# REPORT OF THE 12th GENERAL ASSEMBLY OF IMU 

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

## 1. OPENING

The President opened the Assembly at 10 a.m. on July 31, 1994

## 2. ADDRESS BY THE PRESIDENT

The address given by the President is found in Appendix 1. He also emphasized that every effort had been made to send the delegates all necessary information beforehand. This information is collected in Bulletin ${ }^{\circ}$ 36, Special Number for the General Assembly.

The Agenda was accepted in a modified order.

## 3. COMMITTEES

The following committees were appointed:

## Credentials Committee:

J. Rubinstein (Australia), Chairperson
S. Dani (India)
J. Lindenstrauss (Israel)
J. Margalet-Roig (Spain)
J. Mawhin (Belgium)
J. Palis, ex-officio, Secretary

## Resolutions Committee:

J. Tits (France), Chairperson
J. Ball (UK)
R. Douglas (USA)
J. Jarnik (Czech Republic)
J. Timourian (Canada)
J. Palis, ex-officio, Secretary

## Tellers:

K. S. Chang (South Korea)
R. Gruber (Austria)
V. Thomee (Sweden)

## Committee for Finance and Dues:

C. Terng (USA), Chairperson
A. Gonchar (Russia)
O. Lehto (Finland)
D. Nguyen (Vietnam)
J. Siciak (Poland)
J. Palis, ex-officio, Secretary

## Nominating Committee:

J. L. Lions, ex-officio, Chairperson
K. C. Chang (China)
C. Ciliberto (Italy)
R. Graham (USA)
F. Hirzebruch (Germany)
N. Hitchin (UK)
R. Macias (Argentina)
V. Sos (Hungary)
M. Yamaguti (Japan)
L. Faddeev, ex-officio, Past President

## 4. MEMBERS

### 4.1. NEW AFFILIATIONS:

Armenia
Kazakhstan
Tunisia
will be addmitted to the Union in Group I as of January 1, 1995.

### 4.2. CHANGE OF GROUP OF ADHERENCE

The Group of Adherence of Chile and Iran were raised from I to II. The change will take effect on January 1, 1995. Concerning Israel, the General Assembly approved a raise from Group III to Group IV, as of January 1, 1995

Bulgaria had its Group of Adherence lowered from II to I, on its own request. The change has taken effect as of January 1, 1994. The Secretary emphasized that this change will be reversed as soon as Bulgaria's economic situation improves, without another ballot. The presidente asked Prof. B. Sendov, a delegate from Bulgaria to tell the Bulgarian Academy of Sciences, the Union's appreciation of the scientific work in that country.

### 4.3. DUES ARREARS:

The Secretary informed the Assembly that the situation is satisfactory, as no country has dues arrears for more than 4 years.

## 5. ACTIVITIES OF THE UNION - FINANCIAL REPORTS

The activities of the Union for the years 1990-1993, as well as the complete financial reports, including audited ones, had been reviewed in the Bulletin $\mathrm{N}^{\circ} 36$, Special Number, 1994.

The reports in the Bulletin covered symposia and conferences supported by IMU, IMU lectures, ICMS activities, CDE activities, ICHM activities, the IMU Bulletin, and the World Directory of Mathematicians. They were approved.

The 10th edition of the World Directory of Mathematicians compiled and printed by the American Mathematical Society under the supervision of Professor David Mumford , will be available at the ICM in Zurich.

## 6. REPORT OF THE TURN OF THE CENTURY COMMITTEE:

Prof. J. Palis, Chairperson of the Committee, reported on the work of the Committee.
This report is printed in Appendix 2.
The discussion was interupted for lunch at 12:30.
The 2 nd session started at 2 p.m. Prof. J. Timourian proposed a resolution on the "Turn of the Century" activities. The Assembly decided to transfer this proposal, as well as several others, to the Resolution Committee.

## 7. DISCUSSION ON THE FORMAT OF FUTURE ICMs

Prof. D. Mumford presented the three specific points of his proposal.
The text is presented in Appendix 3.
It was decided that the topic should be the subject matter of some resolution of the General Assembly to be discussed for approval in the next day.

## 8- ICM - 1998

The President announced that the Site Committee recommends Berlin as the Site for the 1998 International Congress of Mathematicians. The Assembly decided unanimously that the 1998 Congress be held in Berlin. Prof. F. Hirzebruch thanked the General Assembly and promised the mathematical community a good conference. He assured that there will be no visa problems and announced the date as August 18 to 28, 1998.

