America, follow up Year 2, Meeting Dominican Republic GRANT	€ 5,000.00		

	Transfer fees CANP Central America, GRANT	€ 36.55		
		€ 5,036.55	5,036.55 €	€ 243,798.44
ICMI Meeting Berlin 2012, September (hand over)	Travel costs	€ 1,540.16	€ 242,258.28	
ICMI EC meeting	Travel cost EC members to Berlin	€ 5,849.77	€ 5,849.77	€ 236,408.51
Klein Project	ICMI 2012 Klein Project 2013 Cambodia	€ 1,261.56		
	Klein meeting Berlin	€ 699.20		
		€ 1,960.76	€ 1,960.76	€ 234,447.75
ICMI EC Meeting RIO 2014	Travel cost, EC member	€ 1,569.02	€ 1,569.02	€ 232,878.73
CANP 3 Cambodia Workshop	CANP SEA workshop in PP, Cambodia 2013	€ 40,362.84	40,362.84 €	€ 192,515.89
CANP 3 & ERCOME	Preparation CANP 3 and ERCOME ICMI EC participation	€ 4,680.80	4,680.80 €	
Total Spending 2013 and balances on the ICMI bank account			73,521.51 €	€ 192,515.89

ICMI's principal source of 'core' income is an annual grant from the International Mathematical Union (IMU) that receives its financial support from IMU member countries. ICMI is also supported by a staff member from the IMU Secretariat (part time). In 2013 ICMI also received two generous grants from the IMU Secretariat to hold its annual Executive Commission (EC) meeting (in May 2013) and a Klein meeting (in September 2013) in Berlin. The Klein Meeting was also supported by the German Research Foundation (DFG). The IMU Secretariat receives an annual subvention from the IMU Secretariat host country (Germany) to run all its administrative business. The other sources of income for ICMI are grants from various organizations and foundations. The ICMI EC approves the ICMI budget and all its related spending.

ICMI would like to thank IMU, IMU Secretariat, and the IMU Commission for Developing Countries (IMU-CDC) very much for all the support and collaboration.

More information about ICMI can be found on the website: www.mathunion.org/icmi.

Ferdinando Arzarello, ICMI President
Abraham Arcavi, ICMI Secretary- General
Lena Koch, ICMI Administrator, IMU Secretariat

April 2014
Photo credits:
Lena Koch
Michèle Artigue
Frederick Leung

3.2. Commission for Developing Countries (CDC)

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

Report on CDC activities in 2013

Herb Clemens & Lena Koch



Salt Lake City/ Berlin, 30 May 2014

Throughout 2013 the Commission for Developing Countries (CDC) has continued to use the funds it receives from the International Mathematical Union (IMU) to support mathematics research and advanced mathematical teaching in developing countries, guided by the basic principles incorporated into its original charge:

- I. Work with and support local mathematical leadership in developing countries.
- II. Leverage resources through partnering and networking with other organizations with goals compatible with the CDC mandate.
- III. Set clear norms of quality, transparency and accountability.

Guided by these principles, the CDC allocated its funds in 2013 for the following purposes:

A) Project Support

Under this category CDC supported capacity building projects and programs in mathematics and mathematics education, be they international or 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.

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 (IRT) 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 to enable them 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 Research Support Program supports travel costs for research visits (minimum stay is four weeks) by mathematicians based in developing and economically disadvantaged countries.

E) Reports on mathematics research and graduate education in emerging nations

Various CDC members have been working on three reports about the current state of mathematics in Africa, Asia and Latin America and on opportunities for new initiatives to support mathematical development. The reports will be made available in August 2014.

Administrative Costs

Administrative costs are kept to no more than 10% of the CDC operating budget. Since the CDC Administrator salary and many other administrative expenses were covered by the IMU Secretariat budget, such costs were very low in 2013.

New CDC administered programs:

IMU-Simons Travel Fellowship Program

CDC has successfully applied for support from the Simons Foundation in New York, USA and will receive annually the amount of USD 25,000 for 2014-2016 for a grant program called "IMU-Simons Travel Fellowship Program". It has been decided to replace the Individual Research Travel Grant Program from 2014-2016 with the IMU -Simons Travel Fellowship Program. The CDC Grant Selection Committee (GSC) is responsible for this program

Details of the program can be found online:

<http://www.mathunion.org/cdc/grants/simonstravelfellowship/>.

Abel Visiting Scholar Program

In 2013 the Niels Henrik Abel Board (Norway) and the CDC launched the "Abel Visiting Scholar Program". The Niels Henrik Abel Board gives an annual grant of USD 15,000 to support mathematicians professionally based in developing countries to visit an international research collaborator for a period of one month. The period is extendable for up to three months in the case of matching support from the host institution. The program is designed for postdoctoral mathematicians in the early stages of their professional careers. It is designed to offer the opportunity for a 'research sabbatical,' a necessary complement to teaching and other academic duties for mathematicians desiring to also sustain a viable research program. The Abel Visiting Scholar Program Selection Committee is responsible for this program.

Details of the program can be found online:

<http://www.mathunion.org/cdc/grants/abel-visiting-scholar-program/>.

Both program funds (IMU- Simons Travel Fellowship Program and the Abel Visiting Scholar Program) are kept separate from the CDC budget. Therefore both programs are not mentioned in detail in this report.

A) Project Support

Proposal from London Mathematical Society (LMS) regarding the MARM Project

The London Mathematical Society proposed a LMS/CDC partnership to support the continuation of the LMS project: Mentoring African Research in Mathematics (MARM)

<http://www.lms.ac.uk/grants/mentoring-african-research-mathematics>

CDC will support the program for two years with USD 15,000 per year. In 2013 the amount of **EURO 11,686.90** has been donated to MARM.

AMMSI 2012/2013 Scholarships

The CDC supported in 2013 the request from AMMSI to support the program with the amount of

USD 22,000 for the academic year 2012/2013. USD 20,000 will be used for scholarships and USD 2,000 for administration. AMMSI is a network of mathematics centers in sub-Saharan Africa that organizes conferences and workshops, visiting lectureships and an extensive scholarship program for mathematics graduate students doing PhD work on the African continent.

The AMMSI scholarship program currently needs continuous international funding to maintain its vital work of providing the continent with its next generation of mathematical leadership. In 2013 the supported students are from Kenya, Senegal, Ghana, Cameroon and Malawi.

More details can be found on the AMMSI website: <http://www.ammsi.org>.

