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International  
Mathematical Union**



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**S E C R E T A R I A T**

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**36<sup>o</sup> Bulletin of the  
International Mathematical Union**

**Special Number**

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*INTERNATIONAL MATHEMATICAL UNION*

*Executive Committee*

January 1, 1991–December 31, 1994

President:	Professor Jacques Louis Lions
Vice-Presidents:	Professor John Coates Professor David Mumford
Secretary:	Professor Jacob Palis
Members:	Professor James Arthur Professor Albrecht Dold Professor Hikosaburo Komatsu Professor László Lovász Professor Eduard Zehnder
Past President:	Professor Ludwig Faddeev

**Twelfth General Assembly**  
of the  
**International Mathematical Union**

Lucern, Switzerland, July 31 – August 1, 1994

(Opening session at 10 a.m.)

**Agenda**

1. Opening of the Assembly
2. Address by the President
3. Appointment of Committees
  - Credentials Committee
  - Resolutions Committee
  - Tellers
  - Committee for Finance and Dues
  - Nominating Committee
4. Members
  - 4.1. New applications, change group
  - 4.2. Dues arrears of members
5. Review of the activities of the Union:
  - Symposia and conferences; IMU lectures; ICMI; CDE; ICHM.
  - IMU Bulletin; World Directory of Mathematicians.
6. Report of the Turn of the Century Committee
7. Finance and dues:
  - Financial reports for the years 1990–1993
  - Budget for the years 1995–1998
8. Elections:
  - Executive Committee of IMU
  - Executive Committee of ICMI
  - CDE
  - ICHM
  - Representatives of IMU to ICSU, COSPAR, CTS, COSTED
9. Site of ICM-98
10. Discussion of the format of future ICMs
11. Adoption of resolutions
12. Next meeting of the General Assembly
13. Miscellaneous

## IMU General Assembly

The following letter has been sent to all Adhering Organizations of IMU, with a copy to the National Committees:

1. The Twelfth General Assembly of IMU will be held on July 31 - August 1, 1994, in Lucern, Switzerland.

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:

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

provided that the number of delegates shall not exceed the corresponding number of votes. Any Adhering Organization which desires to ensure its full quota of 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, 1994.

4. Enclosed you will also find a hotel form for your delegate(s) and other material from Switzerland which should be given to the delegates to be filled and sent to Switzerland, as requested.

5. 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., not later than March 31, preferably before March 1, 1994.

The information material from Switzerland will be sent upon request to members who have not received it.

**INTERNATIONAL MATHEMATICAL UNION**

**General Assembly**

*Lucerne, Switzerland, July 31 - August 1, 1994*

**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, 1994 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*

## Procedure for the Election of the Executive Committee of IMU

1986

1. Not less than a year before the meeting of the G.A., the E.C. shall request proposals for the membership of the E.C. from the Committees for Mathematics, to be considered before the meeting of the E.C. in the Spring before the Assembly.  
The E.C. shall then draw up its own list of nominations and this shall be made known to delegates not later than two months before the General Assembly. The E.C. shall make certain that the candidate is willing to serve if elected.
2. Further nominations may be made in writing before the commencement of business on the second day of the meeting provided that they are signed by at least ten delegates and contain a statement by the candidate that he or she is willing to serve if elected.  
Each nomination shall be for a specific office: President, Secretary, Vice-President or Member at large of the E.C.
3. On the first day of the meeting, the General Assembly shall appoint a Nominating Committee consisting of:
  - (a) the President (chairman),
  - (b) all Past Presidents who are present (ex-officio),
  - (c) 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.
4. The Nominating Committee shall propose a slate from the nominations made under (1) and (2) above and shall make it known to the meeting.  
No person shall be a candidate for more than one office.
5. The General Assembly shall then elect the new Executive Committee by written ballots.  
The voting slips shall contain all the names nominated under (1) and (2) (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".



## **Procedure 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 E.C. of IMU shall request proposals for the membership of the E.C. of ICMI from the Committees for Mathematics and will conduct 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.

## **Procedure 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 E.C. of IMU shall request proposals for the membership of CDE from the Committees for Mathematics and will conduct consultations with the existing CDE before proposing slates to the Nominating Committee.

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

# International Commission on Mathematical Instruction

## Terms of Reference

1986

1. The Commission shall consist of
  - (a) the members of an Executive Committee as specified in (2) below, elected by IMU, and
  - (b) one delegate from each member nation as specified in (4) below,
2. The Executive Committee consists of four officers, namely, President, two Vice-Presidents, and Secretary, and of three further members. Furthermore, the outgoing President of ICMI, the President and the Secretary of IMU, and the representative of IMU at CTS (ICSU) are members ex-officio of the E.C.
3. In all other respects the Commission shall make its own decisions as to its internal organization and rules of procedure.
4. Any Adhering Organization wishing to support or encourage the work of the Commission may create, or recognize, in agreement with its Committee for Mathematics, a Sub-Commission for ICMI to maintain liaison with the Commission in all matters pertinent to its affairs. The Adhering Organization in question shall designate one member of the said Sub-Commission, if created, to serve as a delegated member of ICMI as mentioned in (1).
5. The Commission shall be charged with the conduct of the activities of IMU, bearing on mathematical or scientific education and shall take the initiative in inaugurating appropriate programmes designed to further the sound development of mathematical education at all levels, and to secure public appreciation of its importance. In the pursuit of this objective, the Commission shall cooperate, to the extent it considers desirable with effective regional groups which may be formed spontaneously, within, or outside, its own structure.
6. The Commission may, with the approval of the Executive Committee of IMU, coopt, as members of ICMI, suitable chosen representatives of non-IMU countries, on an individual basis.
7. The budget of the Commission shall be submitted to the Executive Committee of IMU and the General Assembly, for approval, at such times as may be determined by agreement between the Commission and the Executive Committee of IMU.
8. The Commission shall file an annual report of its activities with the Executive Committee of IMU, and shall file a quadrennial report at each regular meeting of the General Assembly.

## Commission on Development and Exchange

### Terms of Reference

1986

1. The Commission shall consist of a Chairman and ten other members including the outgoing Chairman of CDE, the President and Secretary of IMU and the representative of IMU at COSTED (ICSU). The last four are members *ex-officio* of the CDE.  
The rules for the election of the Commission are similar to those of the IMU E.C. and of the ICMI E.C., with the same Nominating Committee. The E.C. shall request proposals for the membership of CDE from the Committees for Mathematics and will conduct extensive consultations with the existing CDE before proposing slates to the Nominating Committee.
2. The Commission shall elect, from among its members, a Secretary who shall act also as its Treasurer, unless the Commission appoints another member for that purpose.  
The Chairman, the Secretary (if any) and the Treasurer (if any) shall be designated as Officers of the Commission. The Commission may, in exceptional circumstances, elect the Chairman as Secretary or Treasurer, as the case may be, provided that the Commission has at least two different (elected) officers. The Commission shall make its own financial arrangements, subject to By-law 10 of the IMU.
3. Acting in accordance with the Statutes and By-laws of the Union, and the administrative policies of the Union, as determined by the Executive Committee, the Commission shall
  - (a) support and encourage the growth of Mathematics in developing countries and cooperate with appropriate bodies to that end;
  - (b) support the exchange of visits with member countries of the Union in which, for one reason or another (e.g. non-convertible currencies), such exchanges are not easy to arrange;
  - (c) advise and assist existing agencies working towards the same objective with due regard to the non-governmental and non-political nature of IMU and to its administrative policies, and without duplicating or prejudicing the work of other Commissions and Committees of IMU at points of common interest.
4. The Commission may accept gifts, legacies and subventions, subject to the Statutes of IMU, Section 16. The Commission shall make its own arrangements for the utilization of such funds for the activities mentioned in (3).
5. The Commission shall report annually to the Executive Committee on its activities and provide a financial statement.
6. The Commission shall file a quadrennial report at each regular meeting of the General Assembly. The Commission shall come into existence on January 1, 1979, and the "Commission on Exchange" shall be dissolved from that date.

## **MEMBERS OF THE INTERNATIONAL MATHEMATICAL UNION - IMU**

### **ADHERING ORGANIZATION (AO), COMMITTEE FOR MATHEMATICS (CM)**

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

<b>Argentina</b>	<b>II</b>	<b>AO</b>	Union Matematica Argentina Dr. Juan Tirao, President PEMA-INTEC Guemes 3450 3000 Santa Fe Argentina Tel: (54) (42) 20023/24 - Fax: (54) (42) 550944
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<b>Philippines</b>	<b>I</b>	<b>AO</b>	National Research Council of the Philippines Bicutan, Tagig Metro Manila The Philippines
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		<b>Dues:</b>	Academia das Ciencias de Lisboa R.Academia das Ciencias, 19 1200 Lisboa - Portugal
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		CM	International Relations Committee Mr. L.U. Mole, Secretary The Royal Society 6 Carlton House Terrace London SW1Y 5AG United Kingdom
U.S.A.	V	AO	National Academy of Sciences Board on Math. Sciences Attn.: Dr. John Tucker, Director 2101 Constitution Avenue, N.W., Washington, D.C. 20418 U.S.A. Phone: (1) (202) 334- 2421 Fax: 334 1597
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## INSTRUCTIONS FOR A COUNTRY THAT WISH TO BECOME A MEMBER OF IMU

A country interested in becoming a member of the International Mathematical Union, is requested to send to the Secretary of IMU, a sample of activities in mathematics, specially concerning research, as well 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, for its recommendation to all country members for final decision, which shall be taken through "Postal Ballots" or by the General Assemblies.

## Report of the Executive Committee to the Twelfth General Assembly

This report covers the period 1990-1993

### Members of the Union

The following countries were members of IMU as of January 1, 1994:

- I: Cameroon, Chile, Croatia, Cuba, Egypt, Greece, Hong Kong, Iceland, Iran, Ivory Coast, Democratic Republic of Korea, New Zealand, Nigeria, Norway, Philippines, Portugal, Romania, Saudi Arabia, Singapore, Slovenia, Turkey, Vietnam, Venezuela.
- II: Argentina, Austria, Bulgaria, Czech Republic, Denmark, Finland, Georgia, Ireland, Mexico, Republic of Korea, Slovakia Republic, South Africa, Yugoslavia.
- III: Australia, Belgium, Brazil, Hungary, India, Israel, Netherlands, Poland, Spain, Sweden, Switzerland.
- IV: Canada, Italy.
- V: China, France, Germany, Japan, United Kingdom, USA, Russia.

In postal ballots conducted among the Adhering Organizations of IMU, Lithuania was admitted to the Union both in Group I as of January 1, 1995.

### Scientific activities of the Union

#### 1990:

The major events of the International Mathematical Union in 1990 were its eleventh General Assembly, held in Kobe on August 18-19, and the International Congress of Mathematicians, held in Kyoto on August 21-29.

The General Assembly elected a new Executive Committee for IMU as well as for its commission ICMI (International Commission on Mathematical Instruction), a new Commission for Development and Exchange, members to the Executive of its joint International Commission on the History of Mathematicians, as well as representatives to several ICSU bodies. The Assembly also decided the site of the next Congress, Zürich in 1994.

The International Congress of Mathematicians-1990 was held in the Kyoto International Conference Hall. A total of 3955 mathematicians from 76 countries and districts attended in person together with 562 accompanying members.

The Chairman of the Fields Medals Committee, Ludwig D. Faddeev, President of IMU, announced the recipients of the Fields Medals: V.G. Drinfeld, Vaughan F.R. Jones, Shigefumi Mori and Edward Witten. The Chairman of the Rolf Nevanlinna Prize Committee, László Lovász, announced A.A. Razborov as the recipient of the Prize.

The main part of the mathematical program consisted of one-hour Plenary Addresses and 45-minute Section Lectures in 6 parallel sessions. In total, 15 Plenary Addresses and 138 Section Lectures in 18 Sections were delivered. The Organizing Committee invited these speakers following the decision of the IMU Program Committee. No invited speakers declined for political or economical reasons. In addition, there were five 45-minute lectures invited by ICMI, 620 Short Communications and many informal seminars and other meetings conducted by the participants. The details will be reported in the Proceedings of the Congress, which will be published by the end of 1991.

Funds from Japan made it possible to support 269 foreign participants from 50 countries. Most of them came from developing countries or countries in difficult currency situations. The number includes 47 IMU Scholars whose travel expenses were supported by the Special Development Fund of IMU. To the Fund IMU had received donations more than ever before from its members as well as important contributions from ICSU and the Royal Society, London.

At the Closing Ceremony in the afternoon of August 29, the President of IMU, Professor Faddeev, announced the new officials of IMU for 1991-94 and the side of ICM-94 as decided by the General Assembly, Prof. S.D. Chatterji invited mathematicians of the world to the next ICM in Zurich.

## 1 9 9 1:

**International Association on Mathematical Physics (IAMP) Congress**, was held in Leipzig, DDR, on July 30–August 8, 1991. The meeting was attended by approximately 400 mathematicians from different countries. IMU supported this Congress with 10 000 Swiss Francs. The IMU representative was Professor L.D.Faddeev.

**Seventh Symposium on General Topology and its Relations to Modern Analysis and Algebra**, was held in Prague, Czechoslovakia, on August 19–24, 1991. The Symposium was attended by 230 foreign mathematicians. IMU granted 5 000 Swiss Francs to this Symposium. The IMU representative was Professor L.Lovasz.

**International Conference on the Theory of Rings, Algebras and Modules**, dedicated to the 70-th anniversary of A.I.Shirshov, was held at the Altai University, Barnaul, U.S.S.R., on August 23–27, 1991. It was attended by approximately 50 foreign mathematicians. IMU Granted 5 000 Swiss Francs to this Conference. The IMU representative was Prof. W.Feit.

**The International Symposium Algebraic Groups and Related Number Theory**, was held in Minsk on May 22-29, 1991, and was attended by approximately 24 foreign mathematicians. IMU granted 5 000 Swiss Francs to this Symposium. The IMU representative was Prof. W.Feit.

**Third Pan African Congress of Mathematics**, was held in Nairobi, Kenya, from August 13-23, 1991. The meeting was attended by 70 mathematicians and IMU granted 10 000 Swiss Francs to this Congress. IMU Representative was Prof. J.Palis.

**X Escola Latino Americana de Matematicas - ELAM**, was held at Sierras de Cordoba, Argentina, from August 12-21, 1991. This School was attended by 150 mathematicians from different countries and the topics covered were Partial Differential Equations/Analysis. IMU Granted 11 000 Swiss Francs to this Conference. The IMU Representative was Prof. Jacob Palis.

**International Conference in Functional Analysis**, was held in Mons, Belgium, with a participation of about 80 mathematicians. IMU gave its imprimatur to this Conference. The IMU representative was Prof. J.L.Lions.

## 1 9 9 2:

**International Research Workshop on Banach Space Theory**, was held in Merida, Venezuela, from 6 to 17 of January, 1992. It was attended by 50 mathematicians from different countries and 12 invited speakers. IMU granted 5 000 Swiss Francs to this Workshop. The IMU representative was Prof. Jacob Palis.

**International Colloquium on Geometry and Analysis**, was held at TATA Institute of Fundamental Research, in January 1992. It was attended by 45 mathematicians with 28 invited speakers. IMU Granted 11.000 Swiss Francs. The IMU representative was Prof. David Mumford.

**Premier Congrès Europeen de Mathématiques (CEM)**, was held in Paris, France, from July 6 to 10, 1992. This Congress was attended by 275 mathematicians from all over the world. IMU gave a grant of 11 000 Swiss Francs to help its realization. The IMU representative was Prof. J. L. Lions.

**Winter School in Abstract Analysis**, was held at Strobl am Wolfgangsse, Austria, from Feb. 3 - 8, 1992. It was attended by approximately 70 mathematicians in the area of Functional Analysis, from different countries. IMU Granted 5.000 Swiss Francs to this School. The IMU representative was Prof. J.L.Lions.

**International Symposium on the 100th Anniversary of the Births of Li Yan and Qian Baozong**, was held in Beijing, China, from August 21-23, 1992 under the support of the International Commission on the History of Mathematics. It was attended by 80 participants from different countries. IMU gave a grant of US\$ 1.000,00 to help its realization. The IMU Representative was Prof. H.Komatsu.

**7th International Congress on Mathematical Education, ICME-7**, was held at Univ. Laval, Québec, Canada, 17-23 August, 1992, under the support of the International Commission on Mathematical Instruction (ICMI). It was attended by 3.300 delegates from 75 different countries. IMU gave a grant of 11 000 Swiss Francs and its representative was Prof. J.Palis.

**International Conference on Group Theory**, was held in Timisoara, from 17-20 September , 1992. It was attended by about 44 participants. IMU Granted 3 000 to help its realization. The IMU representative was Prof. L.Lovász.

**International Conference in Functional Analysis**, was held in Mons, Belgium, with a participation of about 80 mathematicians. IMU gave its imprimatur to this Conference. The IMU representative was Prof. J.L.Lions.

1 9 9 3:

**African Mathematical Union (AMU) Symposium on Current Research Trends in Mathematics, Computer Science and Mathematical Physics**, was held in Porto-Novo, Rep.of Benin, Jan 22-25, 1993. The meeting was attended by 60 participants from different countries. IMU Granted 6 000 to help its realization. The IMU Representative was Prof. M.S. Narasiam (CDE) and P. Grisvard.

**Conference in Abstract Analysis**, was held in South Africa - April 14-23, 1993. It was attended by about 250 mathematicians. The IMU grant was 5 000 Swiss Francs. The IMU Representative was Prof. J. Arthur.

**V Latin American Congress on Probability and Mathematical Statistics (CLAPEM)** was held in São Paulo, June 28 - July 3, 1993. The meeting was attended by more than 200 mathematics, from Latin America and from different countries of the world. The main theme to this Conference was Probability and Statistics in Mathematics. IMU granted 11 000 Swiss Francs and the IMU Representative was Prof. J.Palis.

**International Conference on Complex Analysis and the VIIth Romanian-Finnish Seminar in Timisoara**, from August 23-27, 1993. It was attended by 155 participants. IMU Granted 6 000 Swiss Francs to help its realization. The IMU Representative was Prof. Olli Lehto.

**Second International Seminar on Approximation and Optimization**, held in Havana, from September 26 through October 1, 1993. It was attended by 160 mathematicians and IMU granted 6 000 Swiss Francs to help its realization. The IMU Representative was Prof. J.L.Lions.

**III Int. conference on Algebra - Kargapolov Conference** was held in Krasnoyarsk, August 23-28, 1993. The meeting was attended by 45 algebraists. IMU granted 6 000 Swiss Francs. The IMU representative was J. Coates.

**XI ELAM (Latin American School of Mathematics)**, held in Mexico, from August 15-27, 1993. The theme of this School was Algebraic Topology and its Applications and the conference was attended by more than 184 participants. IMU granted 11 000 Swiss Francs. The IMU representative was Prof. J.Palis.

**INTERNATIONAL CONFERENCE ON COMBINATORICS**, held in Kesztheley, Hungary, from July 18-24, 1993. The meeting was attended by more than 260 participants from different countries. IMU granted 11 000 Swiss Francs. The IMU Representative was Prof. L. Lovasz.

