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Executive Committee

January 1, 1995 - December 31, 1998

President: Professor David Mumford **Vice-Presidents:** Professor Vladimir Arnold

Professor Albrecht Dold

Secretary: Professor Jacob Palis **Members:** Professor James Arthur

> Professor Simon Donaldson Professor Björn Engquist Professor Shigefumi Mori Professor K. R. Parthasarathy

Past President: Professor Jacques-Louis Lions

13th General Assembly

of the International Mathematical Union Dresden, Germany, August 15-16, 1998 (Opening session at 10 a.m.)

Agenda IMU General Assembly

Appointment of Delegations

Agenda

- 1. Opening of the Assembly
- 2. Address by the President
- 3. Appointment of Committees
 - i. Credentials Committee
 - ii. Resolutions Committee
 - iii. Tellers
 - iv. Committee for Finance and Dues
 - v. Nominating Committee
- 4. Members
 - 1. Change of Group
 - 2. Dues arrears of members
- 5. Review of the activities of the Union:
 - 1. Symposia and conferences, ICMI, CDE, ICHM
 - 2. IMU Bulletin; World Directory of Mathematicians
- 6. Finance and dues:
 - 1. Financial reports for the years 1994-1997
 - 2. Budget for the years 1999 2002
- 7. Proposal for the creation of a Commission on Electronic Publishing
- 8. Elections:
 - 1. Executive Committee of IMU
 - 2. Executive Committee of ICMI
 - 3. CDE
 - 4. ICHM
 - 5. Representative of IMU to ICSU
- 9. Site of ICM-2002
- 10. Change of Statutes
- 11. WMY 2000
- 12. Adoption of resolutions
- 13. Miscellaneous
- 14. Any other item with the permission of the President
- 15. Next meeting of the General Assembly

IMU General Assembly

The following letter has been sent to all Adhering Organizations of IMU, with a copy to the National Committees, on July 7 1997.

1. The 13th General Assembly 1998 of the International Mathematical Union (IMU) will be held in Dresden, August 15 - 16, on the weekend directly before the International Congress of Mathematicians Berlin 1998 (ICM98). The meeting will take place at Hotel Bellevue (Große Meißner Straße 15, D-01097 Dresden, Tel: +49/351/81 20-733, Fax: +49/351/81 20 749). Delegates may stay in Hotel Bellevue, other accommodations will also be offered. The procedures for room reservation will be announced with the invitation letters from the Local Organizing Committee

to the delegates appointed by the Adhering Organizations/National Committees. More information can be found under the URL: http://elib.zib.de/IMU/GA-Dresden.

2. According to the Statutes of the Union, each Adhering Organization 'shall appoint and certify to the Secretary of the Union a delegation which shall have the number of votes corresponding to the Group in which it adheres, as follows:

Number	of	votes:	I	ΙI	III	IV	V
Group:			I	ΙI	III	IV	V
Number	οf	votes:	1	2	3	4	5

provided that the number of delegates shall not exceed the corresponding number of votes. Any Adhering Organization which desires to ensure its full quota of representatives at meetings of the General Assembly by the appointment of alternates for its regularly named delegates may do so, provided that no such alternate shall be permitted to participate in the work of the General Assembly until he has been duly certified to the Secretary of the Union as assuming the powers and duties of the delegate he has been designated to replace. No person shall be a member of the delegation of more than one country. Voting by the General Assembly shall be by delegations, provided that each delegation shall be free to cast the votes to which it is entitled either as a unit or divided in such a manner as it may determine."

- 3. You are hereby requested to designate the delegation of your country. Please enter on the accompanying form the names of your delegates, with alternates if any, together with their addresses and return this form to the Secretariat by March 1, 1998.
- 4. As provided for in the By-Laws of the Union, Adhering Organizations may propose business to be transacted at the General Assembly. Such proposals shall reach the Secretary at least four months before the meeting, i.e., preferably before March 1, 1998.

We are now sending to all Adhering Organization and National Committees, the enclosed form for "Appointment of Delegations".

The General Assembly of the Union consists of delegates appointed by the Adhering Organizations, together with the members of the Executive Committee. For each General Assembly, each Adhering Organization shall appoint and certify to the Secretary of the Union, a delegation which shall have the number of votes corresponding to the Group in which it adheres, that is:

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

provided that the number of delegates shall not exceed the corresponding number of votes. (Please see Statutes of IMU, pages 2 and 3).

Thank you very much for your attention.

Sincerely Yours, Jacob Palis Secretary of IMU

INTERNATIONAL MATHEMATICAL UNION

13th General Assembly, 1998 DRESDEN, Germany

Appointment of Delegations

You are hereby requested to designate the delegation of your country. **OBS**: *The appointment of delegations is the responsibility of the Adhering Organization*

COUNTRY:	GROUP OF ADHERENCE:		
ADHERING ORGANIZATION:			
DELEGATES: 1. NAME:	E-MAIL:		
ADDRESS:		FAX:	
2. NAME:	E-MAIL:		
ADDRESS:		FAX:	
3. NAME:	E-MAIL:		
ADDRESS:		FAX:	
4. NAME:	E-MAIL:		

ADDRESS:		FAX:	
5. NAME:	E-MAIL:		
ADDRESS:		FAX:	
ALTERNATIVES: 1. NAME:	E-MAIL:		
ADDRESS:	FAX:		

This form should be filled in capital letters and should be returned, not later than March 1, 1998 to: IMU Secretariat

IMPA - Instituto de Matemática Pura e Aplicada Estrada Dona Castorina, 110 - Jardim Botânico 22460- Rio de Janeiro - RJ - BRASIL

Fax: (55) (21) 512-4115/4112 - E-mail: IMU@IMPA.BR

Procedures for the Election

Procedures for the Election of the <u>Executive Committee of IMU</u>, of the <u>Executive Committee of ICMI</u>, of CDE, of ICHM.

Procedures for the Election of the Executive Committee of IMU 1998

- 1. Not less than a year before the meeting of the GA, the EC shall request proposals for the membership of the EC from the National Committees for Mathematics, to be considered before the meeting of the EC in the spring before the Assembly.
- 2. The EC shall then draw up its own list of nominations, making certain that each candidate is willing to serve if elected. The slate should be mailed to the National Committees at least three months before the GA, together with background on the candidates, their fields and countries/geographic areas.
- 3. After the slate drawn by the EC is known, the National Committees can make further proposals of names specifically for the offices of President, Secretary, Vice-President, and Members at large. These proposals shall reach the Secretary not less than one month before the GA The same information as in (2) concerning the nominees, including their willingness to serve if elected, should be provided. The Secretary will inform all National Committees of these last proposals before the GA. The National Committees are asked to cooperate in having their delegates to the GA fully informed.
- 4. The EC might modify its list in view of (3)
- 5. On the first day of the meeting, the General Assembly shall appoint a Nominating Committee (NC) consisting of:
 - a. the President (chairman),
 - 2. all Past Presidents who are present (ex-officio),
 - 3. eight further delegates.
 - Election to (c) shall be from names either proposed by the President or proposed and seconded from the floor; and shall be by show of hands unless the meeting decides otherwise.
- 6. The NC shall propose a slate drawn from the slate of the EC and the names in (1) and (3) and shall make it known to the meeting.
 - No person shall be a candidate for more than one office.
- 7. Further nominations can be made from the floor after the slate of the NC has been declared, provided that they are drawn from names previously offered by the National Committees as in items (1) and (3) signed by at least ten delegates and convey the same information as in (2) and (3) above.
- 8. The General Assembly shall then elect the new President, Vice-President, Secretary and Members at large by written ballots from the EC and NC slates as well as the list of nominations from the floor (unless a candidate withdraws), but no others.
 - A vote shall be invalid if more names are marked in any category than the number of places to be filled (i.e., one each for President and Secretary, two for Vice-Presidents and five for Members at large). A candidate for President or Secretary may be elected only if unopposed or if he or she obtains a majority of the votes cast. If the first ballot is indecisive, there shall be a second ballot. In the ballots for the Vice-Presidents and Members at large, the two or five candidates respectively who obtain the largest numbers of votes shall be elected. In the event of a tie, the President shall decide.

Note: Statute (9) provides (inter alia) that: 'each delegation shall be free to cast the votes to which it is entitled either as a unit or divided in such a manner as it may determine".

Procedures for the Election of the Executive Committee of ICMI

The rules for the election of the Executive Committee of ICMI are similar to those for the election of the Executive Committee of IMU with the same Nominating Committee.

The EC of IMU shall request proposals for the membership of the EC of ICMI from the National Committees for Mathematics and will conduct extensive consultations with the existing Executive Committee of ICMI before proposing slates to the Nominating Committee.

No person can be a candidate for more than one office.

Procedures for the Election of CDE

The rules for the election of the Commission of Development and Exchange are similar to those for the election of the Executive Committees of IMU and ICMI with the same Nominating Committee.

The EC of IMU shall request proposals for the membership of CDE from the National Committees for Mathematics and will conduct extensive consultations with the existing CDE before proposing slates to the Nominating Committee.

No person can be a candidate for more than one office.

Procedures for the Election of ICHM

The rules for the election of the two IMU members of the Executive Committee of ICHM are similar to those for the election of the Executive Committees of IMU, CDE and ICMI, with the same Nominating Committee. The EC of IMU shall request proposals for the membership of the two IMU members from the National Committees for Mathematics and will conduct extensive consultations with the existing ICHM before proposing slates to the Nominating Committee.