CANP South East Asia, Cambodia

The CDC supported the Capacity and Network Project (CANP) held in Cambodia in October 2013 with **EURO 8,000**. The CANP is a program for teacher educators in developing countries and aims to foster the educational capacity of those people responsible for mathematics teachers, and create sustained and effective regional networks of teachers, mathematics educators and mathematicians, and link them to international support.

The European Women in Mathematics (EMW) Network Meeting, Germany

The EMW organized its 16th general meeting at HCM Bonn from 2nd to 6th of September 2013. EWM is a network with several hundreds of members and over 30 coordinators in Europe. The EWM general assembly also took place at this occasion. They received the amount of **EUR 2,063** to invite four mathematicians from developing countries (to cover the expenses and the travel to Bonn, Germany).

African Women in Mathematics workshop, South Africa

The CDC supported the second “African Women in Mathematics workshop” which took place at AIMS South Africa from July 17-19, 2013. The workshop was part of an initiative by the African Mathematical Union (AMU) through its « Women in Mathematics Committee » (AMUCWMA) and the International Center for Pure and Applied Mathematics (CIMPA/ICPAM). The workshop was supported with a grant of **EURO 2,259.99**.

Volunteer Lecturer Program (VLP)

The CDC supported eight lecturers under its Volunteer Lecturer Program.

1. Gonzalo Aranda Pino (Universidad de Málaga, Spain) gave a course in "Real Analysis", as part of the Master of Mathematics program of RUPP (Cambodia) from July 1 - August 3, 2013. All cost were covered by the Niels Henrik Abel Board grant.
2. Raymond Greenwell (Hofstra University, USA) gave a course in “Statistics 1”, as part of the Master of Mathematics program of RUPP (Cambodia) from May 27 – June 22, 2013. All costs were covered by USNCM.
3. Mark Gockenbach (Michigan Technological University, USA) gave a course in “Ordinary Differential Equations”, as part of the Master of Mathematics program of RUPP (Cambodia) from April 29 –May 24, 2013. All costs were covered by USNCM.
4. Dr. Guillermo Antonio Lobos Villagra (Universidad Federal de San Carlos (UFSCar), Brasil) has taught at the Universidad Pedagógica Nacional Francisco Morazán in Tegucigalpa, Honduras from October 13 to November 4, 2013 an introductory course in differential geometry. All cost were covered by the Niels Henrik Abel Board grant.
5. Brigitte Lucquin (Université Pierre et Marie Curie Paris 6, France) gave a course in “Approximation of PDE” as part of the Master of Mathematics program of RUPP (Cambodia) from January 21 to February 15, 2013. All cost were covered by the Niels Henrik Abel Board grant.
6. Rüdiger Müller (WIAS Berlin, Germany) gave a course in "Numerical Methods for Partial

Differential Equations" Dec. 2. - Dec. 21st, 2013 at Urgench State University, Urganch City, Uzbekistan. The Niels Henrik Abel board supported this course with EURO 613.13. All other cost will be covered from the CDC 2014 budget.

7. Christophe Petit (Université catholique de Louvain, Louvain-la-Neuve, Belgium) gave a course in "Cryptography and Computer Security" at the Université de Kinshasa (UNIKIN), Kinshasa, République démocratique du Congo from March 30, – April 14th 2013. All cost were covered by the Niels Henrik Abel Board grant.

8. Kasso Okoudjou (University of Maryland, College Park, USA) gave a course on "Harmonic analysis, time-frequency analysis, and wavelets" in Benin, Dangbo and Porto-Novo at IMSP from January 8 - January 24, 2014. All cost were covered by the Niels Henrik Abel Board grant.

B) Library Assistant Scheme

1. KCA UNIVERSITY in Nairobi received Mathematical Reviews of the American Mathematical Society (1971- 1996) from Prof. Dr. G. Helmbert, Innsbruck, Austria.

C) Grants for Conferences

During the interval 1 January - 31 December 2013, the Grant Selection Committee of the Commission for Developing Countries received a total of 41 applications for financial support, in the three existing categories:

- (i) Conferences in developing countries¹
- (ii) Conferences in developed countries²
- (iii) Individual research travel support

A total of **31 awards were made**, for a total value of **38,550 Euro**.

- (i) Conferences in developing countries

Support was granted in **23 cases** for conferences taking place in the following developing countries:

Country	Number of Awards	Total value of awards (Euro)
Benin	1	€ 1,000
Colombia	1	€ 2,500
Côte d'Ivoire	1	€ 1,500
Honduras	1	€ 1,125
India	6	€ 7,300
Indonesia	2	€ 2,500
Lebanon	1	€ 1,500
Mongolia	1	€ 1,125
Morocco	3	€ 3,300
Pakistan	2	€ 2,200
Palestine	1	€ 1,000

¹ 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.)

² 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.

Tunisia	1	€	1,500
Total	21	€	28,050

(ii) Conferences in developed countries

Support was granted in **3 cases** for conferences taking place in the following **developed countries**:

Country	Number of Awards	Total value of awards (Euro)
Argentina	2	€ 3,500
Russia	1	€ 1,800
Total	3	€ 5,300

(iii) Individual research travel support

Individual research travel support was granted in **6 cases**, to mathematicians from

Country	Number of Awards	Total value of awards (Euro)
Belarus	1	€ 700
Madagascar	1	€ 700
Serbia	1	€ 1000
Uzbekistan	3	€ 2,800
Total	6	€ 5,200

The Grants Selection Committee had the amount of **45,419 Euro** available for grants:

Income 2013	
CDC allocation to GSC (former CDE) Grants including the support from the Niels Henrik Abel Board*.	€ 45,000
Unspent funds 2012	€ 419
Total fund available 2013	€ 45,419

*The Niels Henrik Abel Board supported the CDC Grants program with 21,771.70 €.

Income vs. Expenses Conference Grants

Income	Expenses
€ 45,419	€ 38,550

Savings Grants 2013 (will be rolled over to 2014): € 6,869

E) ResearchRegional Reports

The editors of the regional reports continue to work on them. Additional editing within the regions was done until September 1, 2013. The reports should be approved in final form by August 2014 and made available during the MENAO symposium at the ICM 2014 in Seoul, Korea.

AdministrationCDC Meeting, March 2013, Germany

In 2013 the members of the Commission for Developing Countries met in March in Berlin, Germany at the premises of the IMU Secretariat. Most expenses (Euro 12,799.15) were covered from the IMU

Secretariat, WIAS Berlin funds. The cost for the CDC budget was only EURO 1,390.78. The CDC is very thankful for this generous support and would like to express its sincere thanks to the IMU Secretariat and all staff members for their support of the meeting.