**IV CHILEAN SIMPOSIUM OF MATHEMATICS**, held in Santiago, Chile, from September 7 - October 1, 1993 and its attendance was of about 60 foreign participants from Latin American and other countries. IMU granted 6 000 Swiss Francs to help its realization. the IMU Representative was Prof. J.Palis.

IMU also supported the following conferences without financial help, giving only its Imprimatur: **Conference on Local Theory of Banach Spaces and Related Topics**, held at the Centro Stefano Franscini, in Ascona, Switzerland, from September 5-11, 1993. The Conference was attended by 60 participants and IMU representative was Prof. E.Zehnder.

**Nevanlinna Colloquium**, held at the Univ. of Michigan, June 1993. It was attended by about 70 participants. The IMU Representative was Prof. Olli Lehto.

#### **1 9 9 4:**

The Executive Committee of IMU decided to support the following Conferences without financial assistance, for the year 1994:

**Symposium on History of Mathematics**, to be held in Warwick, 1994. The IMU representative will be Prof. John Coates.

**Conference Internationale de Physique Mathematique**, held in Paris, from July 18-23, 1994. The IMU representative will be Prof. L. Faddeev.

**International Conference on Dynamical Systems and Chaos**, to be held in Tokyo, from May 23-27, 1994. The IMU representative was Prof. J.Palis.

**International Conference on Potential Theory**, to be held at Kouty in Czech Republic, from August 13-19, 1994. The IMU Representative will be Prof. J.L.Lions.

**Siberian Conference on Applied and Industrial Mathematics**, to be held at Novosibirsk Akademgorodok, from July 24-30, 1994. The IMU representative will be Prof. L. Faddeev.



### Meetings of the Executive Committee

- The 55th Meeting of the Executive Committee of IMU was held on Kobe, Japan, August 17, 1990.
- The 56th Meeting of the E.C. was held in Paris, France, April 18-19, 1991.
- The 57th Meeting of the E.C. was held in Rio de Janeiro, May 7-8, 1992.
- The 58th Meeting of the E.C. was held in Zurich, Switzerland on May 6-7, 1993.
- The 59th Meeting of the E.C. was held in Budapest, Hungary, on April 14-15, 1994.

The Executive Committee expresses its gratitude to the Collège de France, Instituto de Matemática Pura e Aplicada, in Rio de Janeiro, ETH-Zentrum in Zurich and the Hungarian Academy of Sciences, Budapest, for their hospitality during its meetings.

#### Excerpt from the Meeting of May 7-8, 1992:

##### Program "Turn of the Century"

On May 6, 1992, Professor Jacques Louis Lions, President of IMU, declared the Year 2000 as the World Mathematical Year.

##### World Mathematical Year 2000

On May 6th, 1992, in Rio de Janeiro, during the celebration of the 40th anniversary of the world-wide reputed Institute of Pure and Applied Mathematics (IMPA), Professor Jacques-Louis LIONS, President of the International Mathematical Union (IMU) declared in the name of this Union, that the year 2,000 will be a **WORLD MATHEMATICAL YEAR**.

**WMY 2000 (World Mathematical Year 2,000)** is set under the sponsorship of UNESCO (Professor Frederico MAYOR), of the THIRD WORLD ACADEMY OF SCIENCES (Professor Ab-dus SALAM and Professor Carlos CHAGAS, who took part in the Declaration of Rio de Janeiro), of the FRENCH MINISTER OF RESEARCH AND SPACE (Professor H. CURIEN), OF THE BRAZILIAN STATE SECRETARY OF SCIENCE AND TECHNOLOGY (Professor Helio JAGUARIBE), of the BRAZILIAN ACADEMY OF SCIENCES (Professor Israel VARGAS) and of the SWISS FEDERAL COUNSELLOR, Dr. Flavio COTTI, the next International Congress of Mathematicians being organized in Zürich in August 1994.

##### *THE DECLARATION OF RIO DE JANEIRO set three aims*

1. *First Aim:* the great challenges of the 21st century.

During his conference in Paris in 1900, David HILBERT, listed a series of the main problems that the now ending century had to challenge.

The US National Committee for Mathematics suggested in 1990, at the last General Assembly of IMU in KOBE (Japan), that reputed mathematicians, to be represented within the *Turn of the Century Committee* organize the efforts to envision what the great challenges of the year 2,000 would be. This Committee is chaired by Professor Jacob PALIS, IMPA, General Secretary of IMU.

## 2. *Second Aim*: Mathematics, keys for development.

Pure and Applied Mathematics is one of the main keys of the understanding of the world and of its development.

That is why it is essential that the countries which are members of UNESCO are gradually able to reach a level enabling their admission to IMU, the members of which are 50 nations for the time being.

Therefore, the *second aim* of the DECLARATION of RIO DE JANEIRO is that most countries which are members of UNESCO reach such a level for the turn of the century.

That implies great additional efforts in the fields of **Education**, of **Training**, and, as a very sensitive point for countries that face difficulties in having currency resources, of access to **Scientific Information**.

Such efforts, which have already been widely undertaken will be confirmed and raised by the two main commissions of IMU: **I.C.M.I. (International Commission on Mathematical Instruction)**, which is chaired by Professor M. de GUZMAN, from Madrid and whose General Secretary is Prof. M. NISS from Denmark, and the **C.D.E. (Commission on Development and Exchange)**, which is presided by Professor M. S. NARASIMHAN, from Bombay and whose General Secretary is Professor P. BÉRARD, from Grenoble, France. Both Commissions are linked with UNESCO, which was represented in Rio de Janeiro by Professor A. MARZOLLO, responsible for Mathematics.

## 3. *Third Aim*: the image of Mathematics.

The DECLARATION OF RIO DE JANEIRO sets as *third aim*, which also has the greatest importance, a systematic presence of mathematics in the "*information society*" thanks to examples and applications which will be scientifically exact and open to the largest number.

That will be developed in connection with such efforts which have already been undertaken by many countries that are members of IMU.

The DECLARATION OF RIO DE JANEIRO on MATHEMATICS announcing the WORLD MATHEMATICAL YEAR 2,000, was warmly supported not only by all the mathematicians present in Rio and who had come from all continents, and by, of course, many of the Brazilian most eminent mathematicians, but also by Professors in other subjects too, and especially Professor Carlos CHAGAS former President of the Pontifica Academy of Sciences.

## Publications of the Union

Four issues of the IMU Bulletin have come out in the last three and half years: Number 33 in December 1991, No. 34 in December 1992, No. 35 in December 1993 and the present Number 36 (Special Number) in June, 1994.

The 9th Edition of the World Directory of Mathematicians came out in 1990. The compilation of material and printing were done by the American Mathematical Society with Prof. W. Feit as Editor. The A.M.S. is the sole distributor of the Directory.

The 10th edition (Editor, Prof. D. Mumford) is again produced by the American Mathematical Society. This edition is due in the summer of 1994.

## Postal Ballots

The following postal ballots were conducted among the Adhering Organizations, with the knowledge of the National Committees for Mathematics, in the years 1991-1994:

### 1 9 9 1:

- Number 1/91 - Venezuela to become a member of the IMU, as for Group I. All votes received, 84, were in favor.

### 1 9 9 2:

- Number 1/92 - Croatia to become a member of IMU, as for Group I. All votes received, 79, were in favor.
- Number 2/92 - Korea, to change from Group I to II. All votes received, 83, were in favor.
- Number 3/92 - Mexico, to change from Group I to II. All votes received, 82, were in favor.
- Number 4/92 - Slovenia to become a member of IMU, as for Group I. All votes received, 97, were in favor.
- Number 5/92 - Georgia to become a member of IMU, as for Group II. All votes received, 93, were in favor.

### 1 9 9 3:

- Number 1/93 - Czech Republic to become a member of IMU, as for Group II. All votes received, 95, were in favor.
- Number 2/93 - Slovakia to become a member of IMU, as for Group II. All votes received, 97, were in favor.

### 1 9 9 4:

- Number 1/94 - Lithuania to become a member of IMU, as for Group I. All votes received, 72, were in favor.

## Union Representation at ICSU and Other Organizations

- Prof. Olli Lehto, Past Secretary of IMU, represented IMU at the 60th Meeting of ICSU, held in Norway, September, 1991.
- Prof. Jacob Palis, Secretary of IMU, represented IMU at the 30th General Committee of ICSU and Associated Meetings, held in Israel, November, 1992; also, at the 31th and 32th Meetings of the General Committee of ICSU, held in Santiago, Chile in October, 1993.
- Prof. Jacob Palis was elected member of the Executive Board of ICSU, on its 65th meeting held in Chile, October 1993.

## IMU Lectures

Since 1971, the Executive Committee of IMU has been inviting, from time to time, a distinguished mathematician, of high international standing, to give a set of four to five lectures, on important new developments in mathematics to which the lecturer, directly or indirectly, has made a contribution, and which deserve to be “surveyed” at some length, for the benefit of younger mathematicians as well as others.

IMU provides an stipend of US\$ 2000 to the lecturer upon receiving a manuscript corresponding to his talks. The present Executive Committee has also decided to consider the payment of the transportation of the lecturer when an institution of a developing country is involved.

The lectures should be give at mathematical centers and they will be published in the *L'Enseignement Mathématiques*.

The Executive Committee of IMU appointed Professor Marc Yor (Lab. Probability, Univ. of Paris) to visit the Indian Statistical Institute, India and give the IMU Lectures on “Recent developments in the theory of stochastic process”.

## Colloquia Sponsored by IMU

1. The International Mathematical Union sponsors, or co-sponsors, “colloquia”; it does not sponsor or co-sponsor “institutes”. A colloquium is understood to mean a meeting, lasting about a week or more, to mainly discuss the results of recent research.
2. Any colloquium sponsored or co-sponsored by the Union is to be designated “an international colloquium”.
3. The co-sponsorship of the Union usually (though not always) implies a financial contribution by the Union of a few thousand Swiss francs. It is understood that such a contribution will be matched by at least an equal contribution from the organizers themselves.
4. The Union’s contribution is to be utilized for meeting the travel expenses of the invitees. The living expenses are to be met from other sources.
5. When the Union co-sponsors a colloquium, it nominates one or two members to the Organizing Committee of the Colloquium as its representatives. The Union’s nominee(s) should have a share in the preparation of the scientific program and in the selection of speakers. It is customary that one of the nominees of the Union is a member of the Executive Committee.
6. Immediately after the Colloquium is over, a financial statement giving the full budget of the Colloquium (showing the income from *all* sources, and the expenditure on all accounts) and a report on the scientific activities are to be sent by the Chairman of the Organizing Committee to the Secretary of the Union.
7. The Union’s deadline for receiving applications for colloquia is March 1 of the year preceeding the Colloquium. Even if the full picture of the Colloquium is not clear by that date, an application giving the topic, the names of the officers of the Organizing Committee, the main prospective speakers, the probable size of the Colloquium, and the probable size of the budget, together with the place where the Colloquium will be held, should be sent in.
8. The ICSU resolution on the free circulation of scientists should be observed: *Before the Symposia or meetings are arranged, an assurance in writing should be obtained from the organizers in the country concerned that visas will be granted to bona fide scientists if proper applications are made.*

## **International Congress of Mathematicians 1994**

The next International Congress of Mathematicians will be held in Zurich, Switzerland, from August 3-11, 1994. The first announcement has been sent out in July 1993 and the second in January 1994. For further informations please contact the Organizing Committee: Prof. Christian Blatter, ICM/94 ETH-Zentrum, CH -8092 Zurich, Switzerland.

### **Travel Grants for Young Mathematicians**

*to attend the International Congress of Mathematicians*

The International Mathematical Union will award travel grants to young mathematicians to help them to attend the ICM-94, Zürich, Switzerland August 3–11, 1994. The grants are intended primarily for young mathematicians from developing countries (not necessarily members of IMU), but applications from countries with strict monetary regulations will also be considered.

The age-limit for the grantees is 35 years. The candidates should present evidence of research work on post-doctoral level, by providing a list of accepted publications in international journals, 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 a brief curriculum vitae plus a list of publications and a brief account of present research plans.

The International Congress of Mathematicians will provide a special allowance to the grantees to cover their registration, board and lodging.

### **Special Development Fund**

The Special Development Fund aids 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

International Mathematical Union  
Commission on Development and Exchange  
Scientific Report on the Activities of the C.D.E. 1990 - 1993  
Pierre Bérard. Secretary and Treasurer

The present CDE was elected in Kobe (August 1990) with Professor M.S. Narasimhan as President. The members of the CDE held a meeting in Grenoble (France) in April 1991. Professor P. Bérard was elected Secretary and Treasurer and the CDE set up its lines of actions and general policy. It was decided to run three programmes for the years 1991-1994 (depending upon the amount of funds available), in continuation with the schemes of the former CDE (1987-1990).

The general policy of the CDE has been to keep **high standards** on the scientific level of the individuals and conferences which were supported.

This report concerns the years 1990 - 1993 (this includes year 1990 of the previous CDE ; report on year 1994 is postponed). Charts are included in the present report. Early reports (scientific and financial) were submitted to the Executive Committee (see earlier bulletins of IMU).

### CDE Actions

The first programme offers **partial travel support to individual mathematicians** (at the PhD level) who make an extended research visit to a mathematical centre (either in an advanced country or in a developing country) which commits itself to bearing the local expenses. This programme includes the UNESCO - IMU Visiting Mathematician Programme (for which specific contracts have been signed with UNESCO). In the four aforementioned years, the CDE supported 38 mathematicians (for a total amount of \$ 40,078). Grantees have made scientific reports on their visits.

The second programme **offers partial support to conferences organised in developing countries** (the funds are to be used for academic activities, including travel expenses of invited speakers or travel expenses of participants from developing countries). CDE support only applies to conferences with a least a regional scope. The CDE has supported 17 such conferences which provided both scientific and financial reports (for a total amount of \$ 35,990).

These programmes are advertised by sending leaflets to adhering bodies of IMU, to CIMPA/ICPAM, ICTP and to other institutions. The posters are also circulated by CIMPA/ICPAM. Applications to these programmes are to be sent by the mathematicians involved to the secretariat of the CDE. Summaries of pending applications (compatible with CDE programmes and policy) are regularly circulated among the members of the CDE for evaluation. The average delay (once an application is complete) for the CDE to take a decision is four months.

The CDE has also continued to **support research teams in developing countries**. The CDE has supported two teams of high scientific level : one in Cordoba, Argentina (Lie groups and Differential Geometry, Professor J. Tirao) and one in Hanoi, Vietnam (Topology and Singularities, Professor Le Van Thanh). The CDE has granted \$ 3,000 per year to each of these teams (in return, they have provided the CDE with scientific and financial reports). To be efficient such supports must have some duration (both teams have already been supported for three years for a total of \$ 15,000). The CDE shall pursue this effort and shall figure out other teams in other regions of the world.

The CDE has also been involved with **documentation problems**. A proposal aiming at creating documentation centres in developing countries has been sent to UNESCO (document written by Professor Narasimhan, Chairman of the CDE and Professor Marzollo in charge of mathematics at the

Division of Basic Sciences, UNESCO Paris). This proposal has not yet received a favourable answer due to lack of funds. Three mathematical centres respectively in Abudja (Nigeria), Cordoba (Argentina) and Hanoi (Vietnam) benefited from complete collections of the Annales de l'Institut Fourier (donated by members of the editorial board) and a 5-year free subscription (donated by the Annales) ; the CDE provided financial help to these centres to cover the postal fees (for an amount of \$ 1,450).

**The above mentioned programmes set up by the CDE should be continued and if possible increased in the future.**

### **CDE funds**

The funds at the disposal of the CDE are deposited into two accounts : an account in US\$ (run by the AMS, with generous managing help from Mr. Brownell, Mrs George and Mrs Huber of the AMS staff) and an account in FFR. Secretarial help has been provided by Mrs Vitter (Institut Fourier, Grenoble).

The activities sponsored by the CDE have increased (although they remain very limited if we consider the needs) and the CDE has been lucky enough to receive several grants during the period 1990 - 1993 (see enclosed charts for details).

The CDE has received an increased support from the **International Mathematical Union** itself (both for its administrative expenses and to support academic activities in the third world).

The CDE has also benefited from an important 3-year contract which IMU signed with ICSU (**International Council of Scientific Unions**), with explicit mention to the three above mentioned programmes.

Several **UNESCO** contracts (first of all with the Mathematics Division of the Division of Basic Sciences at UNESCO Paris, later with the regional offices UNESCO-ROSTA and UNESCO-ROSTSEA) have permitted to continue the UNESCO-IMU Visiting Mathematician Programmes.

Finally, the CDE has benefited from donations made by the **Mathematical Society of Japan (MSJ)**, the members of the **Société Mathématique de France (SMF)** and the **Association du Premier Congrès Européen de Mathématiques (ACEM)** and from indirect financial support given by the **Institut Fourier** (Université de Grenoble, France) which hosts the Secretariat of the CDE.

The main difficulty which the CDE encounters is that only a small amount of the funds is assured on a regular basis (namely the funds provided by IMU). Without the extra funds mentioned above, the CDE would have been able to do nothing. The CDE has managed to make up a \$ 45,000 float in order to guarantee the continuity of its actions.

Contracts with ICSU and UNESCO should be renewed and if possible set up on a long term basis. Funding from other sources should be looked for. In particular, the national adhering bodies should be induced by IMU to encourage the **Mathematical Societies** to make donations similar to those of the **Mathematical Society of Japan** and the **Société Mathématique de France**.

Grenoble May 12, 1992



## 1. Organization

The previous Executive Committee had its last meeting in Paris, France, 19-20 January 1990, whereas the new one had its first meeting in Madrid, Spain 9-10 April 1991.

In 1991, National Sub-Commissions of ICMI were established in Belgium and in New Zealand in accordance with the Terms of Reference for ICMI, item 4.

## 2. ICMEs

The latest of the quadriennial International Congress on Mathematical Education, ICME-6, was held in Budapest, Hungary, 1988. The Programme and Organizing Committee for next congress, ICME-7, which was held at Université Laval, Québec, Canada, 17-23 August 1992, have invested immense efforts in planning the congress which had an attendance of more than 3000 participants from all parts of the world.

The Executive Committee has decided with great pleasure to accept Spain's bid to host ICME-8, 1996, in Sevilla. A general invitation to submit bids to host ICME-9, 2000, has been issued in Bulletins Nos. 30 and 31.

## 3. ICMI Studies

In the last few years ICMI has emphasised the holding of so-called ICMI study conferences on specific key themes and issues in mathematics education and in publishing subsequent study volumes. In 1990 no conferences were held. However, the study *The Popularization of Mathematics* (210 + pages) resulting from a seminar held at the University of Leeds in September 1989, was published (by Cambridge University Press) in 1990 as was the study *Mathematics and Cognition: A Research Synthesis by the International Group for the Psychology of Mathematics Education* (180 + pages). The International Group for the Psychology of Mathematics Education is one of three study groups affiliated to ICMI.

Outside the study series, ICMI has been involved in producing a document on *Science and Mathematics Education for Future Elementary School Teachers*, jointly with ICSU/CTS and UNESCO.