Members Of The International Mathematical Union - IMU

Adhering Organization (AO), Committee For Mathematics (CM)

January, 1, 1998

The members are kindly requested to check the address list below and send possible corrections to the Secretariat of IMU.

Country		AO	CM	Dues
Argentina	II	Union Matematica Argentina	Dr. Felipe Zó, Presidente Univ. Nac. De San Luis Ejercito de los Andes 950 5700 San Luis - Argentina Te;: (54) 652 22 803 - Fax: 54 652 26759 uma@unsl.edu.ar	Ministerio de Educacion y Justicia Secretaria de Ciencia y Técnica Consejo Nacional de Investigaciones Cientificas y Técnicas Relationes Internationales Rivadavia 1917 1033 Buenos Aires , Republica Argentina Fax: (54) 1 953- 4345/4225
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<u> </u>		<u> </u>		
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Slovenia	I	Society of Mathematicians, Physicists	and Astronomers of Slovenia Professor Egon Zakrajsek, President Jadranska, 19 61111 Ljubjana, Slovenia Fax: (386) (61) 217281 e-mail: egon.zakrajsek@uni-lj.si	
Singapore	I	Singapore Mathematical Society	Prof. San Ling, Honorary Secretary Department of Mathematics National University of Singapore Lower Kent Ridge Road Singapore 0511 Republic of Singapore e-mail: smsuser@math.nus.edu.sg	
South Africa	II	Foundation for Research Development (FRD) South African ICSU Secretariat P O Box 2600 Pretoria 0001 South Africa Fax: 27 12 481 4093/4110/4028 e-mail: icsu@frd.ac.za	South African National Committee for IMU Foundation for Research Development (FRD) South African ICSU Secretariat P O Box 2600 Pretoria 0001 South Africa Fax: 27 12 481 4093/4110/4028	

			e-mail: icsu@frd.ac.za	
Spain	III	Adhering Organization: Oficina de Ciencia y Tecnologia. Presidencia del Gobierno c/ Rosario Pino, 14-16 E-28080 Madrid Spain Fax: 34 1 3360576	Spanish comittee, Chairman Professor Jose Luis FERNANDEZ Departamento de Matematicas Universidad Autonoma de Madrid E-28049 Madrid Spain Fax: 34-1-397-4889 e-mail: joseluis.fernandez@uam.es	
Sweden	IV	The Royal Swedish Academy of Sciences Dr. Erling Norrby, Secretay General Box 50005 S-104 05 Stockholm, Sweden	Swedish National Committee for Mathematics Prof. Christer Kiselman Uppsala University Department of Mathematics P.O. Box 480 S-751-06 Uppsala, Sweden Phone: (46) (18) 183216 - Fax: 183201 E-mail: cok@math.uu.se	
Switzerland	IV	Swiss Mathematical Society	Professor Dr. Gerhard Wanner Section de Mathèmatiques Université de Genève, CP 240 CP 240 - CH 1211 Genève, Switzerland	
Turkey	I	Turkish Mathematical Society	Prof. Dr. Tosun Terzioglu, President Sabanci University Sabanci center 80745 - Istanbul - Turkey Tel: (212) 269 55 99 - fax: (212) 281 4231 e-mail: tosun@sabanciuniv.edu.tr	
Tunisia	I	Societé Math. de Tunisie	Prof. K. Harzallah, President Faculté des Ciences de Tunis Dep. de Math., Campus Universitaire 1060 Tunis Fax: (216) 1 - 885-350	
United Kingdom	V	The Royal Society Executive Secretary 6 Carlton House Terrace London SW1Y 5AG United Kingdom Phone: (44) (171) 839 5561 - Fax: 930 2170	Scientific Unions Committee Mr. Ruth A. Cooper The Royal Society 6 Carlton House Terrace London SW1Y 5AG United Kingdom	
Uruguay	I	Professor José Luis Massera	Presidente Soc. Uruguaya de Matematica y Estadistica (SUME) IMERL - Fac. Ingenieria Av. J. Herrera y Reiseig 565 - CC No. 30 11200 - Montevideo - Uruguay	

			Tel: (598-2) 71 06 21 - Fax: 71 5446 e-mail: massera@fing.edu.uy	
U.S.A.	V	U.S. National Academy of Sciences Office of International Affairs Attn.: Dr. Tamae Maeda Wong, Program Director 2101 Constitution Avenue, N.W. Washington, D.C. 20418, USA Phone: +1-202-334-2243 Fax: +1-202-334-2231 twong@nas.edu	U.S. National Committee for Mathematics Board on Mathematical Sciences, Rm NAS 315 Michael Artin, Chair 2101 Constitution Avenue, N.W. Washington, D.C. 20418 U.S.A. Phone: (1) (202) 334-2231 - Fax: 334 1597 e-mail: bms@nas.edu	Ms. Wendy D. White Director, CIOP Office of International Affairs National Academy of Sciences 2101 Constitution Avenue, N.W. Washington, DC 20418 - USA
Venezuela	I	Asociacion Matematica Venezolana	Prof. Eduardo Lima de Sá, President Inst. Venezolano de Investigación Cientificas (IVIC) Dep. Mat Apartado 47898 Caracas - 1020-A - Venezuela e-mail: elima@usb.ve	
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Yugoslavia	II	Savez drustava matematicara Jugoslavije Prof. Vladimir Micic, President of the Union of the Mathematicians Societies of Yugoslavia 11000 Beograd, Kneza Mihaila 35/IV Yugoslavia Phone and Fax: (381) (11) 638 263	Prof. dr. Zoran Kadelburg Matematicki fakultet 11000 Beograd, Studentski trg 16 Yugoslavia e-mail: kadelbur@matf.bg.ac.yu Fax and Phone: (381) 11 638 263	

GUIDELINES FOR A COUNTRY THAT WISH TO BECOME A MEMBER OF IMU

A country interested in becoming a member of the International Mathematical Union, shall send to the Secretary of IMU, a sample of activities in mathematics, specially concerning research, as well as a sample of research papers published in international journals by the local mathematicians in the last 10 years or so. The Secretary of IMU shall then present the case to the Executive Committee, and, upon a recommendation of this board, the final decision depends on a majority vote of the members at a General Assembly or through a Postal Ballot.



Report of the IMU Executive Committee to the 13th General Assembly

This report covers the period 1994-1997

Members Of The Union, Scientific activities of the Union, Meetings of the Executive Committee, Excerpts The Imu Executive Committee Meetings Between 1995-1998, IMU and ICM on the World Wide Web, Publications Of The Union, World Directory Of Mathematicians - 1998, Postal Ballots, General Assembly - 1998,

Members Of The Union

The following countries were members of IMU as of January 1, 1998:

I. Armenia, Bulgaria, Cameroon, Croatia, Cuba, Egypt, Greece, Hong Kong, Iceland, Ivory Coast, Democratic Republic of Korea, Kazakhstan, Lithuania, New Zealand, Nigeria, Norway, Philippines, Portugal, Romania, Saudi Arabia, Singapore, Slovenia, Tunisia, Turkey, Uruguay, Vietnam, Venezuela

II: Argentina, Austria, Chile, Czech Republic, Denmark, Finland, Georgia, Iran, Ireland, Mexico, Republic of Korea, Slovak Republic, South Africa, Yugoslavia

III: Australia, Belgium, Brazil, Hungary, India, Netherlands, Poland, Spain

IV: Sweden, Switzerland

V: Canada, China, France, Germany, Israel, Italy, Japan, Russia, United Kingdom, USA In its last meeting held in Berlin on May 15-16, 1997, the IMU Executive Committee decided to invite the following countries to apply to change their Groups of Adherence: Sweden and Switzerland from III to IV, and Canada, Israel and Italy and Canada from Group IV to Group V. In the Postal Ballot sent to all country members, the change of Sweden and Switzerland from Group III to Group IV and Italy, Israel and Canada from Group IV to Group V, were approved as of January 1, 1998.

Scientific activities of the Union

1994

The major events of the International Mathematical Union in 1994 were its 12th General Assembly, held in Lucerne, Switzerland, July 31 - August 1, 1994, and the International Congress of Mathematicians, held in Zurich, Switzerland, on August 3-11, 1994.

The General Assembly elected a new Executive Committee for IMU as well as for its International Commission on Mathematical Instruction (ICMI), a new Commission for Development and Exchange (CDE), and two members to the Executive Committee of its joint International Commission on the History of Mathematics (ICHM), as well as representatives to ICSU bodies. The Assembly also decided that the next Congress should take place in Berlin, in 1998.

The International Congress of Mathematicians - 1994 was held in the Congress Hall of Zurich. A total of 2536 mathematicians from 87 countries and districts attended the meeting together with 363 accompanying members.

The Chairman of the Fields Medals Committee, David Mumford, Vice-President of IMU, announced the recipients of the Fields Medals: J. Bourgain, P-L. Lions, A. Widgerson and J-C. Yoccoz. The Chairman of the Rolf Nevanlinna Prize Committee, Jacques-Louis Lions, announced E. Zelmanov as the recipient of the Prize. From August 4 to August 11, except for Saturday, August 7, one-hour plenary addresses were delivered in the Congress Hall in the morning (on the last day also in the afternoon) and 45-minutes section lectures in up to 7 parallel sessions were held during the afternoon in the rooms of the University and of the ETH Zurich. In total, there were 16 plenary and 148 section lectures. The speakers had been invited by the Organizing Committee according to the decisions of the Program Committee. Six invited speakers declined for different reasons and two didn't show up. In addition, there were 4 lectures invited by the International Commission on the History of Mathematics, which were scheduled along with the section lectures and 978 short communications appeared in a Book of Abstracts. Most of them and some 100 additional contributions were presented at the poster session which took place at ETH during the afternoon. There were also several informal seminars as well as a symposium organized on Thursday, August 4, by the Association for Women in Mathematics and the European Women in Mathematics.