Further Activities: MENAO

In 2010 the 16th General Assembly of the International Mathematical Union, Bangalore, India, passed a resolution #6, to hold a “donors conference” at the next ICM. At the joint meeting of the CDC and the IMU EC in March 2013, IMU and CDC decided to hold the “Mathematics in Emerging Nations: Achievements and Opportunities” (MENAO) symposium on August 12, 2014 in Seoul, Korea, the day before the opening of ICM 2014. The MENAO symposium will feature personal stories from a variety of mathematicians, country-specific development stories – both from the perspective of mathematicians in developing countries and from the perspective of their international partners – as well as an insight into the state of mathematics in Korea and its influence on economic development.

A subcommittee was set up and started working in 2012. No cost occurred in 2013.

CDC Budget and Finances 2013

	Category	Year	Total Amount (EURO to Ind.)	
Income				
IMU allocation to CDC for 2013	General Income	2013	73,469.70	
Niels Henrik Abel Grant to CDC for 2013	Special Income	2013	34,567.30	
Japanese Mathematical Society Support (retrospectively for 2012)	Special Income	2013	1,227.96	
Swiss Mathematical Society (retrospectively for 2012)	Special Income	2013	525.39	
Additional allocation from IMU (for 2013 and 2014)*	Special Income	2013	100,000.00	
Returned funds from 2012	Income	2013	42.46	
Total Income 2013 CDC			209,832.81	
Savings from 2012				
2012 Savings GCS	Savings		419.00	
Saving CDC 2012	Savings		61,211.00	
Total funds available for 2013			271,462.81	
Expenditure in 2013**				Account Balance in Euro
CDC allocation to GSC (former CDE)	Grants Program CDC	2013	450,00.00	226,462.81
CDC allocation to GSC (former CDE) unspent funds from 2012	Grants Program CDC	2013	419.00	226,043.81
VLP Brigitte Lucquin	VLP Cambodia	2013	1,315.88	224,727.93
VLP Rüdiger Müller	VLP Uzbekistan	2013	613.13	224,114.80
VLP Guillermo Antonio Lobos Villagra	VLP Honduras	2013	3,341.00	220,773.80

VLP Gonzalo Aranda Pino	VLP Cambodia	2013	3,234.22	217,539.58
VLP Congo Christophe Petit	VLP Congo	2013	1,925.26	215,614.32
VLP Kasso Okoudjou	VLP Benin	2013	2,366.11	213,248.21
AMMSI 2012/2013 Scholarships	Project Support	2013	16,446.00	196,802.21
The European Women in Mathematics Workshop Bonn	Project Support	2013	2,063.00	194,739.21
CANP South East Asia Project Support	Project Support	2013	8,000.00	186,739.21
MARM Support 2013 London Mathematical Society	Project Support		11,686.90	175,052.31
Library assistant scheme Kenya	Library assistant scheme	2013	936.00	174,116.31
Expenses for Regional Reports	Research	2013	7,788.53	166,327.78
CDC meeting Berlin	Administrative Cost	2013	1,390.78	164,937.00
Ragni Piene Travel cost	Administrative Cost	2013	332.48	164,604.52
Account Maintenance Charge and bank transfer fees	Administrative Cost	2013	1,380.35	163,224.17
African Women Mathematician Workshop at AIMS in South Africa	Project Support	2013	2,259.99	160,964.18
Total expenditure in 2013**			110,498.63	504,65.55
				504,65.55
Savings 2013			160,964.18	160,964.18

* This special grant has to be spent (distributed) until 31.12.2014.

**Partially transferred in 2014.

In 2013 CDC received from IMU a special grant of EURO 100,000.00 that has to be distributed by 31.12.2014. It is planned to meet the deadline and distribute those funds by 31.12.2014. The CDC members will take final decisions after the MENAO symposium in August 2014 in Seoul Korea.

CDC's principal source of 'core' income is an annual grant from the International Mathematical Union (IMU) that receives its financial support from IMU member countries as well a generous grant from the Niels Henrik Abel Board (Norway). CDC is also supported part time by a staff member from the IMU Secretariat (WIAS Berlin). As in the past years CDC received a generous donation from the Swiss Mathematical Society and the Japanese Mathematical Society. In 2013 CDC also received a grant from the IMU Secretariat (WIAS Berlin) to hold a meeting (in March 2013) in Berlin. The IMU Secretariat receives an annual subvention from the IMU Secretariat (WIAS Berlin) host country Germany, to run all its administrative business.

CDC would like to thank IMU, IMU Secretariat at the WIAS Berlin, the Niels Henrik Abel Board, the Swiss Mathematical Society and the Japanese Mathematical Society very much for all the support and collaboration.

CDC would also like to thank the Simons Foundation who has given in 2013 a grant for the new established IMU-Simons Travel Fellowship Program, which has been launched in 2014.

More information about CDC can be found on the website: <http://www.mathunion.org/cdc/>.

We look forward to future collaboration.

Herb Clemens, Secretary for Policy CDC
Lena Koch, CDC Administrator, IMU Secretariat
May 2014