## 4. Regional Conferences

Financial support was given by ICMI to regional conferences held by the Southeast Asian Mathematical Society (Brunei, 14-16 June 1990), the Inter-American Committee on Mathematical Education (Miami, Florida, 3-7 August, 1991) and to the ICMI-China Regional Conference on Mathematical Education (Beijing, China, 5-8 August, 1991).

## 5. ICMI Bulletins

In 1990 ICMI published Bulletins Nos. 28 and 29 by the then Secretariat at University of Southampton, U.K. In 1991 Bulletins Nos. 30 and 31 were published by the new Secretariat at Roskilde University, Denmark.

## 1. Organisation

As from 1 January 1991 the Executive Committee 1991-1994 of ICMI took office and the Secretariat moved to the University of Roskilde. The EC is composed as follows:

*President: Miguel de Guzmán* (Madrid, Spain)

*Vice Presidents: Jeremy Kilpatrick* (Athens, GA, USA), *Lee Peng Yee* (Singapore)

*Secretary: Mogens Niss* (Roskilde, Denmark)

*Members: Yuri Ershov* (Novosibirsk, Russia), *Eduardo Luna* (The Dominican Republic, p.t. Miami, FL, USA), *Anna Sierpiska* (Poland, p.t. Montréal, QC, Canada)

*Members Ex Officio: Jean-Pierre Kahane*, Past President (Orsay, France), *Jack van Lint*, Representative of IMU on ICSU/CTS (Eindhoven, The Netherlands), *Jacques-Louis Lions*, President of IMU (Paris, France), *Jacob Palis Jr.*, Secretary of IMU (Rio de Janeiro, Brazil).

The Executive Committee met in Madrid (Spain) 9th-10th April 1991, in Québec, QC (Canada) 16th, 18th, 20th August 1992, and in Höör (Sweden) 9th-10th October 1993. Otherwise the work of the EC has been conducted by regular correspondence, e-mail exchanges and so forth.

The quadriennial General Assembly of ICMI was held in connection with ICME-8 in Université Laval, Québec (QC) Canada, on 18th August 1992. The Minutes were published in the ICMI Bulletin No. 33, December 1992, pp 9-14.

In 1992 *Chile* and *Iceland* - both member states of the IMU - joined ICMI by appointing National Representatives.

New National Sub-Commissions of ICMI were established in accordance with the *Terms of Reference* for ICMI, item 4, in the following countries: *Belgium* (1991), *New Zealand* (1991), *Chile* (1992), *Denmark* (1993).

## 2. ICMEs

The latest of the quadriennial International Congress on Mathematical Education, ICME-7, was held at Université Laval, Québec (QC), Canada, 17-23 August 1992. More than 3300 delegates from more than 75 countries participated in the congress. The International Programme Committee for the next congress, ICME-8, which is to be held in Seville (Spain), in July 1996, was appointed in August 1992. The IPC is chaired by *Claudi Alsina*, Barcelona (Spain).

Invitations to submit bids to host ICME-9, 2000, have been issued in the ICMI Bulletin.

## 3. ICMI Studies

For quite some time ICMI has emphasised the mounting of so-called ICMI studies on specific key themes and issues in mathematics education. An ICMI study consists of a study conference and subsequent study volume.

In 1991 an ICMI study conference on *Assessment in Mathematics Education and Its Effects* was held in Calonge, Spain, 11- 16 April. Two ICMI study volumes were published in 1993 by Kluwer Academic Publishers, Dordrecht (The Netherlands) as a result of this conference: *Investigations into Assessment in Mathematics Education* (270 pages) and *Cases of Assessment in Mathematics Education* (220 pages), both edited by Mogens Niss.

An ICMI study conference on *Gender and Mathematics Education* was held in Höör, Sweden, 7-12 October 1993, with 75 participants from 23 different countries. Proceedings are expected to appear in 1994 whereas the resulting ICMI study volume is expected to appear in 1995.

The next studies will be on *What is Research in Mathematics Education, and What are Its Results* (Washington DC, USA, May 1994) and on *New perspectives on the teaching of geometry for the 21st century* (Catania, Italy, September 1995).

In 1993 a new and revised edition of an earlier ICMI study *The Influence of Computers and Informatics on Mathematics and Its Teaching* (edited by Bernard Cornu and Anthony Ralston) was published as No. 44 of the Document Series Science and Technology Education by UNESCO, Paris.

Outside the study series, ICMI was involved in producing a document *Education for Teaching Science and Mathematics in the Primary School* jointly with ICSU/CTS and UNESCO. The document was published as No. 46 in the Document Series Science and Technology Education by UNESCO, Paris, in 1993.

#### **4. Affiliated Study Groups**

In 1991-93 ICMI has continued to have three 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). The EC has decided to accept the affiliation of *WFNMC* (The World Federation of National Mathematical Competitions) as from 1 April 1994.

#### **5. Regional Conferences**

Financial support was given by ICMI to regional conferences held by the Inter-American Committee on Mathematical Education (Miami (Florida), USA, 3-7 August 1991), to the ICMI-China Regional Conference on Mathematical Education (Beijing, China, 5-8 August 1991), to the Sixth South East Asian Conference on Mathematics Education (Surabaya, Indonesia, 7-11 June 1993), and the ICMI-China Regional Conference to be held in Shanghai, 16-20 August 1994.

#### **6. New Initiatives**

With great pleasure and enthusiasm the EC of ICMI has been involved in IMU's preliminary planning of the *World Mathematical Year 2000* as made public in the Rio de Janeiro Declaration of 6 May 1992 (cf. ICMI Bulletin No. 33, December 1992).

In connection with ICME-7 ICMI decided to establish a *Solidarity Programme* to help the development of mathematics education in countries where there is a

critical need for it. The first step in the programme has been to establish a *Solidarity Fund* based on contributions from individuals and associations.

#### **7. ICMI Bulletins**

In 1991-93 ICMI published Bulletins Nos. 30-35. The Bulletins are edited by Mogens Niss and distributed worldwide from the ICMI Secretariat at Roskilde University, Denmark.

8 April 1994

Mogens Niss, Secretary

## International Commission on History of Mathematics

Report on activities for the period 1990–1993

### International Meetings sponsored by the ICHM

ICHM and IUHPS SUMMER SCHOOL (Lisbon, Portugal, 1990)

The First Summer School for History of Mathematics in Portugal was held in Herdade da Mitra, Evora, from July 16-21, 1990. Organized by Professors Jean Dhombres (Univ. of Nantes) and Luis Saraiva (Univ. of Lisbon), the summer school included twenty-eight participants. The goal was to help create in Portugal a group of historians of mathematicians.

The focus of the summer school was on styles and methods in history of mathematics. Among the courses taught: Giorgio Israel (Univ. of Rome) on “The Principle of Least Action from Maupertius to Hamilton”; Amhed Djebbar (Univ. of Orsay) on “Euclid, Book V, in Islamic Countries: the Critique of Omar al-Khayyam”; Enrico Giusti (Univ. of Florence) on “Leibniz’s Nova methodus pro maximis: novelties of the differential and integral calculus”; and Jean Dhombres (CNRS, Paris) on “The Fundamental Theorem of Algebra: different presentations/demonstrations from Girard to Cauchi (including d’Alembert and Laplace)”.

Shorter lectures of one-half to an hour’s duration were also given by summer school participants, in an effort to encourage work in history of mathematics. Another summer school is planned for the summer of 1992, for which the topic will be “Mechanics in the 18th century: theory and applications (contingency and necessity)”.

### TOKYO HISTORY OF MATHEMATICS SYMPOSIUM (1990):

The International Commission on History of Mathematics co-sponsored, with the History of Science Society of Japan and the Organizing Committee of the Kyoto ICM-90, a conference on History of Mathematics at the University of Tokyo, August 31 and September 1, 1990. The Tokyo Symposium emphasized three areas in particular:

- 1) mathematical traditions in the East,
- 2) the history of mathematics in modern Europe, and
- 3) the interaction between mathematical research and the history of mathematics.

In addition to 22 invited lectures, a separate session was devoted to short communications.

Following opening remarks by Tamotsu Murata, Chairman of the Symposium’s Executive Committee and Akiko Armira, President of the Univ. of Tokyo, the Introductory Lecture was given by Joseph W. Dauben on “Mathematics: An Historian’s Perspective”. Among the invited lectures were L. Beaulieu, U. Bottazzini, C. Davis, S.R. Du W.J. Ellison, C.G. Fraser, G. Frei, J. Gray, K. Hara, A.M. Horiuchi, C. Houzel, E. Knobloch, J. Lützen, K. Miyake, R. Nagaoka, E. Neuenschwander, R. Rashed, D. Rowe, C. Sasaki, E. Sholz, M. Sugiura, and M. Takase. Closing remarks were offered by Shokichi Iyanaga, Professor Emeritus of the Univ. of Tokyo and Former President of the Mathematical Society of Japan. The Secretary of the Symposium was Chikara Sasaki, of the Univ. of Tokyo, where the meeting was held. The invited lectures have been edited for publication and will be printed by Birkhäuser of Basel, Switzerland (1994).

### **ICM-90, Kyoto: History of Mathematics:**

During the 11th General Assembly of the IMU meeting in Kobe, Japan, August 18–19, Jean Dhombres and Harold Edwards were elected by the Assembly as IMU members to serve on the Executive Committee of the Joint International Commission of the History of Mathematics for the period 1991–1994.

### **Ancient Chinese Mathematics (Beijing, PRC, 1991):**

An International Conference on the “Nine Chapters of the Mathematical Art” and Liu Hui’s Mathematical Thought was held at Beijing Normal University between June 20–25, 1991. A full report of this meeting may be obtained from Professor Li Junxiu, Dep. of Math., Shaanxi Normal Univ., Xi’an People’s Republic of China.

### **Symposium on Mathematical Journalism (Zaragoza, Spain, 1991):**

*El Progreso Matemático*, the first Spanish mathematical journal, was founded by Zoes Garcia de Galdeano in 1891. To mark the centenary of its appearance, the Spanish Society for the History of Science and Technology sponsored an International Symposium on Mathematical Journals at Zaragoza, Spain. The general theme covered mathematical journals in the 19th and 20th centuries, in relation to national mathematical communities, and the international organization of mathematicians in this period.

### **International Colloquium in Commemoration of the 100th anniversary of the Births of Li Yan and Qian Baocong (Beijing, PRC, 1992):**

This meeting to celebrate the lives and work of two of China’s pioneering historians of mathematics, was held in Beijing during August of 1992.

### **African Mathematical Union:**

Recently the African Mathematical Union has begun to publish a *Newsletter of the Commission on the History of Mathematics in Africa*. The Secretary of the Commission is Ahmed Djebbar (Algeria). The members include: Georges Njock (Cameron), Maasouma Kaxim (Egypt), J. Mutio (Kenya), Lawrence Shirley (Nigeria), Geoffrey Mmari (Tanzania), Mohamed Souissi (Tunisia), and Claudia Zaslavsky (USA).

### **ICHM and the Zaragoza Congress - 1993:**

The major undertaking of the International Commission on History of Mathematics during the period 1990–1993, was planning a number of special symposia in conjunction with the program for the XIXth International Congress of History of Science, which was held in Zaragoza, Spain, from August 22–29, 1993. In addition to the efforts of the Congress organizers, led by Prof. Mariano Hormigón, Chairman of the Organizing Committee, and Prof. Jean Dhombres, Chairman of the Programme Committee (and one of the IMU members of the ICHM Executive Committee), the Congress program included more than twenty different symposia devoted specifically to history of mathematics, with topics ranging from “ethno-mathematics” to the “history of model theory”. The ICHM organized five separate symposia of its own.

During the Congress, the ICHM Executive Committee met on Tuesday, August 24, during a luncheon meeting at which the election of new officers for the Commission’s Executive Committee

was announced. On Thursday, August 26, the Commission held an Open Meeting for all historians of mathematics attending the Congress, during which the 1993 K.O. May Medal for Outstanding Contributions to the History of Mathematics was awarded.

#### **ICHM Symposia sponsored during the Zaragoza Congress:**

##### **Historiography of History of Mathematics**

Organized by Joseph Dauben and Christoph Scriba.

##### **Mathematics in Asia**

Organized by Karine Chemla, Liu Dun and Chikara Sasaki

##### **Arts and Mathematics**

Organized by Kirsti Andersen and Eberhard Knobloch

##### **Logics and Foundations of Mathematics, 1885-1905**

Organized by Ivor Grattan-Guinness and F. Rodriguez-Consuegra

##### **National Schools in the 19th and 20th Centuries**

Organized by Serguei Demidov and Mariano Hormigón

#### **Celebration in honor of 20 years of *Historia Mathematica*:**

In 1994 *Historia Mathematica* began publication of its 20th volume, and this anniversary was celebrated in appropriate style during the Zaragoza Congress thanks to the generous support of its publisher, Academic Press. For that a special evening was set aside by the Congress Organizing Committee.

#### **May Medal struck in Toronto**

The International Commission, in conjunction with the May Committee at the Univ. of Toronto, commissioned a bronze medal in honor of K.O. May which was designed in 1993 and struck by the Canadian sculptor Salius Jaskus. The first of the new medals was engraved and presented, officially, to Dirk J. Struik during a session devoted to History of Mathematics organized by Judith V. Grabiner and Karen Parshall during last year's annual meeting of the American Association for the Advancement of Science, in Boston, February 13, 1993. A second medal (the first prize was jointly awarded to Professors Struik and Youschkevitch), was presented to A.P. Youschkevitch during a meeting at the Institute for History of Science and Technology in Moscow last spring.

#### **Second Kenneth O. May Prize Awarded in Zaragoza**

The International Commission on History of Mathematics awarded the second Kenneth O. May Prize during the XIXth International Congress of History of Science in Zaragoza, Spain, during the open plenary meeting of the Commission on August 26, 1993. The Prize was given jointly to Professor Dr. Christoph J. Scriba of the University of Hamburg, and to Professor Dr. Hans Wussing of the University of Leipzig. Both Professors Scriba and Wussing are well-known to historians of mathematics for their many publications and scholarly contributions to the international community of historians of mathematics, and the Commission is pleased to congratulate them both warmly on the announcement of this year's award.

The first Kenneth O. May Prize was presented in Hamburg during ICHS-1989, and was given jointly to Prof. Dirk Struik and A.P. Yushkevich during the open plenary meeting of the Commission on August 3.

The award, to commemorate the first Chairman of the Commission and founding editor of *Historia Mathematica*, is intended to acknowledge significant contributions to the history of mathematics. In addition to receiving an honorarium, recipients of the Prize are also given a certificate of award and a commemorative bronze medal. The Executive Committee of the Commission has established an Endowment Fund to help support the Kenneth O. May Prize. Anyone wishing to honor his memory and to support the work of the International Commission is invited to contribute. The May Prize is supported by the Institute for the History and Philosophy of Science and Technology, University of Toronto; by the International Commission on the History of Mathematics, and by individual contributions to the ICHM May Prize Fund. Further information may be obtained from the Commission's Treasurer:

Professor Dr. Menso Folkerts, Director  
Institut für Geschichte der Naturwissenschaften  
Deutsches Museum  
Postfach 260102 - D- 8000 München 26, Germany

#### 1994: A Change of Guard

At the end of 1993, both the editorship of the Commission's journal, *Historia Mathematica*, as well as the composition of the ICHM Executive Committee, were changed. After eight years of service as Editor, Eberhard Knobloch gave up his position to begin a four-year term as the newly-elected Chairman of the Commission. The new editors of *Historia Mathematica* are David Rowe and Karen Parshall. The newly-elected Executive Committee, to serve four years, includes:

Chairman: Eberhard Knobloch (Germany)  
Vice-chair: Kirsti Andersen (Denmark)  
Secretary: Jeanne Peiffer (France)  
Treasurer: Menso Folkerts (Germany)  
Members: Ubiratan d'Ambrosio (Brazil)  
John Fauvel (England)  
Giorgio Israel (Italy)  
Liu Dun (China)  
Chikara Sasaki (Japan)  
Evgeny A. Zaitsev (Russia)

Positions not open for election in 1993:

IMU members: Harold Edwards (USA)  
Jean Dhombres (France)  
Ex-Officio: Christoph Scriba (Germany)  
Joseph Dauben (USA)  
David Rowe (Germany)



## **New and Continuing Projects, including future meetings and Congress**

### **International Congress of Mathematicians - Zürich, 1994**

With the cooperation of the Congress Program Committee, the ICHM has organized a special historical symposium on "The History of Congresses from Zürich to Zürich". A Committee chaired by Erwin Neuenschwander (and comprised of Umberto Bottazzini, Serguei Demidov, and Ivor Grattan-Guinness) is overseeing the planning of this symposium. Due to scheduling decisions made by the Congress Organizing Committee, however, five 45-minute lectures will be sponsored by the ICHM on various topics, some related to the subject of past Congresses, instead of the symposium as originally planned.

### **World Mathematical Year 2,000**

The International Mathematical Union has declared the Year 2,000 as World Mathematical Year. The first aim of WMY 2,000 is to consider the "great challenges of the 21st century". In coordination with the next International Congress of Mathematicians to be held in Zürich in 1994, the Commission has already undertaken to organize an historical Symposium (described above) which will survey the history of International Congresses from Zürich to Zürich, looking ahead to the first century of the next millennium.

The second aim of WMY 2,000 is to consider "Mathematics, Keys for Development". Here the International Commission on History of Mathematics hopes to support various projects and possible international meetings at which the connections between pure and applied mathematics in particular may be explored in their historical context, especially in countries that are not currently members of the IMU (another of the goals emphasized by WMY 2,000). The question of increasing the availability and exchange of information related to the history of mathematics among colleagues everywhere, including schools, colleges, universities, research institutes, etc, is a continuing concern of the Commission in connection with its own international activities.

The Commission hopes to contribute substantially as well to the third aim of WMY 2,000, namely to the "image of mathematics". One way to account for the "systematic presence" of mathematics in the "Information Society" (another interest of WMY 2,000) is through the history of mathematics, which can effectively demonstrate the significance of mathematics in cross-cultural ways in the widest possible variety of different contexts. Again, local meetings, international symposia, special exhibitions and long-range publications efforts can all help to achieve the goal of creating a higher public awareness of mathematics and the crucial role it has played in world history.

Two projects of the ICHM are especially relevant here. One is the maintenance of a portrait archive of slides and photographs of mathematicians and historians of mathematics. The second is the production of a "Historiography of the History of Mathematics". At present, nearly forty colleagues from all over the world are collaborating in this effort to describe the history of mathematics from the first historical writings on mathematics by the ancient Greeks and Chinese, to the present.

## New Edition of the ICHM World Directory

Periodically, the Commission updates its *World Directory of Historians of Mathematics*, the last edition of which was published as a Supplement and made available in time for the Berkeley International Congress of History of Science in 1985. Work on the new edition is underway as the old guide is now quite out of date. The new edition will include more than 1000 newly-verified names and addresses with complete institutional affiliation, telephone, e-mail and fax numbers (as available).

## ICHM Data Base

In conjunction with the new *World Directory*, the International Commission is also compiling a database containing information about historians of mathematics around the world. This will include both biographical and bibliographic information, as well as photographs for individual historians of mathematics (to constitute, eventually, a sort of Poggendorff's for history of mathematics). In particular, anyone knowing of the deaths of any members currently listed in the *World Directory* is requested to forward as much information as possible about the individual in question to the Commission for its files. Optimally, birth and death dates, a short *Curriculum Vitae*, bibliography of any obituary notices or other articles related to the individual's life and work would all be valuable as the Commission begins the task of building up its archive for history of mathematics. Photographs would also be very welcome.