The Organizing Committee was able to support the prize winners, the officials of IMU, 19 of the invited speakers and some 200 participants from Eastern Europe. The International Mathematical Union through its Special Development Fund, paid the travel expenses of 79 young scholars from developing countries whose living expenses were covered by the Organizing Committee.

At the Closing Ceremony in the afternoon of August 11, Prof. J.L.Lions announced the new members of IMU Executive Committee and of ICMI, CDE and ICHM for the term 1995-1998 and the site or ICM98, as decided by the General Assembly in Lucern. Prof. F. Hirzebruch invited the mathematicians of the world to meet in Berlin in 1998. A banquet was offered to the participants on Friday, August 5, a classical concert by H.H.Schneeberger (violin) and G.Wyss (piano) on Tuesday, August 9 and a performance by the pantomime group Mummenschanz together with the folk music group Trio da Besto on the same evening.

1995

- Workshop on Dynamical Systems, held in Montevideo, Uruguay, March 1995.
- 16th Rolf Nevanlinna Colloquium, held in Joensuu, Finland, August 1-5, 1995
- Modelling and Optimization of Distributed Parameter Systems With Applications to Engineering, held in Warsaw, Poland, July 17-21, 1995
- Fourth AMU Pan-African Congress of Mathematicians, held in Ifram, Marocco, September 18-26, 1995
- VI Latin American Congress on Probability and Mathematical Statistics (CLAPEM) held in the Univ. Catolica de Valparaiso, Chile, November 20-24, 1995
- **3rd International Conference on Approximation and Optimization,** Puebla, Mexico, October 8-14. 1995
- **2nd International Conference on Operations Research** held in Havana, Cuba, October 3-5, 1995 The following conference was supported by IMU without financial help (IMU imprimatur):
 - Mathematics of Numerical Analysis Real Number Algorithms, four-week conference held in the summer of 1995, in Park City, USA

1996

- **International Colloquium on "Lie Groups and Ergodic Theory**, held in Tata Inst. of Fundamental Research, India, from January 4-12, 1996.
- Ring Theory Conference, held at the Univ. of Miskolc, Hungary, from July 15-20, 1996
- International Mathematical Conference Conference dedicated to the 60th anniversary of academician V.G. Sprindzhuk's birth (1936-1987), held in Belarus Academy of Sciences/Belarus State University
- International Conference on Contemporary Problems in the Theory Of Dynamical Systems, held in Nizhny Novgorod, Russia, from July 1-7, 1996.
- The 2nd European Congress of Mathematics, held in Budapest, Hungary, July 21-27, 1996.

- Workshop on Geometry and Dynamical Systems, held at PUC, Rio de Janeiro, Brazil, from July 31 to August 9, 1996.
- 8th Prague Topological Symposium, held in Prague, Czech Rep., August 18-3, 1996.
- International Conference on Nonlinear Differential Equations and Applications, held in Tata Inst. of Fundamental Research, India, from August 19 23, 1996
- Int. Congress on Mathematical Education (ICME 8), held in Sevilla, July 13 , 1996
- International Conference on Number Theory, held in Hungary, July 29 August 2, 1996 (IMU imprimatur)

1997

- International Conference on Operator Algebra, held in Madras, India, on January 6-11.
- International Conference on Dynamical Systems, held in Mexico, June 1-5.
- XIIth International Congress of Mathematical Physics, held in Brisbane, Australia, July 13-17.
- **EQUADIFF 9, Conference on Differential Equations and their Applications**, held in Brno, Czech Republic, August 25-29.
- 3rd International Conference on Combinatorial Mathematics and Combinatorial Computing, held in Melbourne, Australia, June, 6 July 4.
- Free Boundary Problems Theory and Applications, held in Crete, Greece, June 8-14.
- FOCM Foundations on Computational Mathematics, held in Rio de Janeiro, Brazil from January 5-11 (IMU imprimatur)
- Conference Dedicated to the Memory of D. K. Faddeev, held in St. Petersburg, Russia, from June 24-30.
- **24 conference on Stochastic Processes and their Applications**, held in Viña del Mar, Chile, from June 16-20.
- Mathematics and its Uses in Southern Africa (MUSA), held in the Univ. of Botswana in Gaborone, December 11-12.
- **Diderot Mathematical Forum on Mathematics and Environment**, organized by the European Math. Society, held in Madrid, Spain, on December 19 20.

Meetings of the Executive Committee

- The 60th Meeting of the Executive Committee of IMU was held in Lucerne, Switzerland, July 30, 1994
- The 61th Meeting of the Executive Committee of IMU., was held in Paris, France on April 9 10, 1995
- The 62th Meeting of the Executive Committee of IMU., was held in New York, on April 11 12, 1996,
- The 63th Meeting of the Executive Committee of IMU., was held in Berlin, Germany, May 15-16, 1997
- The 64th Meeting of the Executive Committee of IMU., was held in Rome, Italy on April 1-3, 1998

The Executive Committee express its gratitude to the ETH- Zentrum, Zürich, Collège de France, Paris, Courant Institute, New York, Weierstrass Institute for Applied Analysis and Stochastics,, Berlin and Consiglio Nazionale Delle Ricerche, Rome.

Excerpts The Imu Executive Committee Meetings Between 1995- 1998

1. Meeting of May 11-12, 1995, Paris, France

Program Committee

The members of the Program Committee were appointed at the meeting. The Chairman is Prof. Phillip Griffiths. The resolutions 3, 4 and 5 of the General Assembly, 1994, concerning the ICM's, were forwarded to the Chairman and members of the PC.

Elections

Following Resolution 6 of the last General Assembly, the Executive Committee of IMU redrafted the proposed Procedures for the Election of the Executive Committee of IMU, as well as those of ICMI, CDE and ICHM. The preliminary versions have been sent to all IMU Adhering Organizations and National Committees for suggestions. (see page 5).

Program "Turn of the Century"

World Mathematical Year 2000 - Following Resolution 2 of the General Assembly 1994, the EC discussed the planning of activities for The World Mathematical Year 2000, in particular an invitation to a select group of outstanding mathematicians to present their views on topics they expect to be central to mathematics in the next century and the selection of a number of symposia, some possibly organized together with other scientific bodies, dedicated to mathematics, its applications and to its role in society, and also events held under the auspices of ICMI, CDE and ICHM. To select the authors of a book that should be published in 1999, on the mathematical perspectives for the 21st century, the EC nominated the following committee:

- Vladimir Arnold (Chairman), Barry Mazur, Michael Attiyah, Peter Lax.
- The discussions about other activities shall proceed and some decisions shall be taken in the next meeting of the EC in April, 1996.

Books/Journals for Russian Mathematicians

The Executive Committee, decided to continue with the contribution of US 5,000 to main mathematical libraries in Moscow through the Moscow Mathematical Society and to the library of the Steklov Institute or Euler Institute in St. Peterburg. This has been suggested by the EC in its meeting of April 1993, renewing a previous grant in the same amount and same purpose. On that occasion the gesture was appreciated by the Russian institutions and the deliver of books/journals well accomplished.

Also, a number of scientific meetings in different countries were approved to receive IMU financial support or just its imprimatur.

2. Meeting of April 11-12, 1996, New York, USA

Program Turn of the Century - WORLD MATHEMATICAL YEAR 2000

A number of meetings for the year 2000, including possibly some special ones to be co-sponsored or supported by IMU, were discussed. Some of them correspond to periodic activities and thus they have already been scheduled, like ICME and the European Mathematical Society (EMS) Congress. The idea of having meetings in different regions of the world was considered, such as supporting a meeting in Latin America and possibly one in Asia (already ICME is scheduled for Japan) and one in Africa. The IMU may also provide some financial support to other meetings/activities. On the other hand, the EC asked Prof. J-P. Bourguignon, who attended part of the meeting, about the possibility of planning a meeting in Europe on the history of mathematics, to be jointly sponsored by IMU and EMS.

Joint activities at ICM-98 (resolutions of the General Assembly, 1994)

The Executive Committee of IMU had asked the Program Committee (PC) to take steps to implement Resolutions 3, 4 and 5 of the General Assembly, 1994. The Chairman of the PC, Prof. Griffiths, reported that

the collaboration with other institutions like the Committee for the International Congress on Industrial and Applied Mathematics (CICIAM), Bernoulli Society, the Mathematical Programming Society and others, were being pursued to jointly plan part of the sections, specially with respect to applications.

A member of ICMI Executive Committee, Prof. J. Kilpatrick, also attended part of the meeting and presented a view on this IMU Commission. It was discussed, among other things, ICMI's involvement in ICM 98. Prof. Mumford pointed out the necessity of closer cooperation between the Executive Committee of IMU and its Commissions. In particular, the PC should have ICMI and ICHM collaboration in planning the sections on teaching and popularization as well as history of mathematics.

Since only the talks programmed for the sections shall appear in the Proceedings of the Congress, Prof. Kilpatrick would discuss with ICMI-EC the issue of promoting talks outside the official sections organized by the PC.

Joint Sections with AMS

A meeting of the American Mathematical Society took place in New York just after that of the Executive Committee of IMU. For the occasion, IMU and AMS programmed two joint sections on Saturday, April 13. The first one was a panel discussion entitled: "The activities of IMU and Plans for ICM-98" - Members of the Executive Committee, as well as Prof. P. Griffiths, as Program Chair for ICM-98 and J. Kilpatrick on behalf of ICMI, participated on it presenting an overview of some of the main activities of IMU and plans for the near future.