Prof. J. L. Lions told the Assembly that bids to host the Congress 2002 must be received by the Executive Committee by November 1996. The decision will be made by the E.C. by May, 1997, subject to a final deliberation by the General Assembly in August, 1998.

The second session was closed at 4 p.m.
The third session started at 10:10 on August 1.

## 9. ELECTION

The Nominating Committee had met in the early morning, from 8:00 to 9:00. The Committee had received two names for members of the Executive Committee from the floor. Prof. Lions explained the voting procedure.

- The IMU Executive Committee, elected by ballot, for the years 1995-1998, consists of:


## IMU Executive Committee

| President: | David Mumford <br> Vladimir Arnold | (Univ. Harvard, USA) <br> (Steklov Inst., Moscow, Russia) |
| :--- | :--- | :--- |
| Vice-Presidents: | Vlarecht Dold | (Univ. of Heidelberg, Germany) |
| Secretary: | Albrecht Dacob Palis | (IMPA-Brazil) |
| Members: | James Arthur | (Univ. Toronto, Canada) |
|  | Simon Donaldson | (Univ. of Oxford, United Kingdom) |
|  | Björn Engquist | (KTH-Stockholm, Sweden) |
|  | Shigefumi Mori | (RIMS, Kyoto Univ., Japan) |
|  | K. R. Parthasarathy | (Indian Statist. Inst., New Delhi, India) |

The Past President, J.C.Lions, will be an ex-officio member of the Executive Committee.

## The ICMI, Executive Committee, elected unanimously, for the years 1995-1998, consists of:

| President: | Miguel de Guzman | (Univ.Complutense, Spain) <br> (Univ.Georgia, USA) |
| :--- | :--- | :--- |
| Vice-Presidents: | Jeremy Kilpatrick | (Univ. Montreal, Canada) <br> Secretary: |
| Anna Sierpinska | Morgens Niss | (Roskilde Univ., Denmark) |
| Members: | Colette Laborde | (Grenoble, France) |
|  | Gilash Leder | (Monash Univ. Melbourne, Australia) |
|  | Carlos Vasco | (Univ. Nac. Colombia) |
|  | Zhang dian-Zhou | (East China Normal Univ., Shanghai) |

The ex-officio members are: the Past President of ICMI, Prof. J.P. Kahane, the President of IMU, Prof. David Mumford and the Secretary of IMU, Prof. Jacob Palis.

# CDE (Commission on Development and Exchange), elected unanimously, for the years 1995-1998, consists of: 

| Chairman: | Rolando Rebolledo | (Univ. Cat. de Chile) |
| :--- | :--- | :--- |
| Secretary: | Pierre Bérard | (Inst. Fourier, France) |
| Members: | A.A. Ashour | (Cairo Univ., Egypt) |
|  | C.H.Clemens | (Univ. Utah, U.S.A.) |
|  | Kung Ching Chang | (Pequim Univ., China) |
|  | Cesar Camacho | (IMPA, Brasil) |
|  | Jean Mawhin | (U.Louvain,Belgium) |
|  | Mitsuo Morimoto | (Sophia Univ., Japan) |

The ex-officio members are: the M.S. Narasimhan, as Past President of CDE, David Mumford, and Jacob Palis as President and Secretary of IMU.

- Professors Laura Toti Rigatelli and Karen V.H. Parshall were elected as IMU Members to the Executive Committee of the Joint International Commission on the History of Mathematicians for the years 1995-1998.

The IMU representatives to ICSU bodies elected by acclamation are:
Professor Jacob Palis was re-elected to represent IMU at ICSU in the years 1995-1998
Professor J. L.Lions, was re-electerd to represent IMU at COSPAR in the years 1995-1998

- The IMU representative at these organizations should report to the General Assembly of their activities.


## 10 -Report of Committee on Finance and Dues

Professor C. Terng, Chairperson of Committee for Finance and Dues reported on the work of the Committee.

Her report is presented as Appendix 5.
The Committee recommended the approval of the financial reports for the years 1990-1993 and the audited accounts. They were unanimously approved by the General Assembly.

The budget for 1995-1998 had been prepared on the basis of about ten per cent increase on the dues of the Union.

The Committee recommended the acceptance of the budget proposed.
The budget was approved unanimously by the General Assembly. It is printed as Appendix 6 .

## 11 - Adoption of resolutions

The Resolution Committee presented proposals of resolutions for approval of the General Assembly.

After discussion of these and some other proposals presented from the floor, the following ones were approved:

## Resolutions of the IMU General Assembly 1994

## Resolution 1

The General Assembly resolves that the next meeting of the Assembly be held at a time and place conveniently linked to the International Congress of Mathematicians in Berlin, Germany, in 1998.