## Photo Archive

The ICHM has recently entered into an agreement with the Karl-Sudhoff-Institut at Leipzig University, to begin work on an ICHM catalogue of photographs of mathematicians, to complement the collection already housed at the Mathematisches Forschungsinstitut in Oberwolfach, Germany. As reported in the 1992 issue of the ICHM Newsletter, the photo archive includes negatives, prints and slides, along with a projected database of known pictures, to include brief descriptions of each representation, its provenance and availability. The Commission eventually hopes, at some future date, to produce an *Album of Mathematicians*, suitable for publication, featuring a selection of these pictures with commentary.

The projected database of photographs is expected to contain an alphabetic listing of mathematicians, each item describing a picture according to a standard format of catalogue entry. The first stage of this project will require identification of mathematicians of interest, after which it will be necessary to identify sources of pictures in national and private collections. In addition to standard photographs and slides, the types of materials used might include statues, medals, stamps, films and videotapes. Anyone with photographs to contribute to the photo archive, or wishing more information about the project in Leipzig, should contact:

Dr. Hans-Joachim Ilgauds  
Karl-Sudhoff-Institute  
Universität Leipzig  
Leipzig, Germany

## Toronto Workshop Proceedings

Proceedings of the ICHM Workshop held at the University of Toronto (July-August, 1983), entitled *History in Mathematics Education*, are still available in paperback (as part of the series Cahiers d'Histoire et de Philosophie des Sciences”).

## ICHM Dictionary on History of Mathematics

The Dictionary project edited by John Fauvel continues to progress. It is to be published by Oxford Univ. Press, probably in Oxford's "Companion" series, i.e., as a *Companion to the History of Mathematics*. There are still unallocated entries for which help would be very much appreciated.

### Thanks to the IUHPS/DHS and IMU

The Executive Committees of the International Mathematical Union and International Union of the History of Philosophy of Science / Division of History of Science have been generous in funding a variety of special projects, international symposia and (in case of the IUHPS) basic administrative costs of the Commission's operations each year. The Commission wishes to take this opportunity to record its great appreciation for this continuing support of its activities.

*Address of ICHM Chairman and Secretary, beginning January 1, 1994:*

Chairman:  
Professor Eberhard Knoblich  
Technische Univ. Berlin  
Fachbereich Math. und  
Wissenschaftsgeschichte  
Ernst Reuter Platz 7  
D-1000 Berlin 10, Germany

Secretary:  
Dr. Jeanne Peiffer  
21, rue Hermel  
F-75018 - Paris  
France

## **FINANCIAL REPORT FOR THE YEARS 1990-1993**

### **IN SWISS FRANCS**

The audited accounts have been reproduced in the previous IMU Bulletins. Also, copies of them have been sent to the Adhering Organizations/National Committees and Delegates to the 1994 General Assembly.

In the following pages there are financial reports of IMU and its Commissions, CDE and ICMI, for the years 1990-1993. The presentation begins with a budget comparison for this period and other informations.

## INTERNATIONAL MATHEMATICAL UNION

### BUDGET COMPARISON FOR THE YEARS 1990-1993, in Swiss Francs

INCOME	Budget	1 9 9 0	Budget	1 9 9 1	1 9 9 2	1 9 9 3
Membership	163.000	151.778	187.000,00	181.739,35	168.653,14	204.376,26
ICSU Subvention	20.000	26.140	20.000,00	27.599,18	27.521,68	31.559,00
Sales of W.D.M.	15.000	2.606	12.500,00	13.376,93	8.722,08	4.483,41
Special Dev. Fund	8.000	44.102	15.000,00	35.643,51	64.283,43	50.588,94
Interest on Bank Accounts	2.300	26.606	3.500,00	30.923,31	28.661,51	23.457,59
Other	-	-	-	3.474,93	5.000,00	-
<b>TOTAL</b>	<b>208.300</b>	<b>251.232</b>	<b>238.000,00</b>	<b>292.757,21</b>	<b>302.841,84</b>	<b>314.465,20</b>

### EXPENDITURE

Schedule A:	Budget	1 9 9 0	Budget	1 9 9 1	1 9 9 2	1 9 9 3
Secretarial help, IMU off.	17.500	9.155	19.400,00	563,80	10.826,25	8.739,20
Secretarial help, President	1.800	1.800	2.000,00		2.152,00	3.248,40
ICMI	9.000	9.000	10.000,00	10.000,00	10.000,00	10.000,00
C D E	5.000	5.000	5.500,00	11.000,00	-	5.500,00
C T S	900	508	600,00	499,60	596,40	615,00
Office Expenses	7.000	4.183	7.500,00	2.914,81	4.926,75	7.936,45
Travel expenses of the EC	22.500	40.395	25.000,00	24.470,78	22.990,95	9.556,60
President and Sec. expenses	1.800	-	2.000,00	2.025,31	-	914,70
Contribution to ICSU	4.000	2.921	5.000,00	4.298,25	4.930,10	6.519,35
IMU Bulletin	2.000	3.668	2.000,00	-	-	-
Audit Fee	1.800	1.591	2.000,00	704,75	2.965,75	1.490,00
General Assembly 1990/94	3.000	3.000	3.500,00	3.500,00	3.500,00	3.500,00
World Directory of Math.	15.000	5.743	18.000,00	18.000,00	18.000,00	18.000,00
Contingencies	2.000	-	2.000,00	711,10	-	-
Bank Charges	-	-	-	436,18	546,09	774,77
<b>Sub-Total</b>	<b>93.300</b>	<b>86.964</b>	<b>104.500,00</b>	<b>79.124,58</b>	<b>81.434,29</b>	<b>76.794,47</b>

Schedule B:	Budget	1 9 9 0	Budget	1 9 9 1	1 9 9 2	1 9 9 3
Symposia, conf., IMU Lec.	51.000	-	56.000,00	63.000,00	32.915,75	64.689,75
ICMI Scientific Activies	15.000	15.000	18.000,00	18.000,00	18.000,00	18.000,00
C D E Scientif. Activities	10.000	10.000	15.000,00	41.667,38	42.538,83	46.559,00
Prog. Committee 90/94	5.000	-	5.500,00	-	3.540,50	9.088,74
Travel Grants	8.000	83.358	15.000,00	15.000,00	15.000,00	15.000,00
Subvention ICM/90 - 94	22.000	22.000	24.000,00	-	-	40.000,00
IMU Fellowship Fund	4.000	-	-	-	-	-
<b>Sub-Total</b>	<b>115.000</b>	<b>130.358</b>	<b>133.500,00</b>	<b>137.667,38</b>	<b>111.995,08</b>	<b>193.337,49</b>
<b>TOTAL</b>	<b>208.300</b>	<b>217.322</b>	<b>238.000,00</b>	<b>216.791,96</b>	<b>193.429,37</b>	<b>270.131,96</b>

**BALANCE OF THE UNION'S BANK ACCOUNTS AT THE END OF THE FISCAL  
YEAR**

1990 - 1993, in Swiss Francs

**CREDIT SWISS**

	1990	1991	1992	1993
- Current Account	126.067	168.197	171.323	66.901
- Deposit Account	- 0 -	- 0 -	550.000	809.136
Money Market				

**KANSALLIS OSAKE PANKKI**

	1990	1991	1992	1993
- Current Account	44.887	70.072	80.245	11.035
- Deposit Account	224.528	242.878	- 0 -	- 0 -
- Longterm Account	153.840	166.412	- 0 -	- 0 -
	<hr/>	<hr/>	<hr/>	<hr/>
<b>Total</b>	<b>549.322</b>	<b>647.559</b>	<b>801.568</b>	<b>887.072</b>
	<u><u>          </u></u>	<u><u>          </u></u>	<u><u>          </u></u>	<u><u>          </u></u>

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All the following contributions were allocated to CDE (Commission on Development and Exchange) and used to support conferences and workshops in developing countries, travel grants and fellowships and support to research groups:

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Professor Eberhard Knoblich  
Technische Univ. Berlin  
Fachbereich Math. und  
Wissenschaftsgeschichte  
Ernst Reuter Platz 7  
D-1000 Berlin 10, Germany

Secretary:  
Dr. Jeanne Peiffer  
21, rue Hermel  
F-75018 - Paris  
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1990 - 1993, in Swiss Francs

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<b>Total</b>	<u>549.322</u>	<u>647.559</u>	<u>801.568</u>	<u>887.072</u>

**SUBVENTION FROM ICSU**

**Subvention from the International Council of Scientific Union in 1991-1993,  
in Swiss Francs**

All the following contributions were allocated to CDE (Commission on Development and Exchange) and used to support conferences and workshops in developing countries, travel grants and fellowships and support to research groups:

1991	1992	1993
27.599,18	27.521,68	31.559,00

## Special Development Fund

The following contributions have been received in the years 1991-1993, and 1994 up to May:

### 1991

American Mathematical Society	US\$ 14.772,93
Royal Society	US\$ 8.780,27
London Math. Society	US\$ 1.730,10

### 1992

American Mathematical Society	US\$ 27.787,00
Wiskundig Genootschap, Netherlands	US\$ 1.825,40
Royal Society	US\$ 8.377,21
Deutsche Math. Vereinigung	US\$ 6.406,74

### 1993

American Mathematical Society	US\$ 32.500,95
Wiskundig Genootschap, Netherlands	US\$ 1.418,43

### 1994

Mathematical Society of Japan	US\$ 18.881,11
Royal Society	US\$ 4.477,00
Com.Nat. Franc. Math., France	US\$ 3.404,86
CNPq, Brazil	US\$ 6.944,44
American Math. Society	US\$ 30.550,06

On behalf of IMU, the Executive Committee of IMU expresses its deep gratitude for these donations.

INTERNATIONAL MATHEMATICAL UNION

DUES ARREAS AS FOR JANUARY 1, 1994

MEMBER	DUES (Swiss Francs)	
Argentina	2.000	1989
Bulgaria	5.600	1991-93
Belgium (*)	4.400	1993
Cameron (*)	3.300	1991-93
China Taiwan (*)	2.200	1993
Cuba (*)	3.300	1991-93
Croatia	1.100	1993
Egypt	2.200	1992-93
Georgia	2.200	1993
Ireland (*)	2.200	1993
Ivory Coast	3.300	1991-93
Korea Republic of	2.200	1991-92
New Zealand (*)	2.200	1993
Nigeria	4.300	1990-93
Philippines	1.100	1991
Poland (*)	6.000	1988-89
Romania	3.100	1988-89, 93
Turkey	550	1993 (part)
Yugoslavia	7.650	1988-93
Venezuela (*)	1.100	1993

The following countries have paid arrears by May 31, 1994:

Belgium (1993), Cameron (1991, 92, 93), China-Taiwan (93), Cuba (1991), Ireland (1993), New Zealand (1993), Poland (1988, 89), Venezuela (1993).

FOR 1994:

Australia, Austria, Brazil, Cameron, Finland, Hong Kong, Germany, Israel, Poland, Singapore, South Africa, Spain, United Kingdom.

# WORLD DIRECTORY OF MATHEMATICIANS

## Financial Reports and Sales for the 9th Edition for the years ended December 31, 1990 through December 31, 1993

### Revenue:

889 Units at \$ 40.00	US\$ 35,560.00
3 Units at \$ 46.50	139.50
6 Units at \$ 36.00	216.00
1 Unit at \$ 32.00	32.00
2 Units at \$ 28.00	56.00
3 Units at \$ 26.00	78.00
4 Units at \$ 21.50	86.00
3 Units at \$ 20.00	60.00
88 Units at 0	0

**Total Revenue** ..... \$ 36,227.50

### AMS Service Fee

999 Units at \$ 9.00 ..... \$ 8,991.00

### Balance paid IMU

..... \$ 27,236.50

In addition, we have recorded the following sales for the period January 1, 1994 through May 4, 1994:

19 Units at \$ 40.00	\$ 760.00
1 Unit at \$ 36.00	\$ 36.00
1 Unit at \$ 24.00	\$ 24.00
1 Unit at 0	0.00
22 Units	<u>\$ 820.00</u>

**INTERNATIONAL MATHEMATICAL UNION**

**A c c o u n t s**

**Year Ended December 31, 1990**

Helsinki March 26, 1991

International Mathematical Union  
University of Helsinki  
Department of Mathematics  
Hallituskatu 15  
00100 HELSINKI FINLAND

#### AUDITOR'S REPORT

We have audited the Financial Statements of the International Mathematical Union (I.M.U.) prepared by the Executive Secretary of I.M.U. for the year ended December 31, 1990. The Statement of Income and expenditure is prepared in accordance with the instructions given by the International Council of Scientific Unions in a letter dated October 24, 1990. The Balance Sheet and the accounting principles are similar to those of the previous years.

#### Principles and comments:

##### 1. Currency

The Financial Statements are expressed in US dollars. Balances in other currencies have been exchanged into US dollars by applying the Unesco Standard Rates of Exchange based on December 1990.

Income and Expenditure for each month was translated into US dollars at the Unesco Rate of Exchange, which the International Council of Scientific Unions (I.C.S.U.) has made available throughout the year.

##### 2. Income

The contributions from national members, USD 119.520,43 (in 1989 USD 92.063,12) have been recorded on cash basis. The number of members having

Helsinki March 26, 1991

unpaid dues, and most of them for several previous years, is decreasing. The total of unpaid dues is USD 50.048 (in. 1989 USD 51.358).

The list of the unpaid dues is attached to the Financial Statements.

3. Sales of publications

The income of the editions of the World Directory of Mathematicians is USD 2.052. These editions have been sold in the year 1990 according to the bank statement of the Bank of Boston, USA.

4. Expenditure

Expenditure is recorded on accrual basis. The Statement of Income and Expenditure includes gain on exchange for the year 1990 USD 85.711.

5. Bank accounts

The balances of the bank accounts agree with the respective bank statements.

In our opinion the Balance Sheet and the Statement of Income and Expenditure give a true and fair view of the financial status of the International Mathematical Union at December 31, 1990.

SALMI, VIRKKUNEN & HELENIUS OY  
Authorised Public Accountants

  
Antti Helenius

Authorised Public Accountant



Pekka Kaasalainen

Authorised Public Accountant



## INTERNATIONAL MATHEMATICAL UNION

STATEMENT OF INCOME AND EXPENDITURE  
FOR THE YEAR ENDED 31 DECEMBER 1990

I. INCOME	NOTES	US DOLLARS
Grant from ICSU Fund		10.000,00
Allocation from Unesco Subvention to ICSU		10.606,04
Unesco Contracts		-
Contributions from National Members	1.	119.510,43
Contributions from Scientific Members		-
Special Contributions		34.726,00
Contracts		-
Sales of Publications, Royalties		2.052,00
Sales of Scientific Materials		-
Bank Interest		20.950,05
Gain on Exchange		85.711,41
Other Income		-
T O T A L I N C O M E		<u>283.555,93</u> =====
II. EXPENDITURE		
a) SCIENTIFIC ACTIVITIES		
General Assembly		2.362,20
Scientific Meetings		10.067,11
Groups, etc.		-
Representation at Scientific Meetings		-
Data Gathering/Processing		-
Research Projects		-
Grants to Individuals/Organizations	2.	56.979,12
Other		-
LESS COVERED BY UNESCO CONTRACTS		
ROUTINE MEETINGS		
Bureau/Executive Committee		31.020,45
Other		353,97
PUBLICATIONS		
	3.	7.410,02
b) OTHER ACTIVITIES		
Contribution to ICSU		2.300,00
Contribution to other ICSU bodies (CTS, SCOSTEP, COBIOTECH, FAGS, ETC.)		400,00
Activities Covered by Unesco Contracts		-
ADMINISTRATIVE EXPENSES:		
Salaries and Related Charges		11.894,19
General Office Expenses		3.294,19
Office Equipment		-
Audit Fees		1.253,48
Bank Charges		1.248,42
Loss on Exchange		-
T O T A L E X P E N D I T U R E		<u>128.583,15</u> =====
EXCESS OF INCOME OVER EXPENDITURE		154.972,78
ACCUMULATED BALANCE AT 1 JANUARY 1990		250.575,87
ACCUMULATED BALANCE AT 31 DECEMBER 1990		<u>405.548,65</u> =====

Balance Sheet at December 31, 1990

	Notes	1990	1989
<b>ASSETS</b>			
Bank accounts and cash	4		
Cash		1.671	-
Current accounts		255.743	203.452
Deposit accounts		176.794	128.814
Prepayments	5	<u>7.692</u>	<u>4.139</u>
Receivable		2.766	-
TOTAL ASSETS		<u>444.666</u>	<u>336.405</u>
<b>LESS: LIABILITIES</b>			
Creditors and accruals	6	12.716	3.932
		<u>431.950</u>	<u>332.473</u>
		=====	=====
<b>ACCUMULATED FUNDS</b>			
General fund	7		
Balance at December 31, 1989		250.576	279.872
Excess of Income Over Expenditure		154.972	29.296
Balance at December 31, 1990		<u>405.548</u>	<u>250.576</u>
Transfer		405.548	250.576

		Transfer	405.548		250.576
Special Development Fund	7				
Balance at December 31, 1989			36.281		21.246
Interest			1.088		1.275
Income	8		24.252		13.760
Travel grants			(35.219)		-
Balance at December 31, 1990			<u>26.402</u>		<u>36.281</u>
General Assembly Fund					
Balance at December 31, 1989			11.177		9.313
General Assembly 1990			2.362		1.864
To Special Development Fund			(13.539)		-
Balance at December 31, 1990			<u>0</u>		<u>11.177</u>
World Directory of Mathematicians Fund					
Balance at December 31, 1989			34.439		25.123
World Directory, IX ed.			-		9.316
World Directory, IX ed. printing expenses			(34.439)		-
Balance at December 31, 1990			<u>0</u>		<u>34.439</u>
			<u>431.950</u>		<u>332.473</u>
			=====		=====

## INTERNATIONAL MATHEMATICAL UNION

1. STATEMENT OF CONTRIBUTIONS RECEIVED FROM MEMBERS DURING THE YEAR  
ENDED DECEMBER 31, 1990

MEMBER	PRE 1990	PAYMENT CONCERNING THE YEAR		TOTAL
		1990	1991	
Australia		2.685		
Austria		1.342		
Belgium	2.685	3.077		
Bulgaria		1.342		
Cameroon		787		
Canada		4.575		
China				
- Chinese Mathematical Society		2.685		
- Mathematical Society, Taipei		1.307		
Cuba		769	62	
Czechoslovakia		3.077		
Denmark		1.370		
Egypt	671	769		
Finland		1.374		
France		7.216		
German D.R.		2.685		
Greece	671	671		
Hungary		2.740		
Iceland	1.307			
Iran		709		
Israel		1.418		
Italy		4.965		
Ivory Coast	872	873		
Japan		7.092		
Korea, D.P.R.		709		
Korea, Rep.		671		
Netherlands		2.740		
New Zealand		671		
Nigeria	2.440			
Norway		787		
Philippines		815		
Portugal		671		
Poland		2.685		
South Africa		1.307		
Spain	1.370	2.685		
Sweden		2.941		
Switzerland	2.544	2.837		
Turkey		787		
United Kingdom		7.092		
U.S.A.		7.693		
U.S.S.R.	5.142	5.142		
Vietnam	709	2.731		
Yugoslavia	4.545			
	<u>22.956</u>	<u>96.492</u>	<u>62</u>	<u>119.510</u>