On Saturday afternoon, there was a section entitled: "International Forum: Perspectives on doing mathematics in the electronic age". A round table was formed by John Ewing, Martin Groetschel, Joachim Heinze, Andrew Odlyzko, followed by a discussion under the coordination of Lázslo Lovász. Since a number of relevant issues were raised during the meeting, like research journals, storage of information and others of continuous interest to mathematicians, an IMU Commission/Committee on electronic publishing seemed appropriated. The issued would be considered by the EC and be in the agenda of the next meetings.

Also, a number of scientific meetings in different countries were approved to receive IMU financial support or just its imprimatur.

3. Meeting of May 15-16, 1997, Berlin, Germany

ICM-98

- The EC dedicated part of the meeting to the arrangements for the ICM-98. A report was presented to the EC by Prof. M. Groetschel, in charge of the Local Organizing Committee, who also programmed a visit to the location of the Congress. Especial attention was given to the Opening Ceremony and activities of the first day of the Congress

Grants to attend the ICM/98 -

Besides the young research mathematicians from developing countries, the Organizing Committee of ICM/98 is raising funds for mathematicians from Eastern Europe and former Soviet Union to attend the Congress. In a much smaller scale, some funds are also being raised for mature mathematicians from developing countries.

ICM-2002 -

Applications to hold the ICM 2002 has been received from Norway and China. The Site Committee has decided to recommend to the next General Assembly that the Congress should be held in China. This decision was taken under the fundamental assumption that all mathematicians of the world will be allowed to participate in the meeting. Thus, the Executive Committee expects that the final vote at the General Assembly will take into account the importance of the host country to abide by ICSU's principle of free circulation of scientists.

Change in IMU Statutes -

The EC decided to recommend to the next General Assembly, additions to the IMU Statutes for the purpose of facilitating jointly sponsored activities with multi-national mathematical societies and professional societies, in pursuing the objectives of IMU (see page 35).

Manifesto/Video

- It was also discussed the possibility of IMU issuing a manifesto to promote mathematics in the turn of the century, stressing its importance to society, that should also appeal to the mathematical community to engage itself in the promotion of a a more creative teaching of mathematics at all levels. Similarly, it was also raised the possibility of support the production and distribution of video recordings of lectures delivered by outstanding mathematicians and aimed at general audiences.

IMU book Mathematics Tomorrow

- V. Arnold (Coordinator), M. Atiyah, P. Lax and B. Mazur are members of the Committee in charge of editing a book of articles by prominent mathematicians on how they see the prospects of mathematics in the coming century. A good number of potential authors had answered positively to the invitation. The book is expected to appear in 1999. The EC decided to invite publishers to present bids to produce the book Mathematics Tomorrow, by early December 1998 (please see page 34).

Also, a number of scientific meetings in different countries were approved to receive IMU financial support or just its imprimatur.

4. Meeting of April 1-3, 1998, Rome, Italy

- * The EC is considering proposing to the General Assembly a new Commission on Electronic Information and Communication. The idea grew up from a previous Committee on Electronic Publishing, set up by the EC at the previous meetings at New York and Berlin and chaired by Prof. Groetschel. The EC delegated to the President of IMU the task of consulting with all interested parties to develop the Terms of Reference for this proposed Commission.
- * Prizes of the Union Professor Mumford reported that the Fields Medals and Rolf Nevanlinna Prize Committees have completed their work. The Fields Medal will be awarded to four persons, and the Nevanlinna Prize to one. The names will be announced at the Opening Ceremony of ICM-98. The EC also decided to give a silver plaque to Andrew Wiles.
- * Slates The election for the next IMU EC and its Commissions were discussed and slates were prepared to be sent to all Adhering Organizations/National Committees and Delegates (see Procedures for Elections, page 5).

* World Mathematical Year 2000

The Executive Committee approved financial support to the following meetings, considering them as part of IMU activities for the year 2000.

- International Congress on Mathematical Education (ICME-9) to be held on July 31 August 7, in Makuhari/Chiba (Japan)
- Third European Congress Of Mathematics, European Math. Society, July 10-14, to be held in Barcelona, (Spain)
- International Congress Of Mathematical Physics XIII, to be held in London, July 17 22.
- First Latin America And Caribbean Mathematical Congress Latin American And Caribbean Union (UMALCA), August, to be held in Rio de Janeiro
- * The Executive Committee of IMU has approved a one-time support to the development of mathematics in Ukraine and the upbringing of new talented researchers, in the amount of US 8,000.00, primarily for acquisition of books and journals and publication of lecture series; other activities such as small support for meetings may be planned.

IMU and ICM on the World Wide Web

• Information about IMU and ICM/98 are available in the IMU homepage: http://elib.zib.de/imu

Electronical availability of the world mathematical year 2000 newsletter and IMU Canberra circular:
 The World Mathematical Year 2000, as well as the IMU Canberra Circular are now available on http://elib.zib-berlin.de; http://elib.zib.de/IMU/wmy (WMY 2000)
 http://wwwmaths.anu.edu.au/imu.html (IMU Canberra Circular)

Publications Of The Union

Six issues of the IMU Bulletin have come out in the last three and half years: Number 37 in December 1994, Number 38, in December 1995, Number 39, in December 1996, Number 40, in December 1997 41 and the present number 42 (Special Number), in June 1998.

The 10th Edition of the World Directory of Mathematicians came out in 1994. The compilation of material and printing were done by the American Mathematical Society and Prof. D. Mumford was the Editor. The AMS. is the sole distributor of the Directory.

World Directory Of Mathematicians - 1998

National Committees and Mathematical Societies were requested to prepare the list of mathematicians in their countries. Each mathematician should be the author of at least two papers published in journals whose articles are internationally reviewed. E-mail address and fax numbers should also be provided, when possible.

The new issue of the World Directory of Mathematicians (11th Edition) will appear at the occasion of the

Postal Ballots

The following postal ballots were conducted among the Adhering Organizations, with the knowledge of the National Committees for Mathematics, in the years 1995-1998.

1996:

International Congress of Mathematicians, 1998.

• Number 1-2/96 - Latvia and Uruguay to become members of the International Mathematical Union, Group I, as of January 1st, 1997. All votes received were in favor.

1997:

- Number 1/97 Italy to change from Group IV to Group V, as of January 1, 1998. All votes received were in favor.
- Number 2/97 Switzerland to change from Group III to Group IV, as of January 1, 1998. All votes received, were in favor.
- Number 3/97 Sweden to change from Group III to Group IV, as of January 1, 1998. All votes received were in favor.

1998:

• Number 1/98 - Canada to change from Group IV to Group V, as of January 1, 1998. All votes received were in favor.

• Number 2/98 - Israel to change from Group IV to Group V, as of January 1, 1998. All votes received were in favor.

General Assembly - 1998

The General Assembly shall take place in Dresden, on August 15 - 16 at Hotel Bellevue and the Executive Committee will meet on August 14, 1998.

International Congress Of Mathematicians 1998

The next International Congress of Mathematicians will be held in Berlin, Germany, from August 18-27, 1998. The first announcement has been sent out in July 1997 and the second one in January 1998. For further information please contact the Local Organizing Committee: Prof. Martin Groetschel, Konrad-Zuse-Zentrum, Takustr.7, D-14195 Berlin, Germany, e-mail: groetschel@zib.de

What Is ICM'98?

The International Congress of Mathematicians is a quadrennial congress held under the auspices of the International Mathematical Union (IMU). The General Assembly of IMU selects the site of the Congress on behalf of bids submitted by member countries of IMU. In 1994 in Zürich the General Assembly decided in favor of Berlin and now the Organizing Committee takes pleasure in inviting you to participate in the International Congress of Mathematicians Berlin, August 18-27, 1998.

At the International Congress, Mathematicians from all countries gather to discuss recent developments in mathematics that are presented by leading scientists from all mathematical fields. Responsibility for the scientific program, i.e. the selection of sections and speakers, rests with an independent Program Committee that is appointed by IMU. On the recommendation of the Program Committee the Organizing Committee invites the speakers. At ICM'98 there will be twenty-one one-hour Plenary Lectures covering the major areas of mathematics and about 160 forty-five-minute Invited Lectures in nineteen sections.

During the Opening Ceremony on the first day of the Congress the Fields Medals and the Nevanlinna Prize will be awarded.

All events of the first day will take place in the International Congress Center Berlin (ICC); all other scientific events will be held at Technische Universität Berlin (TU Berlin). No scientific activities are scheduled for Sunday, August 23.

The preparation of ICM'98 is supported by numerous institutions within Berlin and Germany.

To make the congress a true worldwide gathering, the organizing committee places special emphasis on attracting scientists from developing countries. For this purpose, we intend to grant a large number of fellowships for research mathematicians from developing countries, in cooperation with the IMU Special Development Found, see our short information about fellowships for young mathematicians from developing countries and support of mature mathematicians from developing countries.

Similarly, the organizing committee is aware of the fact that it will be difficult for many mathematicians from Eastern Europe to attend ICM'98 without financial aid. We are currently seeking support from industry, foundations, and government institutions for this purpose. These will be made available for the participants of ICM'98. This matter is handled by the Committee for the Support of Mathematicians from Eastern Europe (CSMEE).