List of GSC Supported Activities in 2013

Country and Kind of Support	Name of Conference or Host Country for Individual Support	Amount of Support EURO
Argentina	<u>CIMPA Research School</u> : 'New methods in Harmonic Analysis, Sparse Representations, Compressed Sensing and Multifractal Analysis'. This event will take place between the 5th and 16th of August, 2013 at the Hotel Dora, in Mar del Plata, Argentina.	1,500
Argentina	The 37th Conference on Stochastic Processes and their Applications. This event will take place in Buenos Aires, Argentina from July 28 - August 01, 2014.	2,000
Benin	<u>CIMPA School Benin 2014</u> on Algebraic Number Theory and Applications Duration: 2014-07-06 - 2014-07-19 to be held at the L'Institut de Mathématiques et de Sciences Physiques (IMSP) in Dangbo, Benin.	1,000
Belarus > China	Yury Muranov (Institution: Grodno State University) research visit to Renmin University of China from: 09/15 – 10/14. 2013	700
Colombia	<u>CIMPA Research School and Workshop</u> on Real Algebraic Geometry. This event will take place July 13 – 26, 2014 in Villa de Leyva, Colombia.	2,500
Côte d'Ivoire	<u>CIMPA Research School</u> on Analysis and Probability Theory, Duration: 2014-03-17 - 2014-03-28.	1,500
Honduras	VI Escuela de Matematica de America Latina y el Caribe (VI EMALCA), Duration: 2013.06.27 – 2013.07.05 to be held in Honduras.	1,125
India	<u>CIMPA Research School</u> on Current Trends in Computational Methods for PDEs, held from 2013-06-24 –until 2013-07-19 at the Institute of Science Bangalore, India.	1500
India	<u>CIMPA Research School</u> on Fourier Analysis of Groups in Combinatorics held from the 18th to 30th November 2013 in Shillong, India.	1,150
India	International Conference & Workshop on Fractals and Wavelets held from 2013-11-09 until 2013-11-16 in Cochin, India.	1,150
India	<u>ICPAM - CIMPA Research School</u> "Generalized Nash Equilibrium Problem, Bilevel Programming and MPEC" to be held in New Delhi, INDIA from 2013-11-25 - 2013-12-06.	1,500
India	Thirteenth Discussion Meeting on Harmonic Analysis, Duration 2013-12-16 - 2013-12-19 held in Kelambakkam, Tamil Nadu, India.	1,000
India	Eighth International Conference and Instructional Workshop on Matrix Analytic Methods in Stochastic Models. Duration: 2014-01-06 - 2014-01-10 and to be held at the National Institute of Technology, Calicut, Kerala, INDIA.	1,000
Indonesia	SEAMS SCHOOL ON NUMBERS, MATRICES AND GRAPHS (INDONESIA) Duration: 2013-11-04 - 2013-11-16.	1,500
Indonesia	<u>CIMPA-INDONESIA Research School</u> in Mathematical and Statistical Methods in Mathematical Imaging held in Indonesia. August 25 – September 5, 2014	1,000
Lebanon	<u>CIMPA Research School</u> in the field of differential geometry entitled « Elliptic problems and applications in geometry» from February 24 to March 6, 2012 at the Lebanon University in Beirut.	1,500
Madagascar> Austria	Fanja Rakotondrajao (Madagascar): Research stay at the University of Vienna from March 10 - June 10, 2013.	700
Mongolia	Conference 'Optimization, Simulation and Control' Duration: 2013-07-01 - 2013-07-04, to be held at National University of Mongolia.	1,125
Morocco	Conference GeToPhyMA-2014: The main focus of this research program will be on the interaction between Geometry, Topology and Mathematical Physics. Marrakesh, Morocco during June 03 and June 06, 2014.	750
Morocco	First Euro-Mediterranean Workshop on Meshless Methods held in MOROCCO during 2013-09-23 and 2013-09-25.	750
Morocco	Workshop (05/05 to 08/05) followed by <u>CIMPA School</u> (09/05 to 17/05) on Nonlinear PDE and Applications.	1,800
Palestine	<u>CIMPA Summer School</u> on Analysis of Random Structures. This event	1,000

	will take place August 18 – 28, 2014 at the University An Najah in Nablus, Palestine	
Pakistan	International Workshop on Discrete Structures (IWODS) to be held 2014-03-05 until 2014-03-07.	1,200
Pakistan	Conference on Symmetries, Differential Equations and Applications (SDEA-II). Duration: 2014-01-27 - 2014-01-30 to be held at the Center for Advanced Mathematics and Physics (CAMP) Islamabad.	1,000
Russia	International Conference "Differential Equations. Function Spaces. Approximation Theory" The conference will be held at the Sobolev Institute of Mathematics in Novosibirsk, August 18-24, 2013.	1,800
Serbia	Conference on Constructive Mathematics: Foundations and Practice to be held in Niš, Serbia, on 24-28 June 2013.	1,500
Serbia > India	Ljubica Velimirovic (Serbia): Research visit from 01.-31.December 2013 at the Department of Pure Mathematics, University of Calcutta, to give lectures for researchers in field of Differential Geometry and prepare joint papers with colleagues and professors.	1,000
Tunisia	<u>CIMPA School</u> (International Centre for Pure and Applied Mathematics) coupled with the biennial conference of the ANR (National Research Agency) under the heading "Lévy Processes and Selfsimilarity." This event will take place in Tunis and Hammamet during October 28 and November 9, 2013.	1,500
Uzbekistan>Slovakia	Gayrat Urazboev, research visit at the Comenius University Bratislava, Department of Mathematical Analysis and Numerical Mathematics in Bratislava, Slovakia from February 8 to March 3, 2014.	1,000
Uzbekistan> Germany	Utkir Rozikov for a visiting position at the Ruhr-University Bochum from July 07 – December 06, 2013.	900
Uzbekistan > Spain	Bakhrom Omirov Institute of Mathematics, National University of Uzbekistan: Research visit to the University of Seville.	900

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

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

Report on the ICHM Activities in 2013

Craig Fraser, Chair

Activities:

The Executive Council of the ICHM had four electronic meetings (E-meetings) in 2013. In addition, the ICHM held an Open Meeting at the 24th International Congress of History of Science, Technology and Medicine that was held in Manchester, UK in July of 2013. This congress was organized by the International Union of History and Philosophy of Science (IUHPS)/ Division of History of Science and Technology (DHST). The ICHM is a member commission of both the IMU and the IUHPS/DHST. The administrative schedule and activities of the ICHM are coordinated with the IUHPS/DHST.

Executive officers of the ICHM serve four-year renewable terms, these terms coinciding with the four years between the International Congresses of the IUHPS/DHST... A committee was formed in March to nominate a slate of officers for the four years 2013-2017. A slate of candidates was voted on at the June E-meeting of the Executive Committee of the ICHM. The results were announced at the Open Meeting of the ICHM at the Manchester Congress. At this meeting reports of the Chair, Secretary and Treasurer were delivered.

The executive officers serving for 2013-2017 are Craig Fraser (Chair), June Barrow-Green (Vice-Chair), Elena Ausejo (Secretary) and Henrik Kragh Sørensen (Treasurer).

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 co-sponsored several symposia on the history of mathematics for the 24th International Congress in Manchester. These symposia were:
 - a. Mathematics and Patronage
 - b. Mathematical Knowledge at Work in Ancient China
 - c. The History and Philosophy of Mathematical Optimization
 - d. Introduction of Modern Mathematics in Iberoamerica
 - e. The Institutionalization of Mathematics and the Founding of National Societies
 - f. Poincaré's Méthodes nouvelles de la mécanique céleste in historical context: bridging the frontiers of knowledge in mathematics, astronomy and wireless

technology, 1892-1914.