2. GRANTS TO INDIVIDUALS/ORGANIZATIONS

I.C.M.I	6.040
C.D.E	6.213
Travel grants, part	44.726
	<hr/>
	56.979
	<hr/> <hr/>

3. PUBLICATIONS

Publications expenditure is made up as follows:

	1990	1989
I.M.U. Bulletin	2.888	389
World Directory of Mathematicians, IX ed.	4.522	9.317
	<hr/>	<hr/>
	7.410	9.706
	<hr/> <hr/>	<hr/> <hr/>

NOTES TO BE READ IN CONNECTION WITH THE FINANCIAL STATEMENT  
OTHER NOTES

			1990		1989	
			Currency	USD	Currency	USD
4. Banks and cash						
The amount held with banks is made up as follows						
Cash	FINLAND	FIM	5.999	1.671	-	-
Credit Swiss	SWITZERLAND					
- Current account		FS	126.067	99.265	107.241	66.609
Kansallis-Osake-Pankki	FINLAND	FIM	-	-	70.316	16.545
Kansallis-Osake-Pankki	FINLAND	USD	-	-	-	16.342
Kansallis-Osake-Pankki	FINLAND	FS	44.887	35.344	55.894	34.717
Kansallis-Osake-Pankki	FINLAND					
- Deposit account (RESERVE)		FS	224.528	176.794	207.391	128.814
- Longterm account		FS	153.840	121.134	72.131	44.802
Bank of Boston	USA	USD	-	-	-	24.437
				434.208		332.266

5. PREPAYMENTS

IAMP Congress	7.692
	<hr/>
	7.692
	<hr/> <hr/>

6. CREDITORS AND ACCRUALS

Audit	1.689
Office expenses	66
WDM 9th, printing expenses	10.961
	<hr/>
	12.716
	<hr/> <hr/>

7. FUNDS

These funds represent the amounts set aside to cover the following

Provided in year ended	1990 General Fund	1990 General Assembly	1990 World Directory	1990 Special Development Fund
-----	-----	-----	-----	-----
General Fund				
Balance 31.12.1989	250.576			
Transfer from the income of expenditure over excess	154.972			
Special Development Fund				
Balance 31.12.1989				36.281
Interest				1.088
Donations				24.252
Travel Grants				(35.219)
General Assembly Fund				
Balance 31.12.1989		11.177		
General Assembly 1990		2.362		
To Special Development Fund		(13.539)		
World Directory of Mathematicians Fund				
Balance 31.12.1989			34.439	
World Directory, IX ed. printing exp.			(34.439)	
	<u>405.548</u>	<u>0</u>	<u>0</u>	<u>26.402</u>
	=====	=====	=====	=====



8. The following contributions to the SDF,  
we received in 1990:

The Royal Society, United Kingdom	7.179,93
The Royal Society, - " -	9.135,43
Donations from Mathematical Societies	18.410,64
	<hr/>
	34.726,00
Transfer for travel grants to young mathematicians	(10.474,00)
	<hr/>
	24.252,00

STATEMENT OF INCOME AND EXPENDITURE:  
FINANCIAL YEARS 1989 AND 1990 COMPARED

INCOME	1990	1989
Grant from ICSU to SDF	10.000	-
Allocation from Unesco grant to ICSU	10.606	9.774
Contributions from Members	119.510	92.063
Special contributions	34.726	-
Sale of publications	2.052	4.966
Bank interest	20.950	12.481
Next exchange (loss) / gain	85.711	33.782
	<u>283.555</u>	<u>85.502</u>
EXPENDITURE		
A. MEETINGS		
Executive Committee meetings	31.020	10.111
Program Committee	354	3.728
General Assembly	2.362	2.019
	<u>33.736</u>	<u>15.858</u>
B. PUBLICATIONS	7.410	9.706
C. SCIENTIFIC ACTIVITIES		
Colloquia	-	28.548
Other activities		
ICM 1990	-	13.836
I.C.M.I	10.067	9.434
Conferences/ICSU	-	2.006
CDE	6.213	9.482
Travel grants	44.726	-
	<u>61.006</u>	<u>63.306</u>

D. ADMINISTRATIVE EXPENSES

Contribution to I.C.S.U.	2.300		2.767	
Grant to C.T.S.	400		400	
Grant to I.C.M.I.	6.040		5.660	
Grant to C.D.E.	3.356		2.199	
Audit fees	1.253		1.000	
General office expenses	11.833		12.480	
Bank charges	1.248		1.422	
		<u>26.430</u>		<u>25.928</u>
		<u>128.582</u>		<u>114.798</u>
		<u>154.973</u>		<u>(29.296)</u>

EXCESS OF INCOME OVER EXPENDITURE

Allocated to:				
General fund	154.973		-	
	<u>154.973</u>	<u>(154.973)</u>		

EXCESS OF EXPENDITURE

Allocated from:				
General fund			(29.296)	
			<u>(29.296)</u>	<u>(29.296)</u>

## INTERNATIONAL MATHEMATICAL UNION

Dues arrears as of January 1, 1991:

Member	Dues (Swiss francs)	Year(s)	USD
Argentina	4.000	1990, 1989	3.150
Brazil	4.000	1990	3.150
Chile	3.232	1990, 1989, 1988, 1987	2.545
Germany, F.R.	10.000	1990	7.874
Hong Kong	3.000	1990, 1989, 1988	2.362
Iceland	1.000	1990	787
India	4.000	1990	3.150
Ireland	2.000	1990	1.575
Mexico	3.000	1990, 1989, 1988	2.362
Nigeria	1.000	1990	787
Philippines	1.080	1988, 1987	850
Poland	8.000	1989, 1988	6.299
Romania	16.000	1990, 1989, 1988, 1987, 1986, 1985, 1984, 1983, 1982	12.598
Yugoslavia	3.250	1990, 1989, 1988	2.559
			----- 50.048 -----

1 USD = 1,27 SFR = December 31, 1990

**INTERNATIONAL MATHEMATICAL UNION**

**A c c o u n t s**

**Year Ended December 31, 1991**

Rio de Janeiro, April 14, 1992

International Mathematical Union  
Instituto de Matemática Pura e Aplicada (IMPA)  
Estrada Dona Castorina, 110  
Rio de Janeiro - RJ  
22460 - Brasil

### Independent Auditor's Report

I have audited the Financial Statements of the International Mathematical Union (IMU) prepared by the Secretary of IMU for the year ended December 31, 1991. The Statement of Income and Expenditure was prepared in accordance with the instructions given by the International Council of Scientific Unions (I.C.S.U.) in a letter dated February 17, 1992. My responsibility is to express my opinion about the Financial Statement.

### C o m m e n t s

#### 1 - Currency

The Financial Statements are expressed in US dollars and the Income and Expenditure for each month was translated into US dollars at the Unesco Rate of Exchange, which the International Council of Scientific Unions (I.C.S.U.) has made available throughout the year.

**President:**  
*Professor Jacques L. Lions, Paris*  
**Secretary:**  
*Professor Jacob Palis, Rio de Janeiro*

**SECRETARIAT:**  
*Instituto de Matemática Pura e Aplicada-IMPA*  
*Estrada Dona Castorina, 110*  
*22460 Rio de Janeiro RJ*  
*Brazil*

*Telephone: 55 21 511-1749: 294-9032 ext. 146*  
*Fax: 55 21 512-4112*  
*Telex: 21.21145 IAMP*  
*E-Mail: IMU@BHLNCC.BITNET*

**2 - Income**

- The total of contributions from national members was US\$ 129.697,34. The number of members having unpaid dues, has grown up in 1991. However, the total amount of unpaid dues has decreased from US\$ 50.048 by December 31, 1990, to US\$ 33.245 by December 31, 1991.

**3 - Sales of Publications**

The income of the editions of the World Directory of Mathematicians was US\$ 9.354,50. These editions have been sold in the year 1991, according to the Statement of the American Mathematical Society.

**4 - Expenditure**

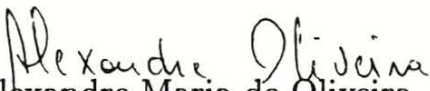
The Statement of Income and Expenditure includes loss on exchanges for the year 1991 in the amount of US\$ 50.399,63.

**5 - Bank Accounts**

The balances of the bank accounts agree exactly with the respective bank statements.

**6 - Final Comments**

In my opinion the Financial Statement represents, in all relevant aspects, the patrimonial and financial position of the International Mathematical Union (I.M.U.) by December 31, 1991, in accordance with the Fundamental Principles of Accounting.

  
Alexandre Maria de Oliveira  
Autorised Independent Accountant  
CRC - RJ. P/14.350/92

**President:**  
*Professor Jacques L. Lions, Paris*  
**Secretary:**  
*Professor Jacob Palis, Rio de Janeiro*

**SECRETARIAT:**  
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INTERNATIONAL MATHEMATICAL UNION - IMU  
STATEMENT OF INCOME AND EXPENDITURE  
FOR THE YEAR ENDED 31 DECEMBER 1991


I. INCOME	NOTES	US DOLLARS
Grant from ICSU Fund and Sp.Contributions		-
Allocation from Unesco Subvention to ICSU		18.000,00
Unesco Contracts		-
Contributions from National Members	1	129.697,34
Contributions from Scientific Members		-
Special Contributions		25.283,30
Contracts		-
Sales of Publications, Royalties		9.354,50
Sales of scientific materials		-
Bank interest		21.004,47
Gain on Exchange		-
Other Income		2.736,16
TOTAL INCOME		<u>206.075,77</u>
II. EXPENDITURE		
A) SCIENTIFIC ACTIVITIES		
General Assembly		2.447,55
Scient.Meetings:Symposia/Colloquia/Working Groups, etc		61.509,63
Representation at Scientific Meetings		-
Data Gathering/Processing		-
Research projects		-
Grants to Individuals/Organizations	2	48.877,84
Other		-
LESS COVERED BY UNESCO CONTRACT		
ROUTINE MEETINGS		
Bureau/executive Committee		18.848,83
Other		485,41
PUBLICATIONS	3	12.587,41
B) OTHER ACTIVITIES		
Contribution to ICSU		2.988,00
Contributions to other ICSU bodies		393,38
SCOSTED, COBIOTECH, FAGS, (ETC)		-
Activities covered by Unesco Contracts		-
ADMINISTRATIVE EXPENSES:		
Salaries and Related Charges		-
General Office Expenses		2.061,94
Office Equipment		-
Audit Fees		500,00
Bank charges		325,02
Loss on exchange		50.399,63
TOTAL EXPENDITURE		<u>201.424,64</u>
EXCESS OF INCOME OVER EXPENDITURE		4.651,13
OR EXCESS OF EXPENDITURE OVER INCOME		-
ACCUMULATED BALANCE AT 1, JANUARY, 1991		405.548,65
ACCUMULATED BALANCE AT 31 DECEMBER 1991		410.199,78



**BALANCE SHEET AT DECEMBER 31, 1991**

ASSETS	NOTES	1 9 9 1	1 9 9 0
Bank Accounts and cash	4		
Cash			1.671
Current accounts		282.993	255.743
Deposit accounts		<u>169.845</u>	432.537
Prepayments	5	7.692	7.692
Receivable		<u>12.120</u>	<u>2.766</u>
<b>TOTAL ASSETS</b>		472.650	444.666
LESS: LIABILITIES	6		
Creditors and accruals		<u>10.526</u>	<u>12.716</u>
		462.124	431.950
		=====	=====
ACCUMULATED FUNDS	7		
General Fund			
Balance at December 31, 1990		405.548	250.576
Excess of Income Over Expenditure		<u>4.651</u>	<u>154.972</u>
Balance at December 31, 1991		410.199	405.548
		<b>TRANSFER</b>	
		410.199	405.548

		<b>TRANSFER</b>	410.199		405.548
Special Development Fund	7				
Balance at December 31, 1990		26.402		36.281	
Interest		-		1.088	
Income		-		24.252	
Travel Grants		-		(35.219)	
Prevision to ICM 94		<u>10.489</u>	36.891	<u>-</u>	26.402
General Assembly Fund					
Balance at December 31, 1990		0		11.177	
General Assembly 1990		-		2.362	
To Special Development Fund		-		(13.539)	
Prevision to General Assembly 1994		<u>2.447</u>		<u>-</u>	
Balance at December 31, 1991			2.447		0
World Directory of Mathematicians Fund					
Balance at December 31, 1990		0		34.439	
World Directory, IX ed.		-		-	
World Directory IX ed. printing expenses		-		(34.439)	
Prevision to W.D.M.		<u>12.587</u>		<u>-</u>	
Balance at December 31, 1991			12.587		0
			<u>462.124</u>		<u>431.950</u>
			=====		=====

  
 JOSÉ LUIZ DIAS FAJIS  
 TÉCNICO TÁTILO GRÁFICO DE  
 CNU - Nº. 02204-B

INTERNATIONAL MATHEMATICAL UNION

1. STATEMENT OF CONTRIBUTIONS RECEIVED FROM MEMBERS DURING THE YEAR ENDED DECEMBER 31, 1991

MEMBER	PRE 1991	1 9 9 1	T O T A L
Argentina	1.527	-	
Australia		3.465	
Austria		1.679	
Belgium		2.993	
Brazil	2.631	2.631	
Canada		5.878	
Chile	2.197	286	
China-Chinese Math.Soc.		3.077	
Czechoslovakia		3.034	
Denmark		1.477	
Finland		1.392	
France		7.534	
Germany D.R.	7.874	7.586	
Hungary		3.077	
Iceland	658	724	
Hong Kong	2.290	-	
Iran		748	
Ireland	1.379	-	
Israel		3.359	
India	3.149	-	
Italy		5.238	
Japan		7.534	
Korea Rep.		840	
Netherlands		3.355	
New Zealand		840	
Norway		724	
Philippines	746	-	
Portugal		840	
Poland		3.150	
Romania	680	724	
South Africa		1.732	
Spain		2.993	
Sweden		2.839	
Switzerland		3.014	
Turkey		758	
United Kingdom		8.661	
U.S.A.		7.483	
U.S.S.R.		6.897	
	<hr/>	<hr/>	<hr/>
	23.131	106.566	129.697

## 2. GRANTS TO INDIVIDUALS/ORGANIZATIONS

C. D. E.	18.464
I.C.M.I.	12.413
C.D.E / I.M.U.	18.000
	<u>48.877</u>

## 3. PUBLICATIONS

Publications expenditure is made us as follows:

	1991	1990
IMU Bulletin	-	2.388
World Directory of Mathematicians	12.587	4.522
	<u>12.587</u>	<u>7.410</u>

NOTES TO BE READ IN CONNECTION WITH THE FINANCIAL STATEMENT  
OTHER NOTES

			<u>1 9 9 1</u>		<u>1 9 9 0</u>	
<b>4. BANKS AND CHASH</b>						
<b>The amount held with banks in made up as follows</b>			<u>Currency</u>	<u>USD</u>	<u>Currency</u>	<u>USD</u>
Cash	FINLAND	FIM	-	-	5.999	1.671
Credit Swiss	SWITZERLAND					
- Current Account		FS	168.197	117.620	126.067	99.265
Kansallis-Osakke-Pankki	FINLAND	FS	70.072	49.001	44.887	35.344
Kansallis-Osakke-Pankki	FINLAND					
- Deposit account (Reserve)		FS	242.878	169.845	224.528	176.794
- Longterm account		FS	166.412	116.372	153.840	121.134
			=====		=====	
				452.838		434.208
				=====		=====

5. PREPAYMENTS

BALANCE 31.12.90		7.692
		<u>7.692</u>

6. CREDITORS AND ACCRUALS

BALANCE 31.12.90	12.716	
PAYMENTS	<u>2.190</u>	<u>10.526</u>

7. FUNDS

These funds represent the amounts set aside to cover the following

Provided in year ended -----	1991 General Fund -----	1991 General Assembly -----	1991 World Directory -----	1991 Special Development Fund -----
General Fund				
Balance 31.12.90	405.548			
Transfer from the income of expenditure over excess	4.651			
Special Development Fund				
Balance 31.12.90				26.402
Prevision to ICM 94				10.489
General Assembly Fund				
Balance 31.12.90		0		
Prevision to General Assembly 1994		2.447		
World Directory of Mathematicians Fund				
Balance 31.12.90			0	
Prevision to W.D.M.			12.587	
	410.199	2.447	12.587	36.891

**STATEMENT OF INCOME AND EXPENDITURE:  
FINANCIAL YEARS 1990 AND 1991 COMPARED**

<b>INCOME</b>	<b>1991</b>		<b>1990</b>	
Grant from ICSU to SDF	-		10.000	
Allocation from UNESCO grant to ICSU	18.000		10.606	
Contribution from Members	129.697		119.510	
Special Contributions	25.283		34.726	
Sale of Publications	9.355		2.052	
Bank interest	21.004		20.950	
Gain on exchange	-		85.711	
Other income	2.736	206.075	-	283.555
	<u>          </u>		<u>          </u>	
<b>EXPENDITURE</b>				
<b>A. MEETINGS</b>				
Executive Committee meetings	18.849		31.020	
Other	485		-	
Program Committee	-		354	
General Assembly	2.447	21.781	2.362	33.736
	<u>          </u>		<u>          </u>	
<b>B. PUBLICATIONS</b>		12.587		7.410
<b>C. SCIENTIFIC ACTIVITIES</b>				
ICMI	13.392		10.067	
CDE	28.067		6.213	
Travel Grants	10.489		44.726	
Conferences	43.142	95.090	-	61.006
	<u>          </u>		<u>          </u>	



**D. ADMINISTRATIVE EXPENSES**

Contribution to ICSU	2.988		2.300	
Grant to CTS	400		400	
Grant to ICMI	6.896		6.040	
Grant to CDE	8.396		3.356	
Audit fees	500		1.253	
General office expenses	2.061		11.833	
Bank charges	325		1.248	
Loss on exchange	50.400	71.966	-	26.430
		<u>201.424</u>		<u>128.582</u>
		=====		=====
		4.651		154.973

**EXCESS OF INCOME OVER EXPENDITURE**

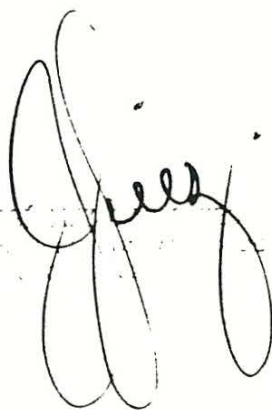
Allocated to:				
General Fund	4.651	(4.651)	154.973	(154.973)
		=====		=====

INTERNATIONAL MATHEMATICAL UNION

DUES ARREAS AS FOR JANUARY 1, 1992

MEMBER	DUES (Swiss Francs)	YEAR(s)	USD
Argentina	4.200	1991, 1989	2.937
Brazil	400	1991-part	279
Bulgaria	2.200	1991	1.538
Cameroon	1.100	1991	769
China-Math.Soc.Taipei	1.100	1991	769
Cuba	1.100	1991	769
Egypt	1.100	1991	769
Greece	1.100	1991	769
Hong Kong	1.100	1991	769
India	4.400	1991	3.076
Ivory Coast	1.100	1991	769
Ireland	2.200	1991	1.538
Korea D.P.R.	1.100	1991	769
Mexico	4.100	1991, 90, 89, 88	2.867
Nigeria	2.100	1991, 1990	1.468
Philippines	1.100	1991	769
Poland	8.400	1991-part, 89, 88	5.874
Romania	2.000	1989, 1988	1.398
Singapore	1.100	1991	769
Vietnam	1.100	1991	769
Yugoslavia	5.450	1991, 90, 89, 88	3.811
			<hr/> <hr/> 33.245

1 USD = 1.43 SFR = DECEMBER 31, 1991



**INTERNATIONAL MATHEMATICAL UNION**

**A c c o u n t s**

**Year Ended December 31, 1992**

# INTERNATIONAL MATHEMATICAL UNION

Rio de Janeiro, March 24, 1993

International Mathematical Union  
Instituto de Matemática Pura e Aplicada (IMPA)  
Estrada Dona Castorina, 110  
Rio de Janeiro - RJ  
22460 - Brasil

## Independent Auditor's Report

I have audited the Financial Statements of the International Mathematical Union (IMU) prepared by the Secretary of IMU for the year ended December 31, 1992. The Statement of Income and Expenditure was prepared in accordance with the instructions given by the International Council of Scientific Unions (I.C.S.U.) in a letter dated December 16, 1992. My responsibility is to express my opinion about the Financial Statement.