The Organizing Committee has set up the ICM'98 e-mail service in order to inform all persons interested in ICM'98 about recent developments. All persons subscribing to this e-mail service will also receive the printed version of Second Announcement, which provides detailed information on registration, submission of abstracts, accommodation, etc.

The necessary contingents of accommodations of every category have been reserved for the period August 18 to 27, 1998. Berlin offers a large number of relatively cheap (usually private) accommodations.

Moreover, a number of initiatives are on the way to set up an attractive social program for the participants of ICM'98 and accompanying persons. The ICM'98 Organizing Committee also plans to organize a number of events for the general public in Berlin, including a VideoMath Festival, evening lectures, and various exhibitions having a link to mathematics. Special emphasis will be given to high school students and teachers.

Support Of ICM'98 Participation

IMU and the Organizing Committee are making strong efforts to ensure ICM'98 participation of mathematicians coming from countries with small financial basis. In particular, IMU and the local organization have established three different support programs for

- 1. Young mathematicians from developing countries
- 2. Mathematicians from Eastern Europe
- 3. Mature mathematicians from developing countries

For all three programs the deadline for application was January 1, 1998. All applicants were informed about the result immediately after May 1, 1998.

1. Fellowships For Young Mathematicians from Developing Countries

To attend the International Congress of Mathematicians, Berlin, 1998

The International Mathematical Union will award fellowships to young mathematicians to help them attend the ICM'98, Berlin, Germany, August 18-27, 1998. The grants, provided by the IMU Special Development Fund, will support travel costs and are intended primarily for young mathematicians from developing countries (not necessarily members of IMU).

The Local Organizing Committee of the International Congress of Mathematicians will provide a special allowance to the grantees of the travel grants to cover their registration, board and lodging in Berlin. The age-limit for the grantees is 35 years at the time of the Congress. The candidates should present evidence of research work on post-doctoral level, and they should be able to benefit from the interaction with mathematicians from other countries attending the Congress.

In addition to the name and address of the candidate, the applications should contain brief curriculum vitae, including date of birth, plus a list of publications (papers published or accepted for publication).

2. Support of Mathematicians From Eastern Europe

To attend the International Congress of Mathematicians, Berlin, 1998

The Local Organizing Committee has set up the Committee for the Support of Mathematicians from Eastern Europe (CSMEE) to support mathematicians with residence in Eastern European countries and the independent states of the former Soviet Union to attend ICM'98.

The funds of the Organizing Committee for financial support are limited. To secure the participation of as many persons as possible the local Organizing Committee will only support local costs in Berlin. Travel grants are not available. Every person applying for a grant from CSMEE is expected to cover travel expenses from other sources.

3. Support of Mature Mathematicians From Developing Countries

To attend the International Congress of Mathematicians, Berlin, 1998

The Local Organizing Committee has set up a Committee for the Support of Mathematicians from Developing Countries (CSMDC) to support mature mathematicians (older than 35 years of age at the time of the Congress) with residence in developing countries to attend ICM'98.

The funds for financial support, partially provided by IMU, are quite small. To ensure the participation of as many persons as possible, a limited grant is provided to cover local costs in Berlin (registration, board and lodging) and travel.

Special Development Fund

The Special Development Fund helps IMU to fulfill the important obligation of helping developing countries within the framework of mathematical research. The means of the Fund, which go unreduced to mathematicians from developing countries, are used primarily for travel grants to young mathematicians, to make it possible for them to participate in International Congresses of Mathematicians. The Executive Committee of IMU elects an international committee to distribute the grants.

Means to the Special Development Fund come from donations. Donations can be sent, at any time and in any convertible currency, to the following account:

Account no. 0862-656208-21 Schweizerische Kreditanstalt Stadtfiliale Zürich-Rigiplatz Universitätstrasse 105 CH-8033 Zürich Switzerland

The following contributions have been received in the years 1994-1997:

1994 American Mathematical Society Mathematical Society of Japan Royal Society Com. Nat. Frac. Math., France CNPq, Brazil	US US US	\$ \$ \$	30.550,06 18.881,11 4.477,00 3.404,86 6.944,44
1995 American Mathematical Society CNPq, Brazil London Mathematical Society	US	\$	33.227,89 10.000,00 3.263,12
1996 American Mathematical Society London Mathematical Society	US US	\$	31.807,41 3.639,60
1997 Societe Mathematique de France and Societe des Math. Appl.et Ind. American Mathematical Society CNPq, Brazil Royal Swedish Academy of Sciences London Mathematical Society	US US US	\$ \$ \$	2.341,81 30.872,76 9.708,05 265,95 3.121,05

ICM-2002

Applications to hold the ICM 2002 has been received from Norway and China. The Site Committee, consisting of the EC members and Prof. M. Groetschel, has decided to recommend to the next General Assembly that the Congress should be held in China. This decision was taken under the fundamental assumption that all mathematicians of the world will be allowed to participate in the meeting. Thus, the Executive Committee expects that the final vote at the General Assembly will take into account the importance of the host country to abide by ICSU's principle of free circulation of scientists.

Bid To Publish Mathematics Tomorrow

An IMU Book by Prominent Mathematicians

World Mathematical Year 2000

The International Mathematical Union (IMU) is publishing a book entitled "Mathematics Tomorrow" to celebrate the turn of the century, with articles by prominent mathematicians on how they see the present state of Mathematics, its main problems and prospects for the coming century. The editors are V. Arnold (Chair), M. Atiyah, P. Lax and B. Mazur. As of now, we expect to have 33 articles, of about 20 pages each, by early December 1998 and the book to be ready by July 1999. We have asked the authors to provide their texts in Latex or Amstex files, with figures in PostScript.

The IMU Executive Committee has decided to ask for bids from international publishers. The bids should address the following items:

- 1. Expected retail price;
- 2. quality of printing;
- 3. Number of books in the first edition;
- 4. Free copies for authors and for IMU;
- 5. Percentage of income from sales as copy rights to IMU

The following authors have given IMU their preliminary acceptance to contribute to "Mathematics Tomorrow:

- M. Atiyah
- A. Baker
- J. Bourgain
- S.-S. Chern
- A. Connes
- G. Debreu
- M. Freedman
- I. Gelfand
- V. Jones
- D. A. Kazhdan
- M. Kontsevich
- P. Lax
- M. Lighthill
- P-L. Lions
- Y. Manin
- G. Margulis
- A. Majda
- B. Mazur
- S. Mori
- D. Mumford
- S. Novikov
- R. Penrose
- K. Roth
- D. Ruelle
- P. C. Sarnak
- I. Singer
- S. Smale
- R. Stanley
- C. Taubes
- A. Wiles
- E. Witten
- S.T. Yau
- E. Zelmanov

Change In The Imu Statutes

The EC decided to recommend to the next General Assembly, the following **additions** to the IMU Statutes (all the other items remain the same, renumbered as necessary):

CHANGE IN STATUTES

of the INTERNATIONAL MATHEMATICAL UNION

Approved in the 63th meeting of the Executive Committee, held in Berlin on May 15-16, 1997

III. AFFILIATION

- 1. For the purpose of facilitating jointly sponsored activities and jointly pursuing the objectives of the IMU, multi-national mathematical societies and professional societies can be affiliated with the Union.
- 2. The members of the Union shall elect the affiliate members by Postal Ballots or at meetings of the General Assembly upon recommendation of the EC. The affiliation may be terminated by the same procedure.
- 3. Affiliate members have the right to participate in the General Assembly but shall have no voting rights.
- 4. Such affiliate members have the right to submit proposals for joint activities to the General Assembly and to the President and Secretary for consideration of the Executive Committee.
- 5. The Executive Committee, with the support of the Adhering Organizations and National Committees, shall look for ways to keep close relations with the affiliated organizations and to enhance mathematical activities in their regions. They shall receive the Bulletin of the IMU and be kept informed of all activities relevant to them.

History Of IMU

Mathematics Without Borders By Olli Lehto Springer-Verlag, 1998

Professor Olli Lehto, who was the Secretary of IMU in the eighties, wrote a book on the history of the Union. This is an invaluable contribution in many ways: besides its historical character, it is also a relevant document in explaining the scenario of cooperation in mathematics in the turn of this century and how IMU was created. It will certainly help to promote IMU and to make it more visible to present day mathematicians.

Commission On Development And Exchanges (CDE)

Report 1994 - 1997

by Pierre Bérard, Secretary and Treasurer

During the period 1994--1997, the Commission on Development and Exchanges has proposed two programs to support Mathematics and mathematicians in the developing countries.

The program « Support to Individual Mathematicians » offered partial travel support to mathematicians who made an extended research visit in an advanced mathematical center which committed itself to supporting the local expenses. This program applied both to mathematicians from developing countries and to mathematicians from advanced countries who visited a mathematical center in a developing country (see lines IL in the following tables).

The program « Support to Conferences » offered partial support for the academic activities of conferences organized in developing countries (see lines CS in the following table).

The CDE has also supported research teams (see lines TM in the tables 1994 and 1995). In 1997, it has initiated a new action aiming at supporting Mathematics in Southern Africa-MUSA project (see below). Finally, the CDE has set up cooperation schemes with CIMPA/ICPAM (Nice, France) and ICTP (Trieste, Italy) to support workshops (CIMPA) or research visits (ICTP).

As in the past years, the CDE received many applications and had to make a strict selection before awarding funding. As a general rule, the secretary received the applications, summarized them and circulated the summaries to the members of the CDE for evaluation and discussion before decision making.