More information to be found at <http://www.ichstm2013.com/>.

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 **Thomas Archibald (Canada)**. It is published by Elsevier Science and is available electronically to subscribers of IDEAL.

Conferences co-sponsored by the ICHM in 2013:

Sessions on history of mathematics at the Joint Meeting of the American Mathematical Society and the Mathematical Association of America (January 9-12, 2013 in San Diego, USA).

Organizers: Patti Hunter (Westmont College), Deborah Kent (Drake University), Adrian Rice (Randolph-Macon College).

24th Novembertagung on the History of Mathematics, hosted by the Open University at De Morgan House, London, UK on 20th–22nd November 2013.

Organizers: Rosie Cretney and Mairi Walker (Open University).

Printing mathematics in the early modern world (December 16-17, 2013; All Souls College, Oxford, UK).

Organizer: Benjamin Wardhaugh (Oxford University).

Reports on these conferences are posted on the ICHM website
<http://www.unizar.es/ichm/activity.htm>.

ICHM Prizes:

The ICHM awards two prizes every four years at the International Congress of the History of Science and Technology. These are the **Kenneth O. May Prize**, awarded to an historian or historians of mathematics for outstanding contributions to the history of mathematics; and the **Montucla Prize**, awarded to the author of the best article by a junior scholar published in *Historia Mathematica* in the four years preceding the International Congress.

Committees were established in 2012 to select winners of these prizes for 2013. The recommendation of the May Prize Committee was ratified by the Executive Council at the December E-meeting of 2012. The result was announced at the Open Meeting of the ICHM held at the 24th ICHSTM in Manchester in July of 2013. The recommendation of the Montucla Prize Committee was ratified at the March 2013 E-meeting of the EC. The result was also announced at the Open Meeting of the ICHM at the Manchester Congress. Detailed information concerning these prizes is posted on the ICHM website

<http://www.unizar.es/ichm/reports/manchester13.html>,

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

The announcement of the winners of the prizes and the citations for them have also

been published in the journal *Historia Mathematica*.

Craig Fraser
March 2014

3.4. Committee on Electronic Information and Communication (CEIC)

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

CEIC Activity Report 2013

Peter Olver, Chair

Members and terms

- Thierry Bouche, UFR de Mathématiques, Institut Fourier, Université de Grenoble I, Grenoble, France (2011-2014)
- Olga Caprotti, Department of Computer Science and Engineering, University of Helsinki, Finland (2008-2016)
- Tim Cole, Grainger Engineering Library Information Center, University of Illinois at Urbana-Champaign, USA (2013-2016)
- James Davenport, Departments of Computer Science and Mathematical Sciences, University of Bath, UK (2008-2016)
- Carol Hutchins, Courant Institute, New York University, USA (2008-2016)
- László Lovász, Department of Computer Science, Eötvös Loránd University, Budapest, Hungary (2011-2014)
- Peter Olver, School of Mathematics, University of Minnesota, Minneapolis, USA (Chair) (2008-2014)
- Ravi Vakil, Department of Mathematics, Stanford University, USA (2011-2014)

Meetings

The annual meeting of the CEIC took place in Bath, UK on June 15-16, 2013. Attending: Peter Olver (Chair), Thierry Bouche, Olga Caprotti, James Davenport, Carol Hutchins, László Lovász, Ravi Vakil. Minutes can be found on the CEIC web page

<http://www.mathunion.org/ceic/about/meetings-and-minutes/>.

The next meeting of CEIC has been scheduled for July 12-13, 2014 in Berlin.

Terms of References

Following input from CEIC at the Bath meeting, the EC in March 2014 approved new terms of reference for the committee, to be adopted by the GA at ICM 2014.

CEIC web site

The permanent CEIC web pages on the IMU Berlin web site were made active on January 28, 2013, and are at

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

Archiving

The IMU Archiving Guidelines based on the CEIC recommendations were endorsed by the IMU EC at its meeting in Berlin on March 11/12, 2013. They will be presented to the 17th IMU General Assembly in 2014. The IMU Web Pages are being archived every week. The archiving process in Berlin is not yet capable of handling confidentiality requirements, and some papers are in bad physical condition. The CEIC is investigating what is missing in the IMU archives.

Copyright

CEIC further investigated questions of copyright policies of photos, videos, recordings, etc.

Social Media and News

IMU Net continues to be edited by Mireille Chaleyat-Maurel. Six regular issues plus a special issue on NANUM appeared in 2013.

The Wikipedia article on the IMU was updated and improved by Lena Koch:

http://en.wikipedia.org/wiki/International_Mathematical_Union.

Journal blog

Following last year's closing of the IMU/ICIAM Journal Blog, CEIC has discussed starting a new blog, for possibly other topics of interest to IMU, using a different software platform, but no firm decisions have been made to date.

World Heritage Digital Mathematics Library

The results of the Sloan-funded, CEIC-organized workshop that took place June 1-3 at the National Academy of Sciences (NAS) in Washington DC can be seen at the Conference Wiki

http://ada00.math.uni-bielefeld.de/mediawiki-1.18.1/index.php/Main_Page.

Following the workshop the Sloan funded NAS Committee was appointed, and includes Ingrid as co-chair and Peter as member. The NAS report was published in March, 2014, and is available at

http://www.nap.edu/catalog.php?record_id=18619.

The IMU owns the internet site <http://www.wdml.org>, which is currently empty. There are plans to create a sub-page of CEIC for WDML, and make <http://www.wdml.org/> point to that until the WDML becomes a separate organization.

A WDML Panel is being organized by CEIC for the ICM — see below.

Online education and MOOCs

Bill Barton from ICMI attended the Bath meeting of CEIC and presented a report written by himself, Ferdinando Arzarello, and John Toland on Massively Open Online Courses

(MOOCs). The report discusses history, advantages, disadvantages, and the potential as transformative teaching tools. Following the discussion, the CEIC produced an “Executive Summary” containing recommendations for an extended version of the report. The current version of the report is posted:

http://www.mathunion.org/fileadmin/CEIC/Minutes/MOOCs - A Preliminary Report for CEIC v2_001.pdf.

In addition, a Panel to discussion on MOOCs and online education is being organized by CEIC for the ICM — see below.

ICSU

The IMU is a member of the International Council for Science (ICSU). In response to a request to the IMU from ICSU President John Ball, the CEIC prepared a short statement answering questions on open access to the scientific literature.