## Resolution 2

The General Assembly thanks the Turn of the Century Committee for its report. The General Assembly asks the new Executive Committee to proceed with the planning of World Mathematical Year 2000, and to organize and coordinate activities such as
a) an invitation to a select group of outstanding mathematicians to present their views on topics they expect to be central to mathematical activity in the next century;
b) the selection of a number of symposia, some possibly organized together with other scientific bodies, dedicated to mathematics, its applications and to its role in society; c) events held under the auspices of ICMI, CDE and ICHM.

The Executive Committee is asked to explore the possibilities provided by communication technology to unite activities occurring around the world.

## Resolution 3

The General Assembly recommends that the name of the Chair of the Programme Committee be made public on appointment.

## Resolution 4

The General Assembly recommends that the Programme Committee explores ways of involving more effectively mathematicians from applied areas in the next Congress, including the possibility of introducing sessions co-sponsored with other scientific bodies.

## Resolution 5

The General Assembly recommends that the Programme Committee schedule some less formal scientific events of broad interest during the Congress.

## Resolution 6

The EC is asked to redraft the electoral procedures to improve them in the light of the points that have been made in the discussion at the General Assembly, and the recommendations be sent to the national committees before the end of 1995.

## Resolution 7

The General Assembly expresses its gratitude to UNESCO and ICSU for the help and support that these organizations have provided for various mathematical activities, in particular those carried out in cooperation with the Commission for Development and Exchange (CDE) and the International Commission on Mathematical Instruction (ICMI) of the IMU.

## Resolution 8

The 12th General Assembly expresses warm thanks to the Executive Committee of the IMU for the work done during the period 1991-1994.

## Resolution 9

The General Assembly gives special thanks to Professor J.-L. Lions for his important contributions, first as Secretary, and then as President of the IMU, assisted by Mme Renault and Mme Theis, and to Professor J. Palis for his considerable and dedicated work as the Secretary of IMU, with the help of Mme Lima and Mme Dold. The General Assembly recognizes with gratitude the generous support provided by the Collège de France and IMPA to the IMU Secretariat.

## Resolution 10

The General Assembly expresses its gratitude to the Swiss organizers of the 1994 Congress, for its hospitable reception, and for the excellent arrangements for this meeting of the Assembly.

12 - Next meeting of the General Assembly
The German delegation invited the General Assembly to meet on August 15-16, 1998 at a place linked to the International Congress of Mathematicians to take place in Berlin, Germany.

13 - The President thanked the Assembly for its work and declared the 12 th General Assembly of IMU closed at 1:00 p.m.

The report of the Credentials Committee is presented as Appendix 4, the list of participants as Appendix 7.

## Appendix 1

## ADDRESS BY THE PRESIDENT AT THE TWELFTH GENERAL ASSEMBLY OF IMU

Dear Colleagues,
On behalf of the Executive Committee of IMU, welcome to the General Assembly of IMU welcome to all of you, in particular to all new members, elected to IMU since the previous General Assembly of Kobe, four years ago, namely Saudi Arabia and Venezuela.

On account of the very important geopolitical changes in the European landscape, many countries, which were already members of the Union, have been re-admitted under their new identity after your approval by postal ballot. Such is the case of Russia, Georgia, the Czech and the Slovak Republics, Croatia and Slovenia. The candidacy of other countries will be submitted to your approval during this Assembly. Welcome to all of you.

We are happy to greet the several observers who are A. Marzollo, Director for Mathematics at UNESCO, de Guzman, Chairman of ICMI, Santiago Sologuren, Bolivia, U.M. Sultangazin, Kazakhstan.

The General Assembly of IMU is an important event. The Executive Committee has paid the greatest attention to all resolutions passed in Kobe and to all the wishes expressed in this previous 11th General Assembly in Kobe.

We have also followed Resolution 2 concerning the Turn of the Century Committee. Let me remind you its content: "whereas the IMU wishes to mark the turn of the century in a manner appropriate to the standard set by David Hilbert in 1900, the General Assembly directs the Executive Committee to set up a committee to report to the adhering bodies by September 1991, how to accomplish this so that in 1994 the Assembly can discuss it and decide how to proceed".

A Committee has been formed, Turn of the Century Committee, chaired by our Secretary General, Jacob Palis. He will report to you today on the work accomplished and on the proposals that are presented to you.

We, at the Executive Committee, have also, in all its actions, carefully listened to the wishes strongly expressed in Kobe, namely to have a good equilibrium betwwen all branches of mathematicians, including those developing in connection with other fields.