## C o m m e n t s

### 1 - Currency

The Financial Statements are expressed in US dollars and the Income and Expenditure for each month was translated into US dollars at the Unesco Rate of Exchange, which the International Council of Scientific Unions (I.C.S.U.) has made available throughout the year.

**President:**  
*Professor Jacques L. Lions, Paris*  
**Secretary:**  
*Professor Jacob Palis, Rio de Janeiro*

**SECRETARIAT.**  
*Instituto de Matemática Pura e Aplicada-IMPA*  
*Estrada Dona Castorina, 110*  
*22460 Rio de Janeiro RJ*  
*Brazil*

*Telephone: 55 21 511-1749: 294-9032 ext. 148*  
*Fax: 55 21 512-4112*  
*Telex: 21 21145 IAMP*  
*E-Mail: IMU@BHLNCC.BITNET*

**2 - Income**

The total of contributions from national members was US\$ 120.603,89. The number of members having unpaid dues, has not grown up in 1992. However, the total amount of unpaid dues has increased from US\$ 33.245 by December 31, 1991, to US\$ 49.917 by December 31, 1992.

**3 - Sales of Publications**

The income of the editions of the World Directory of Mathematicians was US\$ 6.057,00. These editions have been sold in the year 1992, according to the statement of the American Mathematical Society.

**4 - Expenditure**

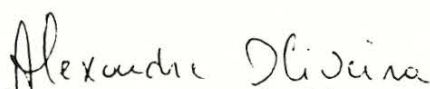
The Statement of Income and Expenditure includes loss on exchanges for the year 1992 in the amount of US\$ 18.063,73.

**5 - Bank Accounts**

The balances of the bank accounts agree exactly with the respective bank statements.

**6 - Final Comments**

In my opinion the Financial Statement represents, in all relevant aspects, the patrimonial and financial position of the International Mathematical Union (I.M.U.) by December 31, 1992, in accordance with the Fundamental Principles of Accounting.

  
Alexandre Maria de Oliveira  
Autorised Independent Accountant  
CRC - RJ. P/14.350/92

**President:**  
*Professor Jacques L. Lions, Paris*  
**Secretary:**  
*Professor Jacob Palis, Rio de Janeiro*

SECRETARIAT  
Instituto de Matematica Pura e Aplicada - IMPA  
Estrada Dona Castorina, 110  
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Telex: 21 21145 IAMP  
E-Mail: IMU@BHLNCC BITNET

INTERNATIONAL MATHEMATICAL UNION - IMU  
 STATEMENT OF INCOME AND EXPENDITURE  
 FOR THE YEAR ENDED 31 DECEMBER 1992

	NOTES	US DOLLARS
I. INCOME		
Grant from ICSU Fund and Sp. Contributions		-
Allocation from Unesco Subvention to ICSU		20.900,00
Unesco Contracts		-
Contributions from National Members	1	120.603,89
Contributions from Scientific Members		-
Special Contributions		47.898,69
Contracts		-
Sales of Publications, Royalties		6.057,00
Sales of scientific materials		-
Bank interest		20.136,59
Gain on Exchange		13.326,51
Other Income		-
T O T A L I N C O M E		<u>228.922,68</u>
II. EXPENDITURE		
A) SCIENTIFIC ACTIVITIES		
General Assembly		2.430,56
Scient. Meetings: Symposia/Colloquia/Working Groups, etc		34.855,74
Representation at Scientific Meetings		-
Data Gathering/Processing		-
Research projects		-
Grants to Individuals/Organizations	2	44.344,18
Other		-
LESS COVERED BY UNESCO CONTRACT		-
ROUTINE MEETINGS		-
Bureau/executive Committee		18.130,93
Other		-
PUBLICATIONS	3	12.500,00
B) OTHER ACTIVITIES		
Contribution to ICSU		3.242,43
Contributions to other ICSU bodies		7.128,47
SCOSTED, COBIOTECH, FAGS, (ETC)		-
Activities covered by Unesco Contracts		-
ADMINISTRATIVE EXPENSES:		
Salaries and Related Charges		5.100,00
General Office Expenses		5.308,94
Office Equipment		2.275,00
Audit Fees		2.000,00
Bank charges		380,71
Loss on exchange		18.063,73
T O T A L E X P E N D I T U R E		<u>155.760,69</u>
EXCESS OF INCOME OVER EXPENDITURE		73.161,99
OR EXCESS OF EXPENDITURE OVER INCOME		-
ACCUMULATED BALANCE AT 1, JANUARY, 1991		410.199,78
ACCUMULATED BALANCE AT 31 DECEMBER 1992		483.361,77

INTERNATIONAL MATHEMATICAL UNION

1. STATEMENT OF CONTRIBUTIONS RECEIVED FROM MEMBERS DURING THE YEAR ENDED DECEMBER 31, 1992

MEMBER	PRE 1992	1 9 9 2	T O T A L
Argentina	1.476,51	-	
Australia	-	2.953,02	
Austria	-	1.447,37	
Belgium	-	3.492,06	
* Brazil	317,46	6.984,13	
Bulgaria	694,44	-	
Canada	-	5.065,79	
Chile	-	1.344,39	
China, Taiwain	1.476,51	-	
Czechoslovakia	-	2.953,02	
Denmark	-	1.666,67	
Egypt	814,81	-	
Finland	-	1.447,37	
France	-	8.430,66	
Germany	-	7.382,55	
Greece	769,23	802,92	
Hungary	-	3.211,68	
Iceland	-	723,68	
Ireland	1.476,51	-	
Hong Kong	814,81	802,92	
Italy	-	5.347,22	
India	3.211,68	3.055,56	
Japan	-	8.029,20	
Korea, Rep.of	-	802,92	
Mexico	2.751,68	873,02	
Netherlands	-	2.894,74	
New Zealand	-	738,26	
Norway	-	802,92	
Philippines	-	763,89	
Portugal	-	802,92	
* Poland	-	6.466,41	
Romania	-	802,92	
Royal Society	-	8.148,15	
Sweden	-	3.211,68	
South Africa	-	1.476,51	
Singapore	763,88	763,89	
Switzerland	-	3.211,68	
Turkey	-	802,92	
USA	-	8.333,33	
	<hr/>	<hr/>	<hr/>
	14.567,52	106.036,37	120.603,89

\* Brazil and Poland have paid for the years 1992 and 1993

**BALANCE SHEET AT DECEMBER 31, 1992**

	NOTES	1 9 9 2		1 9 9 1
<b>ASSETS</b>				
Bank Accounts and cash	4			
Cash		-		-
Current accounts		174.700	282.993	
Deposit accounts		<u>381.944</u>	<u>169.845</u>	452.838
Prepayments	5	7.692		7.692
Receivable		<u>8.822</u>		<u>12.120</u>
<b>TOTAL ASSETS</b>		573.158		472.650
 <b>LESS: Liabilities</b>				
Creditors and accruals	6	<u>12.526</u>		<u>10.526</u>
		<u>560.632</u>		<u>462.124</u>
 <b>ACCUMULATED FUNDS</b>				
General Fund	7			
Balance at December 31, 1991		410.199	405.548	
Excess of Income over Expenditure		73.162	483.361	410.199
			<u>4.651</u>	
		<b>TRANSFER</b>	483.361	410.199



	<b>TRANSFER</b>	483.361		410.199
Special Development Fund				
Balance at December 31, 1991	36.891		26.402	
Prevision to ICM 94	<u>10.416</u>	47.307	<u>10.489</u>	36.891
 General Assembly Fund				
Balance at December 31, 1991	2.447		-	
Prevision to General Assembly 1994	<u>2.430</u>	4.877	<u>2.447</u>	2.447
 World Directory of Mathematicians Fund				
Balance at December 31, 1991	12.587		-	
Prevision to W.D.M.	<u>12.500</u>	25.087	<u>12.587</u>	12.587
		<u>560.632</u>		<u>462.124</u>

  
 JOSÉ LUIZ DIAS PIRES  
 TÉCNICO EM CONTABILIDADE  
 CRC - RJ, 022614-8

## 2. GRANTS TO INDIVIDUALS/ORGANIZATIONS

I.C.M.I.	12.080
C.D.E./I.M.U.	11.364
C.D.E.	<u>20.900</u>
	44.344

## 3. PUBLICATIONS

	1992	1991
World Directory of Mathematicians	<u>12.500</u>	<u>12.587</u>
	12.500	12.587

NOTES TO BE READ IN CONNECTION WITH THE FINANCIAL STATEMENT  
OTHER NOTES

		<u>1 9 9 2</u>		<u>1 9 9 1</u>	
		<u>Currency</u>	<u>USD</u>	<u>Currency</u>	<u>USD</u>
4. BANKS AND CASH					
The amount held with banks is made up as follows					
Credit Swiss	Switzerland				
- Current Account		FS 171.323	118.974	168.197	117.620
- Deposit Account		FS 550.000	381.944	-	-
Kansallis Osakke Pankki	Finland				
- Current Account		FS 80.245	55.726	70.072	49.001
- Deposit Account		FS -	-	242.878	169.845
- Longterm Account		FS -	-	166.412	<u>116.372</u>
		<u>556.644</u>		<u>452.838</u>	

## 5. PREPAYMENTS

Balance 31.12.91		<u>7.692</u>
		7.692

## 6. CREDITORS AND ACCRUALS

Balance 31.12.91	10.526	
Audit Fee 1992	1.000	
Accountant 1992	<u>1.000</u>	<u><u>12.526</u></u>

## 7. FUNDS

These funds represent the amounts set aside to cover the following

Provided in Year ended	1992 General Fund	1992 General Assembly	1992 World Directory	1992 Special Development Fund
General Fund				
Balance 31.12.91	410.199			
Transfer from the income of expenditure over excess	73.162			
Special Development Fund				
Balance 31.12.91				36.891
Prevision to ICM 94				10.416
General Assembly Fund				
Balance 31.12.91		2.447		
Prevision to General Assembly 94		2.430		
World Directory of Mathematicians Fund				
Balance 31.12.91			12.587	
Prevision to W.D.M.			<u>12.500</u>	
	<u>483.361</u>	<u>4.877</u>	<u>25.087</u>	<u>47.307</u>

**STATEMENT OF INCOME AND EXPENDITURE:  
FINANCIAL YEARS 1991 AND 1992 COMPARED**

<b>INCOME</b>	<b>1992</b>		<b>1991</b>	
Allocation from Unesco grant to ICSU	20.900		18.000	
Contributions from National Members	120.604		129.697	
Special Contributions	47.898		25.283	
Sale of Publications	6.057		9.355	
Bank Interest	20.137		21.004	
Gain on Exchange	13.326		-	
Other Income	<u>-</u>	228.922	<u>2.736</u>	206.075
<b>EXPENDITURE</b>				
<b>A. MEETINGS</b>				
Executive Committee meetings	15.470		18.849	
Other	-		485	
Program Committee	2.660		-	
General Assembly	<u>2.431</u>	20.561	<u>2.447</u>	21.781
<b>B. PUBLICATIONS</b>		12.500		12.587
<b>C. SCIENTIFIC ACTIVITIES</b>				
I.C.M.I	12.080		13.392	
C.D.E.	20.900		28.067	
Travel Grants	10.416		10.489	
Conferences	<u>24.440</u>	67.836	43.142	95.090

<b>D. ADMISTRATIVE EXPENSES</b>	<b>1 9 9 2</b>		<b>1 9 9 1</b>	
Contribution to ICSU	3.242		2.988	
Grant to CTS	417		400	
Grant to ICMI	6.711		6.896	
Grant to CDE	11.364		8.396	
Audit Fees	2.000		500	
Salaries and related charges	5.100		-	
General office expenses	5.309		2.061	
Office Equipment	2.275		-	
Bank charges	381		325	
Loss on exchange	18.064	<u>54.863</u>	<u>50.400</u>	<u>71.966</u>
		<u>155.760</u>		<u>201.424</u>
<b>EXCESS OF INCOME OVER EXPENDITURE</b>		<b>67.105</b>		<b>4.651</b>
Allocated to:				
General Fund	67.105	(67.105)	4.651	(4.651)

## INTERNATIONAL MATHEMATICAL UNION

DUES ARREAS AS FOR JANUARY 1, 1993

COUNTRY MEMBER	DUES (SWISS FRANCS)	YEAR(s)	U S \$
Argentina	4.200	1989/92	2.916
Bulgaria	3.400	1991/92	2.361
Cameron	2.200	1991/92	1.528
China - Beijing	4.400	1992	3.055
China - Taiwan	2.200	1992	1.528
Cuba	2.200	1991/1992	1.528
Egypt	1.100	1992	764
Iran	1.100	1992	764
Ireland	2.200	1992	1.528
Israel	4.400	1992	3.055
Ivory Coast	2.200	1991/92	1.528
Dem.Rep.of Korea	2.200	1991/92	1.528
Nigeria	3.200	1990/91/92	2.222
Philippines	1.100	1991	764
Poland	8.400	89/88/91 (part)	5.833
Romania	2.000	1988/89	1.389
Spain	4.400	1992	3.055
USSR	11.000	1992	7.639
Vietnam	2.200	1991/92	1.528
Yugoslavia	7.650	1988 to 1992	5.312
Venezuela	1.100	1992	764
			<hr/>
			50.589

1 US\$ = CHF 1,44 - December 31, 1992



**INTERNATIONAL MATHEMATICAL UNION**

**A c c o u n t s**

**Year Ended December 31, 1993**

Rio de Janeiro, March 7, 1994

International Mathematical Union  
Instituto de Matemática Pura e Aplicada (IMPA)  
Estrada Dona Castorina, 110  
Rio de Janeiro - RJ  
22460 - Brasil

### Independent Auditor's Report

I have audited the Financial Statements of the International Mathematical Union (IMU) prepared by the Secretary of IMU for the year ended December 31, 1993. The Statement of Income and Expenditure was prepared in accordance with the instructions given by the International Council of Scientific Unions (I.C.S.U.) in a letter dated December 2, 1993. My responsibility is to express my opinion about the Financial Statement.

### C o m m e n t s

#### 1 - Currency

The Financial Statements are expressed in US dollars and the Income and Expenditure for each month was translated into US dollars at the Unesco Rate of Exchange, which the International Council of Scientific Unions (I.C.S.U.) has made available throughout the year.

**President:**  
*Professor Jacques L. Lions, Paris*  
**Secretary:**  
*Professor Jacob Palis, Rio de Janeiro*

**SECRETARIAT**  
*Instituto de Matemática Pura e Aplicada-IMPA*  
*Estrada Dona Castorina, 110*  
*22460 Rio de Janeiro RJ*  
*Brazil*

*Telephone 55 21 511 1749 294-9032 ext. 148*  
*Fax 55 21 512-4112*  
*Telex 21 21145 IAMP*  
*E-Mail: IMU@BHLNCC.BITNET*

**2 - Income**

The total of contributions from national members was US\$ 138.318,00. The number of members having unpaid dues, decreasead in 1993. The total amount of unpaid dues has also decreased from US\$ 49.917 by December 31, 1992, to US\$ 40.268,38 by December 31, 1993.

**3 - Sales of Publications**

The income of the editions of the World Directory of Mathematicians was US\$ 3.009,00. These editions have been sold in the year 1993, according to the statement of the American Mathematical Society.

**4 - Expenditure**

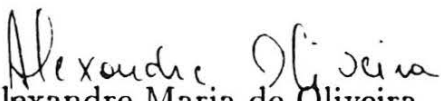
The Statement of Income and Expenditure includes loss on exchanges for the year 1993 in the amount of US\$ 21.182,99

**5 - Bank Accounts**

The balances of the bank accounts agree exactly with the respective bank statements.

**6 - Final Comments**

In my opinion the Financial Statement represents, in all relevant aspects, the patrimonial and financial position of the International Mathematical Union (I.M.U.) by December 31, 1993, in accordance with the Fundamental Principles of Accounting.