World Data System

CEIC is now officially an associate member of the WDS. Olga Caprotti continues to serve as the Committee's liaison.

ICM Panel Discussions

CEIC will be organizing three evening panel discussions at the upcoming International Congress ICM 2014, Seoul, Korea.

1. A Panel Discussion of MOOCs (Massive Open Online Courses) and new developments in online education, to be held in conjunction with the “How can we teach better” panel/round table to be organized by ICMI.

6:00-7:30pm on August 18, 2014

Moderator: James Davenport

1. Bill Barton
2. Robert Ghrist
3. Matti Pauna
4. Angel Ruiz

2. A Panel Discussion on the Future of Mathematical Publishing. This will include such topics as open access, publishing costs and ethics, the cost of knowledge boycott, new models of publishing, and so on.

6:00-7:30pm on August 19, 2014

Moderator: Jean-Pierre Bourguignon

1. Rajendra Bhatia
2. Jean-Pierre Demailly
3. Chris Greenwell
4. Thomas Hintermann
5. Nalini Joshi
6. Ravi Vakil

3. A presentation and Panel Discussion on the World Digital Mathematics Library, covering recent initiatives funded by the Sloan Foundation, including a workshop at the National Academy of Sciences in 2012, a Report issued by the National Research Council in March, 2014, and recent developments.

6:00-7:30pm on August 20, 2014

Moderator: Peter Olver

1. Thierry Bouche
2. Ingrid Daubechies
3. Gert-Martin Greuel
4. Rajeeva L. Karandikar
5. June Zhang

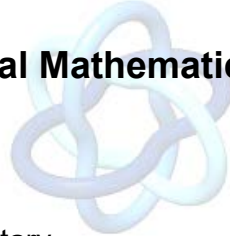
Expenditure

In the calendar year 2013, EUR 8,612 was received from the IMU budget to cover expenditure related to the Bath meeting of CEIC.

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

IMU AO Circular Letter 1/2013

International Mathematical Union



April 16, 2013

IMU AO Circular Letter 1/2013

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

Announcement of the MENAO event

Dear colleagues,

This message is to announce the “MENAO event” and to ask for the support of the IMU Adhering Organizations to identify suitable participants in this event. Please give attention and thought to what is outlined below.

In compliance with Resolution 6 passed by the 16th General Assembly of IMU, Bangalore, India, in 2010, the International Mathematical Union announces the one day event:

MENAO

**Mathematics in Emerging Nations:
Achievements and Opportunities**

**COEX Convention & Exhibition Center, Seoul, Korea
Tuesday, August 12, 2014**

The MENAO event, which features about 100 participants/discussants and is open to an additional 350 observers, will take place on the day immediately preceding the opening of the 2014 International Congress of Mathematicians.

The Republic of Korea (South Korea), the host country for ICM 2014, has experienced a remarkable mathematical development over the last 50 years, one that proceeded hand-in-hand with its economic and educational development. As an act of solidarity with their colleagues in emerging nations, the Korean ICM hosts are currently inviting 1,000 mathematicians and advanced mathematics graduate students from the developing world to attend ICM 2014 (“NANUM 2014” invitation program). The participation of these invitees in the Congress will be fully paid for by Korean corporate and other donors. For further information see:

http://www.icm2014.org/contents.asp?cate_m=20101202_7&cate_s=20101206095752088.

We are all aware of the fact that the presence of mathematical talent and interest in the mathematical sciences is still largely unattended to in many places in the world. The NANUM 2014 invitees in Seoul for the Congress will give the world's mathematics community, as well as governmental and nongovernmental parties supporting mathematical development, an unprecedented opportunity to learn what has been, what can be, and what still needs to be accomplished to bring mathematical opportunity within the reach of young talent in many developing countries. As well as being a potentially

vast resource for development in their own nations, these aspiring young people also represent a potentially vast resource for the mathematics profession worldwide.

The goal of the MENAO event is

- to listen to the voices of mathematicians and aspiring advanced students of mathematics from the developing world,
- to share success stories of development via partnerships between the local mathematical communities, their governments, and international agencies and foundations, and
- to review the current status of those efforts and future needs.

The latter topic will be consolidated in a series of recently written “regional reports” that IMU will make available at the MENAO event.

Moreover it is IMU's hope that the MENAO event will be the beginning of new success stories!

Bringing together, in an environment like this, those who are in need with those who are willing to support may create a stimulus for partnerships that will benefit the developing world and mathematics in general.

The MENAO event will feature personal stories of mathematicians, country-specific development stories, both from the perspective of mathematicians in those countries and from the perspective of their international partners, as well as an in-depth look at the Korean story as narrated by key figures in the various stages of its mathematical development. Finally, relationships between mathematical development and economic development elsewhere in the world will be explored.

MENAO participants/discussants will take part by invitation, observers will be admitted via registration on a first-come first-served basis. The registration process will be explained in a future announcement.

The leadership of the International Mathematical Union wishes to make MENAO a premier event, of compelling interest to all organizations, governmental agencies, and individuals that have contributed to international mathematical development or are potentially interested in doing so.

In order to help us assemble the final list of participant/discussant invitees, we request IMU Adhering Organizations to identify and recommend to the IMU a small, select list of such agencies, organizations, and individuals.

We would appreciate receiving this information before **September 1, 2013**.

For further information, contact by e-mail:

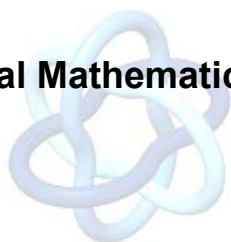
Herbert Clemens
 Secretary for Policy, Commission for Developing Countries
 International Mathematical Union
 clemens.43@osu.edu
 icmi.cdc.administrator@mathunion.org.

Sincerely

Martin Grötschel
 IMU Secretary

IMU AO Circular Letter 2/2013

International Mathematical Union



May 30, 2013
IMU AO Circular Letter 2/2013

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

Call for nominations for the offices of

- **IMU Vice Presidents and IMU EC Members-at-Large**
- **President, Secretaries and Members-at-Large of CDC**
- **IMU Representatives to ICHM**

for the term 2015-2018

Dear colleagues,

Further to my call for nominations for the offices of President and Secretary of IMU, see [IMU AO Circular Letter 10/2012](#), I am now inviting IMU's Adhering Organizations and Committees for Mathematics to submit names for the offices of the

- IMU Vice Presidents and IMU Executive Committee Members-at-Large
(The General Assembly will elect 2 Vice Presidents and 6 Members-at-Large.)
- President, Secretaries and Members-at-Large of the Commission for Developing Countries (CDC)
(1 President, 1 Secretary for Policy and 1 Secretary for Grant Selection, and 3 Members-at-Large, in representation of Africa, Asia, and Latin America (see Terms of Reference as approved through postal ballot 02/09) will be elected by the General Assembly.)
- IMU Representatives to the International Commission on the History of Mathematics (ICHM)
(2 IMU Representatives to ICHM will be elected by the General Assembly.)