The programs offered by the CDE were supported by funds coming from IMU, ICSU, UNESCO-ROSTA, UNESCO-ROSTE and by donations from the Société Mathématique de France and from the Mathematical Society of Japan. The CDE also received indirect support from the Institut Fourier UMR 5582, Université Joseph Fourier -- CNRS (Grenoble, France).

The CDE has been deeply involved in the MUSA project in the Southern Africa Region (a description of the project has been published in the Notices of the American Mathematical Society in May 1997, and is described below). This project, introduced by the secretary of CDE some time ago, has been set up thanks to an extensive work by Professor Clemens on behalf of the CDE. A planning meeting was held in Botswana (late December 1997) and it is expected that the MUSA project will evolve very positively in a near future. The following article was submitted to the Notices by Herbert Clemens of the University of Utah. Clemens is a member of the Commission on Development and Exchange of the International Mathematical Union and is working with the authors of this article and their European research partners to increase interest in and support for the project MUSA, described below.

Mathematics In The Countries Of Southern Africa, Realities and Aspirations

Edward Lungu (University of Botswana) and Precious Sibanda (University of Zimbabwe)

Notices of the AMS

May 1997

Currently there is a dearth of qualified mathematics teachers both at high school and university levels in the entire southern African region. In a continuing effort to remedy this basic structural problem in our countries, each university in the region aims to train its staff through staff development programs. These are programs where the best students are encouraged to go for M.Sc. degrees in the hope that upon completion they will become members of the university staff. Even these programs are currently hampered by the lack of financial resources. As an example, the University of Zimbabwe used to send its graduates overseas for M.Sc./Ph.D. studies, but cannot afford to do so now because there is no longer any money to fund these students. Locally the facilities for their advanced training are either inadequate or simply nonexistent.

Funding for mathematics education and mathematics programs by the various governments of the region is simply inadequate. Most universities have neither the resources nor the expertise to offer mathematics courses with sufficient specialization at bachelor's-degree level or above. For example, in the region the University of Zimbabwe and the National University of Science and Technology (also in Zimbabwe) are the only two which offer honours degrees in mathematics. As a result, the application of mathematics in modeling industrial, environmental, or other real-life problems is fairly unknown in this part of the world, since there is a dire shortage of qualified personnel.

The governments of our various countries tried hard to train manpower when our economies were 'strong'. As the economies have declined, less money is being spent on manpower training. For this reason, the universities in the region are pooling their resources by establishing regional programs. Recently, for example, through partnerships with the University of Oslo and with the Austrian government small combined regional masters programs in mathematical modeling and in graph theory have been established at the University of Zimbabwe. To widen the pool of graduates entering these local programs as well as programs abroad, the region requires a ''pre-M.Sc." program, through which many people will be raised to the required level. A 12-month intensive 'B.Sc. Honours' program at the University of Botswana is currently being contemplated to bridge the gap between the university preparation in mathematics available in many surrounding countries and advanced programs such as those in Zimbabwe. It can also be used as preparation for various staff development fellows from Southern Africa Development Corporation countries. There are also good students who pursue combined majors in mathematics with another science subject. Upon completion of their studies, these students will not have done enough advanced courses in mathematics. The 12-month program can be used to raise the standard of these students to ''pre-M.Sc." level. This program at the University of Botswana can and will go a long way towards addressing the problems of advanced undergraduate mathematics education in the region.

With colleagues from Europe who have worked in the region, we are currently attempting to formalize these efforts, incorporate them into a several-year cooperative plan, and, with the help of the international mathematical community, find the financial and human resources that will help us to a full and fruitful implementation. We are calling the project MUSA (Mathematics and its Uses in Southern Africa). The goal of MUSA is to foster dialogue and cooperative activities involving mathematicians and students of mathematics from a geographically connected region of sub-Saharan Africa, hopefully including Botswana, Malawi, Mozambique, Namibia, Zambia, and Zimbabwe, as well as Lesotho and Swaziland. Ties with the South African mathematical community would also be sought. MUSA will focus on regional development of a vigorous community of mathematicians, students of mathematics, and users of mathematics in government and business. MUSA contemplates three components:

- 1) A 12-month full-time program called a "B.Sc. with Honours in Mathematics" at the University of Botswana in Gaborone consisting of four year-long courses:
- * Abstract Algebra/Linear Algebra
- * Real/Complex Analysis
- * Topology/Geometry
- * Functional Analysis/Applied Mathematics

With the help of the international mathematical community, MUSA hopes to generate a scholarship fund to enable qualified students from participating countries to complete this program.

2) The 18-month M.Sc. in Mathematical Modeling program at the University of Zimbabwe, which has been established in recent years under a cooperative agreement with the Norwegian Universities' Committee for Development, Research and Education (NUFU). Again with the help of the international mathematical community, MUSA hopes to generate a scholarship fund for this program. The support of countries in the region will also be sought in the form of continuing the salaries of mathematics teachers and others employed as mathematicians during a leave of absence to complete this program. In addition, visiting students from

government, industry, and other countries would be encouraged.

3) The gradual formation and strengthening of a community of researchers/teachers connected with a small number of mathematical research centers in Europe, the Americas, and Asia. We envision the establishment of an annual teaching/research meeting in consultation and cooperation with existing activities of the Southern African Mathematical Sciences Association. The site of this meeting would rotate among the countries having students/teachers/researchers participating in the program at any level. In addition, the content of this meeting would include minicourses, mini-research projects, and research talks, as well as a pedagogical component. The emphasis of each component would change from year to year depending on the mathematical situation of the country in which it is held.

In addition, and again with the help of the international mathematical community, MUSA hopes to establish a series of small pilot programs:

- I. A visiting program for research mathematicians from established centers outside the region to participating southern African centers. These visiting mathematicians would teach undergraduate and postgraduate courses and participate in research activities. (Preference would be given to those involved in longer-term joint research or learning projects.)
- II. A program of visits to established centers for the African mathematicians, again with preference for those involved in longer-term joint research or learning projects.
- III. A program of 1-2 year 'visiting lectureships" for young mathematicians with degrees from established centers outside the region to work on-site, teaching and collaborating in the above activities. We would design such positions so as to allow the young mathematicians ample time to continue their own research programs during their lectureships.
- IV. A program of research and teaching visits for mathematicians from one participating southern African country to teach advanced undergraduate and postgraduate courses and to do research in other participating countries.

These annual teaching/research meetings and the visiting programs, although long-term projects, would greatly benefit a lot of young mathematicians in the region who after their Ph.D. find themselves overburdened by teaching demands and with no prospects of promotion by authorities requiring 'a good research record".

Alone our countries do not yet have the human and financial resources to realize these aspirations for our mathematical community. Indeed, a good part of the program outlined above will require funding from abroad, either in the form of foundation grants or cooperative agreements. In the hope that we can gradually find friends for our efforts in America and other countries, we wish to draw the attention of the American mathematical community to our current work and future aspirations here in southern Africa.

International Commission On Mathematical Instruction

Report 1995-1997 Mogens Niss, Secretary

1. Organization

On the 1st January 1995, the new Executive Committee of ICMI, elected at the IMU General Assembly in Switzerland (in August 1994), took office. In 1995 the EC met in Madrid (Spain), 26-27 February. A sub-set of the EC met informally at the ICMI Study Conference on geometry (see below) held in Catania, Sicily (Italy) 28 September - 2 October 1996. The Executive Committee had its second meeting at the Eighth International Congress on Mathematical Education, ICME-8, in Sevilla (Spain), and its third meeting in Madrid (Spain) on 31st August - 1st September 1997. Beside in meetings, the work in the EC is conducted by correspondence and electronic communication under the direction of the President and the Secretary.

The General Assembly of ICMI held its quadriennial session on 17th July 1996 in conjunction with ICME-8, Sevilla (Spain). The minutes of the Assembly are published in the ICMI Bulletin No. 41, December 1996, pp 3-9.

In recent years, applications from a number of countries to be co-opted as non-IMU member states of ICMI have been received by the EC. At the end of 1996 ICMI decided, with the endorsement of the International Mathematical Union, to co-opt *Thailand* as a non-IMU member of ICMI. The Adhering Organisation is the Mathematical Association of Thailand under the Patronage of His Majesty the King. In 1997 it was decided, again with the endorsement of the International Mathematical Union, to co-opt *Indonesia* as a non-IMU member of ICMI. The Adhering Organisation is the Indonesian Mathematical Society. As of 1st January 1997, *Latvia* and *Uruguay* have been adopted as new members of IMU and hence of ICMI as well. Other applications were considered by the EC in 1997. Final decisions are expected to be made in 1998.

ICMI continues to have four affiliated study groups, HPM, IOWME, PME, and WFNMC, see section 5.

2. ICMEs

The latest of the quadriennial International Congress on Mathematical Education, *ICME-8*, was held at Universidad de Sevilla (Spain), Reina Mercedes campus, 14-21 July, 1996, with Professor Claudi Alsina, Barcelona (Spain), as the Chair of the International Programme Committee. The congress had an attendance of about 3500 delegates from almost a hundred different countries. The programme was very rich and intensive. Proceedings of the Congress are expected to appear in the second half of 1998. A novel feature in the ICME series was instigated at ICME-8. A 10% solidarity tax was imposed on all registration fees in order to provide (partial) financial support of the attendance of about 250 delegates from about 55 different non-affluent countries. The amount thus generated was distributed by a specially appointed Grants Committee which worked *incognito*.