  
Alexandre Maria de Oliveira  
Autorised Independent Accountant  
CRC - RJ. 70811

**President:**  
*Professor Jacques L. Lions, Paris*  
**Secretary:**  
*Professor Jacob Palis, Rio de Janeiro*

**SECRETARIAT:**  
*Instituto de Matematica Pura e Aplicada-IMPA*  
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*E-Mail: IMU@BHLNCC BITNET*

INTERNATIONAL MATHEMATICAL UNION - IMU  
 STATEMENT OF INCOME AND EXPENDITURE  
 FOR THE YEAR ENDED 31 DECEMBER 1993

I. INCOME	NOTES	US DOLLARS
Grant from ICSU Fund and Sp. Contributions		-
Allocation from Unesco Subvention to ICSU		20.900,00
Unesco Contracts		-
Contributions from National Members	1	138.318,00
Contributions from Scientific Members		-
Special Contributions		33.919,38
Contracts		-
Sales of Publications, Royalties		3.009,00
Sales of scientific materials		-
Bank interest		16.608,07
Gain on Exchange		-
Other Income		-
T O T A L I N C O M E		<u>212.754,45</u>
II. EXPENDITURE		
A) SCIENTIFIC ACTIVITIES		
General Assembly		2.348,99
Scient. Meetings: Symposia/Colloquia/Working Groups, etc		44.112,55
Representation at Scientific Meetings		-
Data Gathering/Processing		-
Research projects		-
Grants to Individuals/Organizations	2	42.754,29
Other (Subvention to ICM/94		26.845,63
LESS COVERED BY UNESCO CONTRACT		-
ROUTINE MEETINGS		-
Bureau/executive Committee		12.838,39
Other		-
PUBLICATIONS	3	12.080,53
B) OTHER ACTIVITIES		
Contribution to ICSU		4.221,00
Contributions to other ICSU bodies		19.692,95
SCOSTED, COBIOTECH, FAGS, (ETC)		-
Activities covered by Unesco Contracts		-
ADMINISTRATIVE EXPENSES:		
Salaries and Related Charges		5.800,00
General Office Expenses		8.189,78
Office Equipment		-
Audit Fees		1.000,00
Bank charges		525,43
Loss on exchange		21,182,99
T O T A L E X P E N D I T U R E		<u>201.592,53</u>
EXCESS OF INCOME OVER EXPENDITURE		11.161,92
OR EXCESS OF EXPENDITURE OVER INCOME		-
ACCUMULATED BALANCE AT 1, JANUARY, 1992		483.361,77
ACCUMULATED BALANCE AT 31 DECEMBER 1993		494.523,69

BALANCE SHEET AT DECEMBER 31, 1993

	NOTES	1 9 9 3	1 9 9 2
<b>ASSETS</b>			
Bank Accounts and cash	4		
Cash			
Current accounts		52.306	-
Deposit accounts		<u>543.044</u>	174.700
Prepayments	5	7.692	<u>381.944</u>
Receivable		<u>5.774</u>	556.644
			<u>8.822</u>
<b>TOTAL ASSETS</b>		608.816	573.158
<b>LESS: Liabilities</b>			
Creditors and accruals	6	<u>12.526</u>	<u>12.526</u>
		<u>596.290</u>	<u>560.632</u>
<b>ACCUMULATED FUNDS</b>			
General Fund	7		
Balance at December 31, 1992		483.361	410.199
Excess of Income over Expenditure		<u>11.162</u>	<u>73.162</u>
		494.523	483.361

TRANSFER

	<b>TRANSFER</b>	494.523		483.361
Special Development Fund				
Balance at December 31, 1992	47.307		36.891	
Prevision to ICM 94	<u>10.067</u>	57.374	<u>10.416</u>	47.307
 General Assembly Fund				
Balance at December 31, 1992	4.877		2.447	
Prevision to General Assembly 1994	<u>2.349</u>	7.226	<u>2.430</u>	4.877
 World Directory of mathematicians Fund				
Balance at December 31, 1992	25.087		12.587	
Prevision to W.D.M.	<u>12.080</u>	<u>37.167</u>	<u>12.500</u>	<u>25.087</u>
		<u>596.290</u>		<u>560.632</u>

INTERNATIONAL MATHEMATICAL UNION

1. STATEMENT OF CONTRIBUTIONS RECEIVED FROM MEMBERS DURING THE YEAR ENDED DECEMBER 31, 1993

MEMBER	PRE 1993	1 9 9 3	T O T A L
Argentina	1.496,59	1.560,28	
Australia	-	2.913,90	
Austria	-	1.456,95	
Brazil	-	6.092,70	
Canada	-	5.099,33	
Chile	-	1.646,00	
China, Taiwain	1.496,59	-	
China, Beijing	2.993,19	2.993,20	
Czechoslovakia	-	3.076,92	
Denmark	-	1.608,39	
Finland	-	1.456,95	
France	-	7.284,76	
Germany	-	7.284,76	
Greece	-	769,23	
Hong Kong	-	748,29	
Hungary	-	2.953,02	
Iceland	-	728,47	
Iran	728,47	728,47	
Ireland	1.538,46	-	
Italy	-	5.099,33	
India	-	3.120,56	
Israel	2.905,96	2.993,19	
Japan	-	7.692,30	
Korea, Rep.of	-	1.496,59	
Mexico	-	1.560,28	
Netherlands	-	2.913,90	
Norway	-	769,23	
Philippines	-	738,25	
Portugal	-	728,47	
Poland	1.632,65	-	
Royal Society	-	7.284,76	
Russia	7.090,00	9.230,00	
Saudi Arabia	-	769,23	
Sweden	-	2.913,90	
South Africa	-	1.496,59	
Singapore	-	728,47	
Slovenia	-	754,41	
Spain	2.913,90	2.913,90	
Switzerland	-	2.913,90	
Turkey	-	369,12	
USA	-	7.692,30	
Venezuela	733,84	-	
Vietnam	1.472,02	736,03	
	<hr/>	<hr/>	<hr/>
	25.001,67	113.316,33	138.318,00

## 2. GRANTS TO INDIVIDUALS/ORGANIZATIONS

I.C.M.I.	11.921
C.D.E / I.M.U.	9.933
C.D.E.	20.900
	<hr/>
	42.754

## 3. PUBLICATIONS

	1993	1992
World Directory of Mathematicians	12.080	12.500
	<hr/>	<hr/>
	<u>12.080</u>	<u>12500</u>



NOTES TO BE READ IN CONNECTION WITH THE FINANCIAL STATEMENT  
OTHER NOTES

		<u>1 9 9 3</u>		<u>1 9 9 2</u>	
		<u>Currency</u>	<u>USD</u>	<u>Currency</u>	<u>USD</u>
4. BANKS AND CASH					
The amount held with banks is made up as follows					
Credit Swiss	Switzerland				
- Current Account		FS 66.901	44.900	171.323	118.974
- Deposit Account- Money Market		FS 809.136	543.044	550.000	381.944
Kansallis Osakke Pankki	Finland				
- Current Account		FS 11.035	<u>7.406</u>	80.245	<u>55.726</u>
			<u>595.350</u>		<u>556.644</u>

5. PREPAYMENTS

BALANCE 31.12.93		7.692
		<u>7.692</u>

6. CREDITORS AND ACCRUALS

BALANCE 31.12.91	10.526	
Audit Fee	1.000	
Accountant 1993	<u>1.000</u>	12.526
		=====

7. FUNDS

These funds represent the amounts set aside to cover the following

Provided in Year ended	1993 General Fund	1993 General Assembly	1993 World Directory	1993 Special Development Fund
General Fund				
Balance 31.12.92	483.361			
Transfer from the income of expenditure over excess	11.162			
Special Development Fund				
Balance 31.12.92				47.307
Prevision to ICM 94				10.067
General Assembly Fund				
Balance 31.12.92		4.877		
Prevision to General Assembly 94		2.349		
World Directory of Mathematicians Fund				
Balance 31.12.92			25.087	
Prevision to W.D.M.			12.080	
	494.523	7.226	37.167	57.374

STATEMENT OF INCOME AND EXPENDITURE:  
FINANCIAL YEARS 1992 AND 1993 COMPARED

INCOME	1 9 9 3		1 9 9 2	
Allocation from Unesco grant to ICSU	20.900		20.900	
Contributions from National Members	137.949		120.604	
Special Contributions	33.919		47.898	
Sale of Publications	3.009		6.057	
Bank Interest	16.608		20.137	
Gain on Exchange	-		13.326	
Other Income	<u>369</u>	212.754	<u>-</u>	228.922
<b>EXPENDITURE</b>				
<b>A. MEETINGS</b>				
Executive Committee meetings	12.838		15.470	
Other	-		-	
Program Committee	26.846		2.660	
General Assembly	<u>2.349</u>	42.033	<u>2.431</u>	20.561
<b>B. PUBLICATIONS</b>				
		12.080		12.500
<b>C. SCIENTIFIC ACTIVITIES</b>				
I.C.M.I	11.921		12.080	
C.D.E.	20.900		20.900	
Travel Grants	10.067		10.416	
Conferences	34.045		24.440	
Others	<u>9.029</u>	85.962	-	67.836

D. ADMINISTRATIVE EXPENSES	1 9 9 3		1 9 9 2	
Contribution to ICSU	4.221		3.242	
Grant to CTS	400		417	
Grant to ICM	6.623		6.711	
Grant to CDE	13.575		11.364	
Audit Fees	1.000		2.000	
Salaries and related charges	5.800		5.100	
General office expsnes	8.190		5.309	
Office Equipment	-		2.275	
Bank charges	525		381	
Loss on exchange	21.183	<u>61.517</u>	<u>18.064</u>	<u>54.863</u>
		<u>201.592</u>		<u>155.760</u>
		=====		=====
EXCESS OF INCOME OVER EXPENDITURE		11.162		67.105
Allocated to:				
General Fund	11.162	(11.162)	67.105	(67.105)

## INTERNATIONAL MATHEMATICAL UNION

## DUES ARREAS AS FOR JANUARY 1, 1994

MEMBER	DUES (Swiss Francs)	YEAR (s)	USD
Argentina	2000	1989	1.342,28
Bulgaria	5.600	1991/93	3.758,38
Belgium	4.400	1993	2.953,02
Cameron	3.300	1991/93	2.214,76
China Taiwan	2.200	1993	1.476,51
Cuba	3.300	1991/93	2.214,76
Croatia	1.100	1993	738,25
Egypt	2.200	1992/93	1.476,51
Georgia	2.200	1993	1.476,51
Ireland	2.200	1993	1.476,51
Ivory Coast	3.300	1991/93	2.214,76
Korea Republic of	2.200	1991/92	1.476,51
New Zealand	2.200	1993	1.476,51
Nigeria	4.300	1990/93	2.885,90
Philippines	1.100	1991	738,25
Poland	6.000	1988/89	4.026,84
Romania	3.100	1988/89-93	2.080,53
Turkey	550	1993 (part)	369,12
Yugoslavia	7.650	1988/93	5.134,22
Venezuela	1.100	1993	738,25
			<hr/>
			40.268,38

1 USD = 1.49 SFR = DECEMBER 31, 1993

**COMMISSION ON DEVELOPMENT AND EXCHANGE**

**C. D. E.**

**A c c o u n t s**

**For the Years 1990, 1991, 1992 and 1993**

**CDE Actions (1991-1993 ; 1990)**

Year	1991		1992		1993		1990	
	received	granted	received	granted	received	granted	received	granted
IL : individual travel grants	31	8	64	14	31	9		7
CS : support to conferences	8	1	11	6	11	6		4
Info. on CDE's programmes	12		15		18			
Support granted to research teams	1		2		1		1	

It should be noted that grants given in year n may correspond to applications received in year (n-1). The big difference between the number of applications received and the number of grants awarded is due to several factors : many applications do not fall within CDE's schemes : applications for support to training visits (CDE programmes only applied to research visits) ; applications for support to mathematicians or conferences in connected fields eg computer science, etc. Other applications do not satisfy some general criteria set up by the CDE : applications for support to both travel and local expenses (the host institution should commit itself to supporting the local expenses).

**CDE 1990-1993 Support to Research Teams**

Country (City)	Field	Mathematician in charge	Year	CDE Support
Argentina (Cordoba)	Lie Groups and Differential Geometry	Prof. J. Tirao	1990	\$ 3,000
Argentina (Cordoba)	Lie Groups and Differential Geometry	Prof. J. Tirao	1991	\$ 3,000
Vietnam (Hanoi)	Topology and Singularities	Prof. Le Van Thanh	1992	\$ 3,000
Argentina (Cordoba)	Lie Groups and Differential Geometry	Prof. J. Tirao	1992	\$ 3,000
Vietnam (Hanoi)	Topology and Singularities	Prof. Le Van Thanh	1993	\$ 3,000
<b>Total 1990-1993 Support to Research Teams</b>				<b>\$ 15,000</b>



CDE 1990-1993 Support to Individual Mathematicians						
NAME	RESEARCH FIELD	ORIGIN	RESEARCH VISIT	PROGRAM	YEAR	GRANT
Haouba. A.	Control theory	Mauritania (Nouakchott)	France (Nancy)	UNESCO-UMI	1990	\$ 820
Kuku. A.O.	K-theory	Nigeria (Ibadan)	Germany (Bielefeld)	UNESCO-UMI	1990	\$ 1,000
Morales. M	Algebra	France (Grenoble)	Brazil (Bahia)	UNESCO-UMI	1990	\$ 1,200
Pham Huu Sachs		Vietnam (Hanoi)	Germany (Düsseldorf)	UNESCO-UMI	1990	\$ 1,000
Simis. A.	Algebra	Brazil (Bahia)	Japan (Kyoto)	UNESCO-UMI	1990	\$ 1,000
Sridharan		India (Bombay)	USA (Berkeley)	UNESCO-UMI	1990	\$ 562
Yu Yan Lin		China (Beijing)	Great Britain (Oxford)	UNESCO-UMI	1990	\$ 620
<b>Total travel grants for individuals 1990</b>						<b>\$ 6,202</b>
Alcantara-Bode. J.	Analysis	Peru (Univ Pont)	Germany (Heidelberg)	UNESCO-UMI ICSU	1991	\$ 1,500
Dinh Van Huynh	Ring theory	Vietnam (Hanoi)	Germany (Dusseldorf)	ICSU, CDE	1991	\$ 1,250
Mahmoudian. E	Combinatorics	Iran (Teheran)	Australia (Univ. Queensland)	UNESCO-UMI ICSU	1991	\$ 1,500
Markarian. R	Dynamical systems	Uruguay (Montevideo)	Russia (Moscow)	UNESCO-UMI ICSU	1991	\$ 1,500
Muruganadam. V	Representation theory	India (Pondicherry)	France (Poitiers) 1990, paid 1991	UNESCO-UMI	1991	\$ 1,000
Nguyen To Nhu		Vietnam	Europe 1990, paid 1991	ICSU, CDE	1991	\$ 1,050
Seddighi. S	Functional analysis	Iran (Shiraz)	Calgary (Canada)	UNESCO-UMI	1991	\$ 1,000
Tan. S.P	Differential Geometry	Singapour	USA (Univ. Maryland)	UNESCO-UMI ICSU	1991	\$ 1,000
<b>Total travel grants for individuals 1991</b>					<b>1991</b>	<b>\$ 9,800</b>
Corach. G.	Operator theory	Argentina (Buenos Aires)	Europe (Warsaw, Zaragoza, Turin)	ICSU, CDE	1992	\$ 1,000
Cukierman. F.M	Algebraic geometry	USA (Univ Kansas)	Argentina (Buenos Aires)	ICSU, CDE	1992	\$ 1,000
Cuong. N.T	Singularity theory	Vietnam (Hanoi)	Germany (Koln)	UNESCO-IMU ROSTSEA	1992	\$ 1,000
Kabbaj. S	Commutative algebra	Morocco (Marrakesh)	Italy (Roma) & France (Lyon)	UNESCO-IMU ROSTSEA	1992	\$ 566
Kahn. B	K-theory	France (Paris)	Vietnam (Hanoi)	ICSU, CDE	1992	\$ 1,500
Muu. L.D.	Nonconvex optimization	Vietnam (Hanoi)	Germany (Trier)	ICSU, CDE	1992	\$ 1,250
Ndoutoune. J	Convex analysis	Gabon (Libreville)	France (Limoges)	UNESCO-IMU ROSTSEA	1992	\$ 1,000
Osse. A	Algebraic topology	Switzerland (Neuchatel)	Benin (Porto-Novo)	UNESCO-IMU ROSTSEA CDE	1992	\$ 1,200
Paternain. G	Geometry, dynamical syst	Uruguay (Montevideo)	Germany (Bonn)	ICSU, CDI	1992	\$ 1,000
Tamizmani. K	Math. Physics	India (Pondicherry)	France (Lille)	ICSU, CDI	1992	\$ 1,385
Tan. N.X.	Nonlinear analysis	Vietnam (Hanoi)	Germany (Koln)	UNESCO-IMU ROSTSEA	1992	\$1,527

Amounts paid in French francs have been converted into US dollars according to the current chancellery exchange rate.

Tan. X.J.	Algebraic geometry	China (Beijing)	India (Bombay)	UNESCO-IMU ROSTSEA CDE	1992	\$ 1,100
Tarzia. A.	Applied PDEs	Argentina (Rosario)	Italy (Florence)	IMU	1992	\$ 600
Zhang. S.	Number theory	China (Beijing)	GB (Cambridge)	UNESCO-IMU ROSTSEA	1992	\$ 1,000
<b>Total travel grants for individuals 1992</b>					<b>1992</b>	<b>\$ 15,128</b>
Benhissi. A.	Algebra	Tunisia (Monastir)	France (Marseille)	ICSU, CDE	1993	\$ 198
Bozhkov, Y	Gauge field theory & topology	Bulgaria (Sophia)	Brazil (Campinas) 1st payment	ICSU, CDE	1993	\$ 1,100
Lu, H.	Number theory	China (Hefei)	USA (West Lafayette)	ICSU, CDE	1993	\$ 1,000
Muruganadam, V.	Representat. theory, harm Ana	India (Pondicherry)	France (Poitiers & Nancy)	ICSU, CDE	1993	\$ 1,000
Passare, M.	Several complex variables	Sweden (Stockholm)	Argentina (Buenos Aires)	ICSU, CDE	1993	\$ 1,000
Sangare, D.	Commutative algebra	Ivory Coast (Abidjan)	France (Caen & Marseille)	ICSU, CDE	1993	\$ 950
Starkov, A.	Lie group theory, Dyn. Syst	Russia (Moscow)	India (Bombay)	ICSU, CDE	1993	\$ 700
Tang, Z.	Algebraic geometry	China (Suzhou)	Germany (Köln)	ICSU, CDE	1993	\$ 1,500
Wang, D.	Differential equations	China (Beijing)	Europe (Amsterdam & Bratislava)	ICSU, CDE	1993	\$ 1,500
<b>Total travel grants for individuals 1993</b>					<b>1993</b>	<b>\$ 8,948</b>
<b>Total travel grants for individuals 1991-1993</b>					<b>90-93</b>	<b>\$ 40,078</b>

Amounts paid in French francs have been converted into US dollars according to the current chancellery exchange rate.