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

Please consult the IMU [Procedures for Election](#) and send your nominations

by November 15, 2013

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

E-mail: ragnip@math.uio.no FAX: +47 22 85 43 49

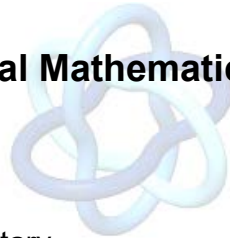
Postal address: Professor Ragni Piene
University of Oslo
Faculty of Mathematics and Natural Sciences
Department of Mathematics
P.O. Box 1053 Blindern
NO-0316 Oslo, Norway

Sincerely

Martin Grötschel
IMU Secretary

IMU AO Circular Letter 3/2013

International Mathematical Union



June 12, 2013

IMU AO Circular Letter 3/2013

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

**ICM 2014 invitation program “NANUM 2014”
Travel grants for 1,000 mathematicians**

Online submission system for travel grants applications is activated now

Dear colleagues,

My circular letter 1/2013 drew your attention, besides the MENAO event, to the ICM 2014 invitation program *NANUM 2014* that the Organizing Committee of ICM 2014 offers to invite 1,000 mathematicians in developing countries to Korea to participate in ICM 2014.

NANUM means “generous sharing” in Korean. Travel grants awarded will be in the range of approximately US\$1,500 - US\$2,500 per person according to the regional groups, making the total sum of US\$2 million under this program. The application and selection procedures for *NANUM 2014* will be based on merit and with due regard for gender and geographical balance. The ICM 2014 Organizing Committee will only consider applications for support made by individual mathematicians with a Ph.D. or equivalent.

Applications can only be submitted online, the online submission system is active now, see <http://www.icm2014.org/en/participants/mathematicians> for more details, e.g., the prerequisites to be eligible for a travel grant.

The direct link to enter the online application process is <http://www.nanum2014.org/home.php>.

Login with username (e-mail) and password is the first step to start the online submission.

Important dates:

- Deadline for applications: August 31, 2013
- Review of applications completed: December 31, 2013
- Notification to applicants of acceptance: January 2014

In case of questions, e-mail has to be sent to: icm@icm2014.org.

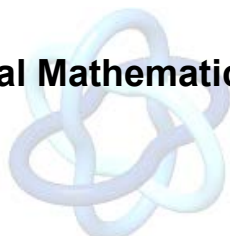
Please spread the information about the *NANUM 2014* travel grant program and encourage everyone considered to be eligible to submit an application for an ICM 2014 travel grant.

Best wishes

Martin Grötschel
IMU Secretary

IMU AO Circular Letter 4/2013

International Mathematical Union



August 26, 2013

IMU AO Circular Letter 4/2013

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

ICSU request concerning national science advisors

High-level meeting of national-level science advisors - an ICSU proposal

Dear colleagues,

I am forwarding to you in the attachment a letter from the International Council for Science (ICSU) to the union members of ICSU describing a new ICSU project entitled "High-level meeting of national-level science advisors". I attach, moreover, the draft of the associated project proposal.

ICSU plans to hold a meeting of national-level science advisors of the countries that are represented in ICSU. This high-level meeting is supposed to be staged in August 2014 in conjunction with the 31st ICSU General Assembly to be held in New Zealand.

ICSU requests the unions to contact their member countries and ask the adhering organizations to identify suitable persons for such a meeting.

I have contacted John Ball, the former IMU president, who currently is a member of the IMU Executive Board. John thinks that this project - to have a first meeting and make it a more permanent activity - is a very good idea to improve the links and connections between science advisors around the world. He asked me, particularly, to request your support for this plan.

Some countries around the world have national science advisors (who usually participate in cabinet meetings and the like in order to support a country's political strategy concerning science, education and technology and, thus, have significant influence). Many other countries do not have such a position, but may have a minister of science, science and technology, science and education or the like, instead. These ministers typically play a broader role, but may have deputy ministers (or representatives in a similar role) who might be considered as an equivalent to national science advisors.

My request to the adhering organizations is to try to identify such persons and to contact the government (in your country) to point out that ICSU is planning this high-level meeting in New Zealand in August next year and to ask the government to send a representative to this meeting.

More details can be found in the attached documents.

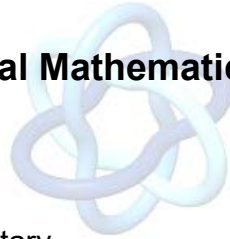
May I ask you to send your proposals to Maureen Brennan (email: Maureen@icsu.org) by September 6, 2013?

Best regards,

Martin Grötschel
IMU Secretary

IMU AO Circular Letter 5/2013

International Mathematical Union



August 26, 2013
IMU AO Circular Letter 5/2013

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

32nd General Assembly of ICSU in 2017

Dear colleagues,

I am forwarding to you another request from ICSU. ICSU is looking for a location willing to host the ICSU General Assembly in 2017.

The e-mail below and the document in the attachment describe the associated details.

May I ask you to forward this information to an organization/institution in your country that may be interested in hosting this event?

Best regards

Martin Grötschel

Von: Tish BAHMANI FARD [mailto:tish@icsu.org]

Gesendet: Montag, 26. August 2013 12:15

An: icsu-imu@mathunion.org

Betreff: 32nd General Assembly of ICSU

To: National Members of ICSU

c.c. ICSU Scientific Unions for information

Further to my message of 16 May 2012 (please see below), we have to date not received any firm offers to host the 32nd General Assembly of ICSU in 2017. The Executive Board has, therefore, decided to reiterate this call and we would appreciate receiving at least preliminary indications of interest in hosting this by **31 December 2013** at the latest.

I look forward to hearing from you.