The importance of the American proposal, unanimously endorsed by the General Assembly of Kobe, concerning the Turn of the Century, and this strong wish for developing mathematics both internally and in connection with other disciplines, has led us to propose, with UNESCO and the Third World Academy of Sciences sponsorship the year 2,000 as the World Mathematical Year - in short WMY 2000.

We will further discuss the work made in this respect, in cooperation with our two main commissions CDE and ICMI, when Jacob Palis presents his report on the Turn of the Century Committee. We convey our thanks to UNESCO, represented here by our colleague, Angelo Marzollo. Our thanks also to the CDE and ICMI commissions, some of their members being here with us in Lucern.

WMY 2000 has already been reported to ICSU. Our position at ICSU will certainly be reinforced by the election at its General Assembly in Chile, at the end of last year, of Professor Jacob Palis to the Executive Board of ICSU. I am sure to express the general opinion of this Assembly when extending my congratulations to Jacob Palis.

During this four-years period, IMU has supported a number of meetings. They are reported in the Special Number of the Bulletin of this year.

We have made very special efforts for having as many as possible young research mathematicians from countries facing very difficult economic situations - in these times of crisis, to attend ICM 94. Thanks to the generous donations of many mathematical societies, scientific institutions and agencies, to the Special Development Fund of IMU, our Travel Grants Committee has been able to help this time about 80 young mathematicians from the Third World, making an effort doubled since the last ICM in Kyoto. Let me heartily thank all donors for such an important help: the complete list of them appear in the special issue of the IMU Bulletin.

Let me emphasize all these points. We have increased as much as possible the scientific activities, keeping to its minimum the administrative part. We have to proceed further. In particular, the CDE , financed by IMU itself and in conjunction with ICSU/UNESCO, has spent about three times more than before. Also, the number of young people from developing countries attending the ICM has doubled. It is very important to continue our action towards supporting good level mathematical activities in developing countries.

Finally we provided support to Russian mathematical libraries, to the University of Moscow through the Moscow Mathematical Society and to the Steklov Institute at St. Petersburg. To help mathematical activities in former Soviet Union and in Eastern Europe is a new challenge tha we should face. This new effort shoud not, of course, be at the expenses of that towards developing countries.

Since 1971, the E.C. of IMU has been inviting, from time to time, a distinguished and active mathematician of high international standing, to give a set of four to six lectures on important new developments in mathematics to which the lecturer, directly or indirectly, has made a contribution. These lectures are published in "LÉnseignement Mathématique". None of these lectures have been delivered in this period but these IMU lectures will start again in 1995. The EC is hopeful that more institutions around the world apply for the IMU lectures, especially from institutions from a developing country; in that case, the travel expenses are taken care of by IMU.

You all know that one of the tasks of the E.C. in connection with the Organizing Committee is to nominate the chairman of the Program Committee and its members. Once this is done, the E.C. has no interference whatsoever with the Program Committee. The composition of the Program Committee is kept confidential, up to the first day of the General Assembly.

For ICM 94 the Chairman of the Program Committee is Professor Louis Nirenberg. The members are: S.K.Donaldson, P. de la Harpe, R. Karp, H.Kraft, A.Majda, M.Raynaud, M.Sato and Y.Sinai.

The Awards of the Union-Fields Medal and Rolf Nevanlinna Prizes - will be presented at the Opening Ceremony of the ICM. The EC has nominated the Committees to select the winners. For the Fields Medals, the chairman is Prof. D. Mumford and the members are L.Caffarelli, M. Kashiwara, B. Mazur, A.Schrijver, D. Sullivan, J.Tits, S. Varadhan, and for the Rolf Nevanlinna Prize, H.W. Lenstra Jr., J.V. Matiyasevic, R.E. Tarjan, M. Yamaguti, and myself as Chairman. Professor David Mumford will not be, in any case, the Chairman of the next Fields Medal Committee.

Those of you who have already participated in the General Assembly, and those of you who have been engaged in some of the activities of IMU, you know that the strengh of our Union is greatly increased by the general friendly atmosphere in which we are working.

I am sure that such will be again the case in the present meeting.

The quality of the reception from our Swiss colleagues and friends, the splendid organization which has been set up, the beauty of the city, will certainly contribute to the relaxed, friendly and efficient Assembly that I now declare open.

Appendix 2

## Turn of the Century Committee Report to the IMU General Assembly 1994

In 1990, at the previous IMU General Assembly in Kobe, Japan, the American National Committee proposed the creation of the Turn of the Century Committee to provide suggestions for IMU to mark the turn of the century in a manner appropriate to the standard set by David Hilbert in 1900, so that the present Assembly can decide how to proceed.