The next International Congress on Mathematical Education, *ICME-9*, will be held in Makuhari, Chiba, Japan, in 2000, 31 July to 6 August. An International Programme Committee was appointed in 1996. It is chaired by Professor Hiroshi Fujita, Meiji University, Tokyo, Japan. The list of members was published in the ICMI Bulletin No. 42, June 1997, p. 17. The IPC had its first meeting, in Makuhari, 2 -3 March 1998.

No official bids have been received by the Executive Committee with respect to *ICME-10* in 2004. However, Brazil has produced a declaration of intent to let ICMI know that it is preparing a bid to host this Congress.

3. ICMI Studies

The mounting and conducting of so-called ICMI studies on crucial themes and issues in mathematics education were continued in 1995-97. The ICMI studies are published by Kluwer Academic Publishers, Dordrecht, the Netherlands, under the general editorship of the President and the Secretary of ICMI. The proceedings of the ICMI study conference on *Gender and Mathematics Education*, held in Höör (Sweden), 7-12 October 1993, were published in 1995 by Lund University Press. The proceedings are edited by Barbro Grevholm and Gila Hanna. The final outcome of the ICMI Study, the book *Towards Gender Equity in Mathematics Education - An ICMI Study*, edited by Gila Hanna, appeared in the ICMI Study Series in 1996.

The study *Mathematics Education as a Research Domain: A Search for Identity. An ICMI Study*, based mainly on the study conference *What is Research in Mathematics Education, and What Are Its Results?*, held at University of Maryland, College Park, USA, May 1994, appeared, in two volumes (576 pages), at the end of 1997. The study is edited by Anna Sierpinska and Jeremy Kilpatrick.

The study *Perspectives on the Teaching of Geometry for the 21st Century*, based mainly on the study conference held at Università di Catania, Sicily (Italy) 28 September - 2 October 1995 appeared in the beginning of 1998, edited by Carmelo Mammana and Vinicio Villani.

Reports on each of these studies were given at ICME-8 in Sevilla in 1996.

The next study in the series is devoted to the theme *The Role of the History of Mathematics in the Teaching and Learning of Mathematics*. An International Programme Committee was appointed in 1996 (a list of members' names was published in the ICMI Bulletin, No. 41, December 1996, p. 14) with John Fauvel, the Open University, UK, and Jan van Maanen, the University of Groningen, the Netherlands as co-chairs. The Discussion Document for this study was published in various journals and newsletters, including the ICMI Bulletin, No. 42, June 1997, pp. 9-16, and in an abbreviated version in *L'Enseignement mathématique*, 2^e Série, t. 43, fasc 1-2, janvier-juin 1997, pp. 199-203. The study conference was held in France, at CIRM, Luminy (near Marseille), 20-25 April 1998, with Jean-Luc Dorier, Grenoble, France, in charge of the Local Organisation.

ICMI has also mounted a study on the *Teaching and Learning of Mathematics at University Level*. The IPC, which was appointed in 1997 (a list of members' names is included in the ICMI Bulletin, No. 42, June 1997, p. 18), is chaired by Derek Holton, University of Otago, Dunedin, New Zealand. The Discussion Document for this study was published in numerous places, including the ICMI Bulletin, No. 43, December 1997, pp. 3-13, and *L'Enseignement mathématique*, 2^e Série, t. 43, fasc. 3-4, juillet-décembre 1997, pp. 381-390. The corresponding study conference will take place in Singapore, 8-12 December 1998.

Reports on these studies will be given at ICME-9, Makuhari (Japan), in 2000.

Plans for further studies, on average one per year, are under development.

4. Regional Conferences

ICMI has decided to adopt the following (minimum) requirements for granting the status of *ICMI Regional Meeting* to a conference under planning:

- There has to be evidence of a broad national support of the meeting;
- There has to be evidence of a fair degree of regional support;
- The conference should have a theme which is of specific significance to the region at issue;
- An International Programme Committee has to be appointed. It should include at least one member representing the ICMI EC (not necessarily an EC member) who is prepared to produce a brief report of the organisation and proceedings of the conference;

- A conference report in English should be published;
- If ICMI is asked to provide financial support, a budget and a subsequent brief account, both in gross terms, should be made available to the ICMI EC. Normally, only regional conferences to be held in non-affluent countries will be eligible to financial support from ICMI.

In 1995, the *Proceedings of the ICMI-China Regional Conference, Shanghai, 1994*, was published by Shanghai Educational Publishing House.

In 1995, the conference *Regional Collaboration in Mathematics Education: An ICMI Regional Conference* was held at Monash University, Melbourne (Australia), 19-23 April 1995. As this conference took place in a developed country, ICMI's sponsorship did not involve financial support.

The ICMI EC supported (by a grant of US\$ 2.000) *The Seventh South East Asian Conference on Mathematics Education* (SEACME 7), which was held at Hanoi University of Technology, Hanoi (Vietnam), 3-7 June 1996, with 135 participants from 17 countries. A brief report of the conference, which was sponsored by ICMI as an ICMI Regional Meeting, was published in the ICMI Bulletin, No. 41, December 1996. The proceedings of the conference, edited by Nguyen Dinh Tri et al., was published by the Vietnamese Mathematical Society in 1997.

No ICMI Regional Conferences were held in 1997. The next such meeting, The First ICMI East Asia Regional Conference on Mathematics Education (ICMI-EARCOME 1), will be held in Chungbuk, The Republic of Korea, 17-21 August 1998.

5. Affiliated Study Groups

ICMI continues to have four affiliated study groups, *HPM* (The International Study Group for the Relations Between the History and Pedagogy of Mathematics), *IOWME* (The International Organisation of Women and Mathematics Education), and *PME* (The International Group for the Psychology of Learning Mathematics), and *WFNMC* (The World Federation of National Mathematical Competitions). Separate reports of their activities were published in the ICMI Bulletin Nos. 40 (HPM, PME, and WFNMC) and 41 (IOWME), 1996.

6. The Solidarity Programme

In 1992 ICMI established a Solidarity Programme to help the development of mathematics education in countries in which there is a need for it that justifies international assistance. The first stage in this programme was the mounting of a *Solidarity Fund* based on private contributions by individuals, associations, etc. The Fund is to be activated to support concrete initiatives and activities that may foster solidarity in mathematics education between well-defined quarters in developed and less developed countries. The Solidarity Fund has received donations from various organisations and individuals in mathematics education for which it is most grateful. Thus, in 1995 the Fund received a generous donation of Australian Dollars 2.000 from the *Mathematics Education Research Group of Australiasia (MERGA)*, and in 1997 a generous donation of French Francs 5.000 from the *French National Sub-Commission of ICMI, C.F.E.M.*

7. ICMI WMY 2000 Committee

In order to consider, plan and prepare the main aspects of ICMI's involvement in the World Mathematical Year 2000, an *ad hoc* committee, ICMI WMY 2000 Committee, was formed in 1997 under the chairmanship of ICMI's President, Professor Miguel de Guzmán. The other members are listed in the ICMI Bulletin No. 42, June 1997, pp. 18-19.

8. ICMI Bulletins

In 1995-97, ICMI Bulletin Nos. 38-43 were published under the editorship of the Secretary of ICMI. In 1995,

an ISSN-number (1024-3127: Bulletin - ICMI) was attached to the Bulletin. As of 1995 the ICMI Bulletin is available in the following electronic forms: In ASCII-format on direct request to the editor. On the World Wide Web, where it can be found under the following coordinates on the IMU-server, through URL:

http://elib.zib.de/imu.icmi.bull.[no.]
or
http://elib.zib.de/imu/icmi/bulletin/no

9. ICMI on WWW

Since the end of 1995, information concerning ICMI can be found on the ICMI-pages of the IMU-server on the World Wide Web. The pages are located through URL:

http://elib.zib.de/imu.icmi

International Commission On The History Of Mathematics (ICHM)

Report 1995-1997 Eberhard Knobloch

The members of the Executive Committee:

The members of the Executive Committee (EC) of the ICHM and of the ICHM itself served from January 1, 1994 onward and finished their term of office by the end of 1997. The members of the EC were: Eberhard Knobloch (Germany), Chair; Kirsti Andersen (Denmark), Vice Chair; Jeanne Peiffer (France), Secretary; Menso Folkerts (Germany), Treasurer; Laura Toti Rigatelli (Italy), Karen A. Parshall (USA) (1994-1995), representatives of the IMU; David Rowe (Germany), Editor of Historia Mathematica (1994-1995), Karen Parshall (USA), Editor of Historia Mathematica since 1996; further members: Ubiratan d'Ambrosio (Brazil), John Fauvel (UK), Giorgio Israel (Italy), Liu Dun (China), Chikara Sasaki (Japan), Evgeny A. Zaitsev (Russia); past Chairmen: Joseph W. Dauben (USA), Christoph J. Scriba (Germany).

Meetings of the EC:

The EC met once a year:

- October 17, 1995 Centre International de Rencontres Mathematiques Luminy (France)
- November 6, 1996 Mathematical Institute Oberwolfach (Germany) July 25, 1997 Liege (Belgium)

Conferences /Symposia/ Congresses (CSC)

- In 1995 members of the ICHM organized CSC in Berlin (Germany), Groningen (The Netherlands), Luminy /France), Neuhofen (Austria). They contributed to CSC in Hamburg (Germany), Cerisy-la-Salle (France), Leiden and Voorburg (The Netherlands).
- In 1996 members of the ICHM organized CSC in Seoul (Korea), Oberwolfach (Germany). They contributed to CSC in Milton Keynes (UK), State College (USA), Paris (France), Delphi (Greece), Berlin (Germany).
- In 1997 members of the ICHM organized CSC in Liege (Belgium). They contributed to a conference in Luminy (France).
- There are now two European centres for conferences on History of Mathematics: Oberwolfach and Luminy.