Tish Bahmani Fard

De : Tish BAHMANI FARD

Envoyé : mercredi 16 mai 2012 18:49

À : Tish BAHMANI FARD

Objet : 32nd General Assembly 2017

To: National Members of ICSU

c.c.: ICSU Scientific Unions

The 28th General Assembly of in October 2005, recognized "the need to meet in different regions of the world"; and agreed that a six-year planning horizon for General Assemblies was desirable.

Since 1990 ICSU has held, or will hold, General Assemblies in the following locations:

31st GA New Zealand	August-September 2014
30th GA Rome, Italy	September 2011
29th GA Maputo, Mozambique	October 2008
28th GA Suzhou/Shanghai, China	October 2005
27th GA Rio de Janeiro, Brazil	September 2002
26th GA Cairo, Egypt	September 1999
25th GA Washington DC, USA	September 1996
24th GA Santiago, Chile	October 1993
23rd GA Sofia, Bulgaria	October 1990

Offers are now solicited to host the 32nd General Assembly in 2017 and I attach a brief description of the Assembly and the practical requirements necessary for its functioning.

We would appreciate receiving expressions of interest to host this Assembly, preferably electronically, no later than 31 December 2012 in order that the Executive Board may consider them at its meeting in early 2013. Decisions on the venue of General Assemblies are normally-made by the General Assembly and would be on the Agenda of the Assembly in 2014 in New Zealand.

Please send expressions of interest to <tish@icsu.org> and do not hesitate to contact me if you have any queries.

With kind regards.

Tish Bahmani Fard

Tish Bahmani Fard | Assistant Executive Director
International Council for Science (ICSU)
5 rue Auguste Vacquerie, 75116 Paris, France
Tel. +33 1 45 25 03 29 | Fax. +33 1 42 88 94 31 | tish@icsu.org | www.icsu.org
Follow us on Twitter @ICSUnews

IMU AO Circular Letter 6/2013

International Mathematical Union



November 18, 2013
IMU AO Circular Letter 6/2013

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.

The Ramanujan Prize for young mathematicians from developing countries has been awarded annually since 2005. It was originally instituted by ICTP, the Niels Henrik Abel Memorial Fund, and the International Mathematical Union (IMU). The participation of the Abel Fund ended in 2012; the 2013 Prize was jointly funded and administered by ICTP and the IMU. This will continue to be the case in 2014, though alternate sources of funding are being explored.

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. The Prize is awarded annually to a researcher from a developing country who is less than 45 years of age on 31 December of the year of the award, and who has conducted outstanding research in a developing country. For the details of the nomination please see the attached call.

February 1, 2014 is the deadline for nominations.

Nominations are to be sent to math@ictp.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. The call can also be found at <http://www.ictp.it/about-ictp/media-centre/news/>.

With best wishes

Martin Grötschel
IMU Secretary

**The Ramanujan Prize
for Young Mathematicians from Developing Countries**

Call for Nominations for the 2014 Prize

The Ramanujan Prize for young mathematicians from developing countries has been awarded annually since the first winner was announced in 2005. The 2014 Prize will be funded and administered jointly by the Abdus Salam International Centre for Theoretical Physics (ICTP) and the International Mathematical Union (IMU).

The Prize winner must be less than 45 years of age on 31 December of the year of the award, and have 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. The winner will be invited to the ICTP to receive the Prize and 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.

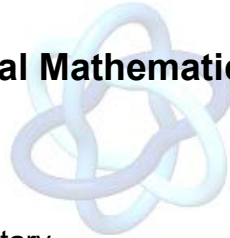
The Selection Committee will take into account not only the scientific quality of the research, but also the background of the candidate and the environment in which the work was carried out. The Committee consists of eminent mathematicians appointed in consultation between the ICTP and the IMU.

The deadline for receipt of nominations for the 2014 Prize is 1 February 2014.

Please send nominations to math@ictp.it describing the work of the nominee in adequate detail. Nominations should include a CV and a list of publications, as well as a letter of recommendation. Additional supporting letters are encouraged. Self-nominations are strongly discouraged.

IMU AO Circular Letter 7/2013

International Mathematical Union



November 27, 2013
IMU AO Circular Letter 7/2013

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

Call for applications for the Heidelberg Laureate Forum 2014

Dear colleagues,

The first Heidelberg Laureate Forum (HLF) which took place from September 22 until 27, 2013, see the IMU Circular Letters 5/2012 and 14/2012, turned out to be a very successful event. It brought together outstanding students in mathematics and computer science with winners of the most prestigious awards in these two disciplines: Abel, Fields, Nevanlinna, and Turing Laureates.

The Heidelberg Laureate Forum was started by the Klaus Tschira Stiftung and is being organized by the Heidelberg Laureate Forum Foundation in cooperation with

- The Norwegian Academy of Science and Letters
- The Association for Computing Machinery
- The International Mathematical Union

which are the awarders of the prizes mentioned.

Detailed information about the Heidelberg Laureate Forum can be found at <http://www.heidelberg-laureate-forum.org/>.

The call for applications for the 2nd Heidelberg Laureate Forum has been released recently, see attachment and https://application.heidelberg-laureate-forum.org/intern/start_start_for.php.

The application deadline is February 28, 2014.

The Heidelberg Laureate Forum is a unique opportunity for excellent young mathematicians and computer scientists to meet eminent experts from both fields in a very special environment and atmosphere.

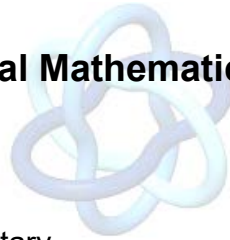
I would be happy if you could spread this information as widely as possible. Your dissemination of this call will give the top students and young researchers in your community the chance to participate in the Heidelberg Laureate Forum 2014.

Best regards

Martin Grötschel
IMU Secretary

IMU AO Circular Letter 8/2013

International Mathematical Union



December 11, 2013
IMU AO Circular Letter 8/2013

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

IMU Bulletin No. 62, December 2012

Dear colleagues,

Attached hereto is IMU Bulletin No. 62 reporting about the IMU activities in 2012. A printed copy is forwarded by regular mail to the Adhering Organizations.

Bulletin No. 62 is also available on the IMU Web server at
<http://www.mathunion.org/publications/bulletins/archive/>.

Apologies for the delay in providing this publication.

With best wishes

Martin Grötschel
IMU Secretary

5. The IMU Secretariat

Since 2011, the International Mathematical Union has a permanent secretariat at Weierstrass Institute in Berlin, Germany (<http://www.wias-berlin.de/imu/index.jsp>). The IMU archive is also hosted here. 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.

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6. Impressum

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