**CDE 1990-1993 Support to Conferences**

Country	Title of the Conference	Organizers	Year	Programme	CDE Support
CHILE (Santiago)	Symposium on Dynamical Systems	Prof. R. Labarca	1990	CDE	\$ 3.000
INDIA (Madras)	Symposium in Algebra	Prof. M.S. Parvathan	1990	CDE	\$ 990
NIGERIA (Ibadan)	Mathematics Conference	Prof. Ekhaguere	1990	CDE	\$ 3.000
VIETNAM (Hanoi)	Fourth Congress of Vietnamese Mathematicians	Prof. Nguyen Dinh Tri	1990	CDE	\$ 2.000
Sub-total Support to Conferences 1990					\$ 8.990
BRAZIL (Campinas)	Topology of gauge fields	Prof. F. Burstall & A. Rigas	1991	ICSU, CDE	\$ 2.000
Sub-total Support to Conferences 1991					\$ 2.000
BENIN (Porto Novo)	GIRAGA IV (Groupe Inter-Africain de Recherche en Analyse, Géométries et Applications)	Prof J.P. Ezin	1992	ICSU, CDE, UNESCO-ROSTA	\$ 2.000
INDONESIA (Surabaya)	South East Asia Conference on Mathematical Education	Prof. S. Linuwih	1992	ICSU, UNESCO-ROSTSEA	\$ 2.000
MOROCCO (Oujada)	Congrès de Mathematiques Appliquées	Prof. M. Boutayeb	1992	ICSU, CDE	\$ 2.000
PHILIPPINES (Quezon City)	International Conference on Functional Analysis and Global Analysis	Prof. S.W. Sy	1992	ICSU, CDE	\$ 2.000
TURKEY (Gokova)	Low Dimensional Topology Conference		1992	ICSU, CDE	\$ 3.000
VIETNAM (Hanoi)	International Conference on Applied Analysis	Prof. Nguyen Dinh Tri	1992	ICSU	\$ 2.000
Sub-total Support to Conferences 1992					\$ 13.000
CHINA (Nankai)	Workshop in arithmetic geometry	Prof. A. Assadi & K.Feng	1993	ICSU, CDE	\$ 2.000
EGYPT (Cairo)	International Conference and Advanced Workshop on Arithmetic Geometry	Prof. A. Dabbour	1993	ICSU, CDE	\$ 2.000
INDIA (Bombay)	Workshop on vector bundles on curves : new directions	Prof. Ramadas, Ramanatha, Seshadri	1993	ICSU, CDE	\$ 2.000
MOROCCO (Rabat)	International Conference on Numerical Analysis and Optimization	Prof. Bennami	1993	ICSU, CDE	\$ 2.000
NIGERIA (Ibadan)	AMU Symposium on Current Research Trends in Mathematics and Mathematical Physics	Prof. A.O. Kuku	1993	ICSU, CDE	\$ 2.000
VENEZUELA (Caracas)	Harmonic Analysis and Operator Theory (in honor of M. Cotlar)	Math. Society of Venezuela	1993	ICSU, CDE	\$ 2.000
Sub-total Support to Conferences 1993					\$ 12.000
<b>Total 1990-1993 Support to Conferences</b>					<b>\$35,990</b>

Commission on Development and Exchanges 1987-1990				
1990 (US\$)				
Description	Deposits	Payments	Balance A	Balance B
			6.285 A	11.326 B
UNESCO contribution (1989)	5.000 B			
IMU contribution (schedule B)	3.333 B			
UNESCO contribution (1990)	6.401 B			26.060 B
IMU contribution (schedule A)	3.333 A		9.618 A	
IL : Support to individuals : travel grants (7)		6.202 B		
CS : Support to Conferences (4)		8.990 B		
TM : Support to research team (Cordoba, 1990)		3.000 B		7.868 B
Secretarial expenses 1990		1,341 A		
Financial fees		292 A	7.985 A	
<b>Balance</b>			<b>7.985 A</b>	<b>7.868 B</b>

Commission on Development and Exchanges 1991-1993				
1991 (US\$)				
Description	Deposits	Payments	Balance A	Balance B
Balance			7.985 A	7.868 B
UNESCO 1990 2nd payment	1,000 B			
IMU contribution (schedule B)	10,233 B			
ICSU contribution	17,985 B			
Math. Soc. Japan contribution	1,137 B			
UNESCO 1991	7,500 B			45.723 B
IMU contribution (schedule A : 91 & 92)	7,656 A		15.641 A	
IL : Support to individuals : travel grants (8)		9,800 B		
CS : Support to conferences (1)		2,000 B		
TM : Support to research teams (Cordoba 91)		3,000 B		30.923 B
Secretarial expenses (1990, paid 1991)		403 A		
Secretarial expenses (salaries 1991 : \$ 2,187 and stationnary : \$ 19, paid 1992)		2,206 A		
Financial fees		83 A		
CDE meeting (April 1991, Grenoble) : \$ 3,612 paid in US\$ and \$ 3,892 paid in FFR		3,612 A 3,730 A	5.607 A	
<b>Balance</b>			<b>5.607 A</b>	<b>30.923 B</b>

All expenses made in French francs have been converted into US dollars using the chancellery exchange rate of the current period. More details are available from the histories of the bank accounts of the CDE

Commission on Development and Exchanges 1991-1992				
1992 (US\$)				
Description	Deposits	Payments	Balance A	Balance B
Balance			5,607 A	30,923 B
IMU contribution (schedule B)	11,363 B			
ICSU contribution	20,885 B			
Math. Soc. Japan contribution	1,153 B			
UNESCO ROSTA	2,500 B			
UNESCO ROSTSEA	4,200 B			
Soc. Math. France contribution	1,488 B			72,512 B
IL : Support to individuals : travel grants (14)		15,128 B		
CS : Support to conferences (6)		13,000 B		
TM : Support to research teams (Cordoba 92 & Hanoi 92)		6,000 B		38,384 B
Library support		1,451 B		36,933 B
Financial fees		199 A		
Secretarial expenses (salaries 1992, paid in part 1993)		1,301 A	4,107 A	
Balance			4,107 A	36,933 B

Commission on Development and Exchanges 1991-1993				
1993 (US\$)				
Description	Deposits	Payments	Balance A	Balance B
Balance			4,107 A	36,933 B
IMU contribution (schedule B)	10,000 B			
ICSU contribution	20,869 B			
Math. Soc. Japan contribution	1,396 B			
Association 1er Congrès Européen Math.	540 B			
Soc. Math. de France	950 B			
UNESCO (ROSTA & ROSTSEA 2nd payment)	800 B			71,488 B
IMU contribution (schedule A : 93)	3,704 A		7,811 A	
IL : Support to individuals : travel grants (9)		8,948 B		
CS : Support to conferences (6)		12,000 B		
TM : Support to research teams (Hanoi 93)		3,000 B		47,540 B
Financial fees		307 A		
Secretarial expenses (salaries 93)		733 A	6,771 A	
Balance			6,771 A	47,540 B

All expenses made in French francs have been converted into US dollars using the chancellery exchange rate of the current period. More details are available from the histories of the bank accounts of the CDE

**INTERNATIONAL COMMISSION ON  
MATHEMATICAL INSTRUCTION - ICMI**

**A c c o u n t s**

**For the Years 1990, 1991, 1992 and 1993**

# I C M I

## Accounts January 1 - December 31, 1990

### Swiss Francs Account:

<u>Income</u>		<u>Expenditure</u>	
Balance at Jan. 1, 1990	2,136	Transfer to other accounts	24,000
IMU (Adm.adm.Sc.Act.)	<u>24,000</u>	Charges	11
		Balances at 31 Dec 1990	2,125
	<u>26,136</u>		<u>26,136</u>

### Dollar Account

<u>Income</u>		<u>Expenditure</u>	
Balance at Jan. 1, 1990	43,473	E.C. Meeting	523
UNESCO(Popularization)	1,000	Computer Study	1,720
UNESCO (Assessment)	1,700	China Meeting	1,500
Interest (less charges)	<u>1,886</u>	Transfer to Sterling	15,000
		ICME 7	1,000
	<u>48,059</u>	Women Study	650
		Balance at 31 Dec. 1990	<u>27,666</u>
			<u>48,059</u>

### Sterling Account (up to February 28, 1991)

<u>Income</u>		<u>Expenditure</u>	
Balance at Jan. 1, 1990	14,732	Computer Study	927
Transfer from Swiss Francs	9,504	Popularization Study	3,210
Transfer from Dollar	8,673	Assessment Study	1,255
ICSU CTS (Joint)	194	Joint Study	1,646
CUP	105	ICME 7 IPC	560
UNESCO(Popularization)	1,150	Southampton Univ.	
ICME 6 Proceedings	350	Bulletins	550
UNESCO (Assessment)	146	Services	2,700
UNESCO (joint)	1,015	Incidentals	24
Interest less charges	<u>2,447</u>	E.C. Meetings	4,684
		IMO Site Committee	30
	<u>37,957</u>	Balance at 28 Feb. 1991	<u>22,371</u>
			<u>37,957</u>

# ICMI

## ACCOUNTS 1991, - 31 December 1991

### Swiss Francs Account :

#### Income:

transfer from Southampton (20 March)	2 068.73
IMU (Schedule A: Administration)	10 000.00
IMU (Schedule B: Scientific Activities)	18 000.00
interest	1 098.09

total 31 166.82

#### Expenditure:

transfer charges	17.78
transfer to DKR account	3 500.00
EC meeting April	1 989.34
President's expenses (incl. Assessment Conf.)	1 905.59
travel grants to PME participation from E. Europe	1 004.44
<b>balance</b>	<b>22 749.67</b>

total 31 166.82

### Danish Kroner Account :

#### Income:

transfer from Swiss Francs Account (3500)	15 867.25
payment of invoice	25.00

total 15 892.25

#### Expenditure:

EC meeting April	6 318.00
Assessment Conference	5 614.25
bank charge	150.00
postage Bulletin	2 503.50
<b>balance</b>	<b>1 306.50</b>

total 15 892.25

### Sterling Account :

#### Income:

transfer from Southampton (15 April)	23 106.40
royalties for studies (CUP)	613.20
interest	1 552.75

total 25 272.35

#### Expenditure:

transfer charges	4.82
<b>balance</b>	<b>25 267.53</b>

total 25 272.35



**US Dollar Account:**

Income:

transfer from Southampton (22 May)	27 836.78
IMO returned (ICMI-China Regional Conf.)	1 494.78
interest	744.88
total	<u>30 076.44</u>

Expenditure:

EC meeting April	977.20
Assessment Conference	679.20
Renewed grant ICMI-China Regional Conf.	1 505.06
Secretariat	150.60
<b>balance</b>	<b>26 764.38</b>
total	<u>30 076.44</u>

**Notes:**

1.

The British tax authorities are claiming income tax amounting to about £ 1900 levied on interest earned when the Secretariat was in Southampton. Negotiations on the matter are still being conducted but it is anticipated that a considerable fraction of the amount claimed will have to be paid.

2.

In order to reserve money to support ICME 7 related activities, incl. EC meetings, expenditures have been kept unusually low in 1991.

3.

Administration costs to compensate Roskilde University have not been paid in 1991. Such costs will have to be paid in 1992. The same is true with the printing costs of the Bulletin.

4.

In 1992 expenditures connected with the editing and publishing of the Assessment Study as well as with the mounting of new studies are anticipated to be noticeable.

Mogens Niss  
28 January 1992

# ICMI

## Accounts 1992: 1 January - 31 December

### Swiss Franc Account:

#### Income:

balance 1991	22.749,67
IMU (Schedule A: Administration)	10.000,00
IMU (Schedule B: Scientific Activities)	18.000,00
IMU grant for ICME-7	11.000,00
interest	2.257,17
<b>total</b>	<b><u>64.006,83</u></b>

#### Expenditure:

transfer charges (IMU)	15,37
transfers to DKR account	4.500,00
<b>balance 1992</b>	<b>59.491,46</b>
<b>total</b>	<b><u>64.006,83</u></b>

### Danish Kroner Account:

#### Income:

balance 1991	1.306,50
transfer from Swiss Franc Account (4.500)	19.288,20
transfer from Sterling Account (1.500)	16.375,35
private contributions to ICMI's <b>Solidarity Fund</b>	<b>916,16</b>
<b>total</b>	<b><u>37.886,21</u></b>

#### Expenditure:

Secretary's meeting in Unesco (April)	4.731,53
typing and printing, Bulletin	4.922,50
postage Assessment Study manuscripts	740,00
EC members' participation in ICME-7, including GA and EC meetings	22.257,50
credit card charge	150,00
<b>balance 1992</b>	<b>5.084,68</b>
<b>total</b>	<b><u>37.886,21</u></b>

## **Sterling Account:**

### **Income:**

balance 1991	25.267,53
CUP royalties for studies	306,87
interest	1930,63
<b>total</b>	<b><u>27.305,03</u></b>

### **Expenditure:**

accumulated previous tax due in the UK	1.891,55
transfer to DKR account	1.500,00
<b>balance 1992</b>	<b>23.913,48</b>
<b>total</b>	<b><u>27.305,03</u></b>

## **US\$ Account:**

### **Income:**

balance 1991	26.764,38
Unesco grant for ICME-7	2.200,00
payments	185,10
interest	270,71
private contributions to ICMI's <b>Solidarity Fund</b>	<b>20.300,00</b>
<b>total</b>	<b><u>49.720,19</u></b>

### **Expenditure:**

ICMI contribution to ICME-7	5.000,00
IMU contribution to ICME-7 ( $\approx$ CHF 11.000)	8.700,00
Unesco contribution to ICME-7	3.000,00
Contribution to SEACME 6	2.000,00
Tibor Nemetz fund finished	750,00
EC members' participation in ICME-7, including GA and EC meetings	628,96
transfer charges	24,48
<b>balance 1992</b>	<b>29.616,75</b>
<b>total</b>	<b><u>49.720,19</u></b>

### **Notes:**

1.

As a consequence of the ICMI General Assembly and Executive Committee meetings held in Québec, August 1992, it was decided to establish an ICMI Solidarity Fund based on private contributions. The **Solidarity Fund** is mounted to assist mathematics education and mathematics educators in less affluent countries. Its money can only be spent (by a committee chaired by Professor Jean-Pierre Kahane) to serve such purposes and is therefore **not** part of ICMI's general resources. However, the appearance of the Solidarity Fund on the ICMI accounts for 1992 is due to the wish to keep ICMI's number of bank accounts at a minimum.

2.

Unesco Contributed a grant of US\$ 3.000 to support the participation in ICME-7 of delegates from developing countries. In accordance with Unesco practice the grant is paid in two parts. Only the first sum (US\$ 2.200) appears in the accounts. The second sum is yet to be paid, but ICMI has transferred US\$ 3.000 to ICME-7.

3.

In addition to the amounts displayed directly in the accounts, considerable extra sums should appear but do not and cannot. In 1992 Roskilde University (the Secretary's institution) has contributed a substantial support of ICMI's work (e.g. telephone and -fax, e-mail facilities, postage, some of the printing costs and all the distribution costs of the Bulletin, plus secretarial help of various sorts). It is estimated that the total contribution of Roskilde University is equivalent about US\$ 5.000. The ICMI Executive Committee expresses its gratitude for this generous support.

The Executive Committee's thanks also go to the institutions of its other members. These institutions, too, have given invisible support to ICMI's work in a variety of ways. For instance, in many cases these institutions have paid travel and other expenses related to participation in EC meetings and so forth.

4.

In 1993, the preparation and holding of an ICMI study conference (on *Gender and Mathematics Education*), and the preparation of one, perhaps two, other ICMI studies (on *Research in Mathematics Education* and on *Geometry*, respectively) will imply considerable costs.

5.

In appreciation of the extraordinary and most impressive work done by Professor Tibor Nemetz in ICME-6, Budapest 1988, the then ICME EC decided to establish a small fund to make it possible for Prof. Nemetz to participate in ICME-7. In 1992 the fund was used for its purpose and has hence come to an end.

Mogens Niss  
12 February 1993

# ICMI

## Accounts 1993: 1 January - 31 December

### Swiss Franc Account:

#### Income:

balance 1992	59.491,46
IMU (Schedule A: Administration)	10.000,00
IMU (Schedule B: Scientific Activities)	18.000,00
interest	1.950,34
total	<u>89.441,80</u>

#### Expenditure:

transfer charges (IMU)	11,96
<b>balance 1993</b>	<b>89.429,84</b>
total	<u>89.441,80</u>

### Danish Kroner Account:

#### Income:

ICMI balance <sup>1)</sup> 1992	4.168,52
<b>Solidarity Fund</b> balance <sup>1)</sup> 1992	916,16
transfer from US Dollars Account (1.000)	6.578,00
total	<u>11.662,68</u>

#### Expenditure:

EC meeting in Höör (Sweden), President's and Secretary's working preceding meeting in Copenhagen	8.301,66
ICMI study on gender, in Höör (Sweden) <sup>2)</sup>	1.732,40
typing Bulletin 34 & 35	1.800,00
credit card charge	150,00
<b>Solidarity Fund balance 1993</b>	916,16
<b>ICMI Balance 1993</b>	<b>-1,237,54</b>
total	<u>11.662,68</u>

## **Sterling Account:**

### **Income:**

balance 1992	23.913,48
CUP royalties for studies	142,65
interest	815,88
total	<u>24.872,01</u>

### **Expenditure:**

International Mathematical Olympiads SC grant	300,00
transfer charges	4,29
<b>balance 1993</b>	<b>24.567,72</b>
total	<u>24.872,01</u>

## **US\$ Account:**

### **Income:**

ICMI balance <sup>1)</sup> 1992	9.316,75
<b>Solidarity Fund</b> balance <sup>1)</sup> 1992	20.300,00
Unesco grant for ICME-7, last instalment <sup>3)</sup>	800,00
interest	129,87
private contributions <sup>4)</sup> to ICMI's <b>Solidarity Fund</b>	529,58
total	<u>31.076,20</u>

### **Expenditure:**

EC member's participation in ICME-7 (late payment)	1.823,39
EC meeting in Höör (Sweden), October 1993 <sup>2)</sup>	433,00
transfer to Danish Kroner Account	1.000,00
transfer charges	4,57
<b>Solidarity Fund balance 1993</b>	<b>20.829,58</b>
<b>ICMI balance 1993</b>	<b>6.985,66</b>
total	<u>31.076,201</u>

1. As a consequence of the ICMI General Assembly and Executive Committee meetings held in Québec, August 1992, it was decided to establish an ICMI Solidarity Fund based on private contributions. The **Solidarity Fund** is mounted to assist mathematics education and mathematics educators in less affluent countries. Its money can only be spent (by a committee chaired by Professor Jean-Pierre Kahane) to serve such purposes and is therefore **not** part of ICMI's general resources. However, the appearance of the Solidarity Fund on the ICMI accounts for 1992 is due to the wish to keep ICMI's number of different bank accounts low. However, for 1993 the accounts exhibit the ICMI balances and the Solidarity Fund balances separately where this makes sense.

2. In 1993 the preparation and holding of the ICMI study conference on *Gender and Mathematics Education* took place in Höör Sweden. Only some of the costs were paid in 1993. An additional amount of about US\$ 2.000 is due in 1994. An EC meeting was held in connection with the study conference.

3. In 1992 Unesco Contributed a grant of US\$ 3.000 to support the participation in ICME-7 of delegates from developing countries. In accordance with Unesco practice the grant was paid in two parts. The first part (US\$ 2.200) was included in the accounts for 1992. The second part (US\$ 800) was paid in 1993.

4. Of this amount, US\$ 500 was granted by the Federación Española de Sociedades de Profesores de Matemáticas. In fact, this Federación gave a larger contribution to the Solidarity Programme as it spent further US\$ 1.500 to directly support work done in Nicaragua by Professors Martínez and de Guzmán within the framework of the Solidarity Programme, on which a report was published in Bulletin No. 34, June 1993.

5. In addition to the amounts displayed directly in the accounts, considerable extra sums should appear but do not and cannot. In 1993 Roskilde University (the Secretary's institution) has contributed a substantial support of ICMI's work (e.g. telephone and -fax, e-mail facilities, postage, all the printing and distribution costs of the Bulletin, plus secretarial help of various sorts). It is estimated that the total contribution of Roskilde University is equivalent about US\$ 5.000. The ICMI Executive Committee expresses its gratitude for this generous support.

The Executive Committee's thanks also go to the institutions of its other members. These institutions, too, have given invisible support to ICMI's work in a variety of ways. For instance, in many cases these institutions have paid travel and other expenses related to participation in EC meetings and so forth.

6. In 1994, the preparation and holding of an ICMI study conference (on *What is Research in Mathematics Education, and What are Its Results*) and the preparation of one (on *New Perspectives on the Teaching of Geometry for the 21st Century*) will imply considerable costs.

Mogens Niss  
7 March 1994

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