Courses:

Members of the ICHM contributed to the European Honours Courses in History of Mathematics which took place in Utrecht (1995), Palermo (1996), London (1997).

Projects:

1. The ICHM is compiling a database containing information about historians of mathematics around the world.

- 2. The ICHM supports the photo archive of the Karl-Sudhoff-Institute at Leipzig University, Germany.
- 3. The ICHM is elaborating a historiography of the History of Mathematics, which will be edited by its members J.W.Dauben (USA) and C.J. Scriba (Germany).
- 4. The ICHM is supporting the CD-ROM Edition of J.W.Dauben's Selected Bibliography on History of Mathematics. The editor will be A. Lewis (Canada).
- 5. In 1996 a committee of coordinators has been established in order to elaborate a suitable proposal for an Oberwolfach meeting in 2000. The new Chairman of the EC belongs to this committee.

Publications:

- 1. The official journal of the ICHM is Historia Mathematica. Every year four issues are published consisting together of 500 pages. It is electronically available, too.
- 2. Once a year a Newsletter prepared by the Secretary and the Chairman of the EC was distributed among the members of the ICHM (February 1995, February 1996, May 1997).
- 3. Once a year the Chairman and the Secretary of the EC sent a report about the scientific activities of the ICHM to the secretary Jacob Palis (Brazil) of the IMU. The reports are published in the Bulletin of the International Mathematical Union.
- 4. In 1995 K. Andersen and M. Dybdahl edited the third edition of the World Directory of Historians of Mathematics for the ICHM.

Medals - Honours

In 1997 the Kenneth O. May Prize was awarded for the third time, and that on the occasion of the XXth International Congress of the History of Science in Liege. The prize went to Rene Taton (France).

New Executive Committee:

From January 1, 1998 onward there is a new EC: Kirsti Andersen (Chair), Craig Fraser (Vice Chair), Jeanne Peiffer (Secretary), Menso Folkerts (Treasurer).

Year 2000: World Mathematical Year

Activities Transcript from the IMU Newsletter WMY2000

Institutions, Countries

INSTITUTIONS

INTERNATIONAL MATHEMATICAL UNION (IMU)

Mathematics Tomorrow

V. Arnold, M. Atiyah, P. Lax and B. Mazur are coordinating the preparation of a book of articles by prominent mathematicians on how they see the prospects of mathematics in the coming century

Contact:

V. Arnold <u>arnold@ceremade.dauphine.fr</u> / <u>arnold@genesis.mi.ras.ru</u> Jacob Palis (<u>ipalis@impa.br</u>)

Web page: http://elib.zib/de/imu/wmy

INTERNATIONAL COMMISSION FOR THE MATHEMATICAL INSTRUCTION (ICMI)

International Congress on the Teaching of Mathematics (ICME-9) July 31 - August 7, 2000, Makuhari/Chiba (Japan)

Contact:

Mogens Niss, MN@mmf.ruc.dk ICMI WMY 2000 Committee

Contact:

Miguel de Guzman, mdeguzman@bitmailer.net

INTERNATIONAL COMMISSION ON HISTORY OF MATHEMATICS (ICHM)

Memory of Mathematicians

Creation of a public database containing for each mathematician a description of the locations where original documents concerning him or her are stored

Contact: Hélène Gispert, <u>Helene.Gispert@ghdso.u-psud.fr</u>

BACHELIER FINANCE SOCIETY

Second World Conference « Bachelier Dissertation Centenary » June 27-29, 2000, Paris (France)

Contact: Hélyette Geman, geman@dauphine.fr

BERNOULLI SOCIETY for MATHEMATICAL STATISTICS and PROBABILITIES

World Congress of the Bernoulli Society

May 15-20, 2000, Guanajato (Mexico)

Five Year 2000 Conferences

Causality, Ecology and Environment, Financial Mathematics, Neural Networks and Learning, Quantum Stochastics, Stochastic Geometry and Imaging

Special Volume of « Bernoulli »

This volume will comprise a number of special invited papers that should take stock of the developments in mathematical statistics and probability in the XXth century and speculate about stochastics and its applications in XXIst century.

Contact: Ole Barndorff-Nielsen, atsoebn@mi.aau.dk

EUROPEAN MATHEMATICAL SOCIETY (EMS)

Third European Congress of Mathematics (3ECM)

July 10-14, 2000, Barcelona (Spain)

Contact : Sebastia Xambó Descamps, sxd@grec.upc.es

Alhambra 2000 (in collaboration with CIMPA (Nice, France))

European-Arab Congress of Mathematicians (with contributions from historians)

Mathematics posters in the subways of cities all over the world. A gesture towards the general public in the form of small posters on the trains, and larger ones in the stations, showing mathematical subjects of general interest.

Postage stamps

Issue of stamps representing European mathematicians. Wherever possible, concerted action between countries or on the European level.

Contact: Vagn Lundsgaard Hansen, V. L. Hansen@mat.dtu.dk

LATIN AMERICAN AND CARIBBEAN UNION (UMALCA)

Latin American Congress of Mathematics

August 2000

Contacts: Roberto Markarian, roma@fing.edu.uy

Mario Wschebor, wscheb@fcien.edu.uy

SOUTH-EAST ASIAN MATHEMATICAL SOCIETY (SEAMS)

Third Asian Mathematical Conference (AMC2000)

October 23-27, 2000, Manila (Philippines)

Contact: Polly Wee Sy, pweesy@i-manila.com.ph

COUNTRIES

CANADA

1. Canadian Mathematical Society (CMS)

Contact: Bernard Hodgson, bhodgson@mat.ulaval.ca

2. Quebec

United Congress of all mathematical associations and groups of Quebec

Spring 2000

Mathematics Exhibition

Contact: Richard Pallascio, pallascio.richard@uqam.ca

FINLAND

Rolf Nevanlinna Colloquium

8-12 August 2000, Helsinki (Finland)

Contact: Pekka Tukia, pekka.tukia@helsinki.fi

Studia Generalia lecture series

Autumn 2000; first lecture 1 October 2000, University of Helsinki (Finland)

Contact: Olli Martio, olli.martio@helsinki.fi

FRANCE

1. French Committee for World Mathematical Year

Mathematics posters in the Paris underground (with the EMS)

This project could involve the re-fitting of certain tube stations (Monge and Laplace).

Contact: Mireille Chaleyat-Maurel, mcm@ccr.jussieu.fr

Postage stamps

A list of mathematicians has been submitted to the Post Office for an issue, in the year 2000, of six stamps portraying French mathematicians.

Contact: Liliane Zweig, zweig@dmi.ens.fr

Mathematics and other fields of knowledge (with the Ecole Normale Supérieure and historians of mathematics)

Re-edition of books out of circulation

In partnership with the CNL (Centre National du Livre) it is planned to re-edit important mathematical works no longer available.

Contact: Martin Andler, andler@math.uvsq.fr

A book « An outlook by women mathematicians » An initiative of the Association « Femmes et

Mathématiques »

Film: "Four women mathematicians at the far end of the world" An initiative of the Association « Femmes et Mathématiques »

Contact: Julianne Unterberger, julia.unterberger@univ-reims.fr

2. Ecole Centrale de Lyon / Ville de Sainte Affrique

Conference « Emile Borel »

July 16-17, 1999, Sainte Affrique (France)

The history of mathematics in France at the beginning of the XXth century.

Contact: P. Guiraldenq, charrier@cc.ec-lyon.fr

GERMANY

Mathematics and Expo 2000

Summer 2000, Hanover

Various mathematical manifestations on the occasion of Hanover's International Trade Fair

Contact: Klaus Hulek, hulek@math.uni-hannover.de

ITALY

Exhibition « Mathematics in contemporary art »

March-September 2000, Museo di arte contemporary del castello di Rivoli, Rivoli, Torino (Italy) Stamp

The proposition to have a commemorative stamp celebrating WMY 2000 was already submitted to the Ministero delle Poste

RAI Programme « Mathematics in western civilization »

RAI, the Radio-Television National State Broadcasting Company is considering the proposition to produce a series of 3 programmes on «Mathematics in western civilization»

Contact: Alberto Conte, conte@dm.unito.it

LUXEMBOURG

The development of mathematics: 1950-2000

A collective book retracing the development of mathematics during the second half of the XXth century.

Contact : Jean-Paul Pier, pier@cu.lu

PORTUGAL

Macao 2000: Mathematics and Civilization

A joint Portuguese-Chinese initiative for a congress on a general subject of the scientific and cultural role of the mathematical sciences in the history of civilization and in the future development of humanity

Contact : José Francisco Rodrigues, rodrigue@lmc.fc.ul.pt

UNITED STATE OF AMERICA

Joint Mathematics Meetings (Joint meeting of the American Mathematical Society, Mathematical Association of America, and Society for Industrial and Applied Mathematics)

January, 19-22, 2000, Washington, D.C. Contact: Hope Daly, hhd@math.ams.org

Web page: http://www.ams.org/meetings/wmy2000.html

Special Meeting on the theme "Mathematical Challenges of the XXIst Century"

August 2000

Contact: Felix E. Browder, <u>browder@math.rutgers.edu</u>
Web page: <u>http://www.ams.org/meetings/wmy2000.html</u>

IMU NEWSLETTER WMY2000

EDITORS: Mireille Chaleyat-Maurel

Gérard Tronel

Web page: http://www.math.jussieu.fr/~jarraud/wmy2000/ma2000.html