Subsequently, such a committeee was set up by the IMU Executive Committee having as members Professors V. Arnold, F. Hirzebruch, L. Lovász, B. Mazur, S. Mizohata, W. Thurston, J. Tits, S. Varadhan and J. Palis.

Meanwhile, in May of 1992, Professor J.L. Lions, in the name of the Union, declared 2,000 as a World Mathematical Year (WMY 2,000) having as first aim the IMU activities to envision what the great challenges of the next century would be. In his own words, the Turn of the Century Committee suggestions to this General Assembly could be a starting point to organize such efforts. The second aim of the Declaration is Mathematics, keys for development and the third is The image of mathematics.

Members of the Committee had different views on how to proceed, but one common idea is to have articles/monographs/uniform series of addresses at various Symposia written by main mathematicians with a broad perspective and comprehensive views of mathematics, achievements of the present century and open problems. Unity of mathematics was much stressed. Another very relevant point raised was the connections between mathematics and other sciences. The importance of communication with the general public has also been mentioned. On the other hand, on the issue of how to proceed to obtain these "articles of the turn of the century", the disparity of views was quite clear: several symposia, or one main congress with a format somewhat different from the usual ICMs or perhaps no congress at all but having leading mathematicians to write, individually, a collection of problems (Fields medalists and a few others would be invited to do so).

From all these discussions and many comments by the members of the present EC, specially Prof. J.L. Lions, and several other colleagues, one possible set of suggestions is the following:

- to invite a number of Fields medalists/Nevalinna prize winners and a few other outstanding mathematicians to write their views (past, present) on topics they consider to be important and corresponding open problems; the invitations should be issued by a small Editorial Board to be designated by the next EC by May, 1995;
- to organize a small number of symposia in different regions of the world, to be selected by the next IMU Executive Committee, one of the objectives being again the production of a few outstanding surveys/sets of open problems;
- of particular importance is to organize some symposia on the applications of mathematics to other sciences and their impact on society. To that end, cooperation with other scientific unions and societies should be pursued.

A detailed set of procedures could be prepared by May, 1995 and be known to all Adhering Organizations/ National Committees immediately after that. Suggestions concerning the set of activities above will be welcome.

In addition to the consultations done in the framework of the Turn of the Century Committee, I want to mention the other aims of WMY 2000 concerning education and development aspects and to emphasize the work being carried out in this respect by ICMI, CDE and ICHM. For instance, ICMI is experimenting at ICME 96 the use of worldwide communication techniques, to be much pursued at ICME 2000, if successful. I also want to mention the publication of the newsletter WMY 2000, organized through Institut H. Poincaré with the support of the École Polytechnique in Paris.

In any case, no matter what course we take, it is a formidable task for the international mathematical community. On that, I would very much like to agree with a committee member when he says: "if we choose absolutely any of the suggestions of the committee members and if we follow it diligently, we will come up with something of substantial value for the mathematical community".

## I C M FORMAT

The Executive Committee has been discussing ways, specially the ones presented by Prof. David Mumford, in which the organization and structure of the International Congresses might evolve in order to better serve the needs of the mathematical community. For many years, the Congresses have been organized in the same way: the Executive Committee appoints a Program Committee, which decides on the sections and appoints subcommittees for each section. These recommend section speakers to the Program Committee, which makes a final selection of both plenary and sectional speakers. To prevent any pressure being exerted on the organizations, these committees have all been secret, the Program Committee being announced at the Congress itself. The Executive Committee has been considering whether there are ways to involve a larger group of people in the organization and to offer talks with different aims from the plenary and sectional talks. The purpose of this agenda item is to get feedback from the entire membership of the IMU on whether such changes shoud be explored. Our proposal is not to make definitive decisions, but to generate a set of suggestions and recommendations to give to the next Program Committee for their consideration.

The specific ideas which we have considered include these:
a. Make the name of the chairman of the Program Committee public so that any mathematician may write to this person with names of proposed speakers or topics of proposed talks. Such input might even be solicited by announcements in the newsletters of various professional journals.
b. In order to involve more effectively mathematicians from applied areas (including computer science, mathematical physics, statistics as well as industrial and applied mathematics), some sessions can be sponsored and organized by a joint subcommittee between the IMU and other professional organizations. Rather than attempting to systematically cover all major developments in the previous 4 years in applied areas (which would be a major enlargement of the Congress), such sessions might take specific 'hot' topics and present a set of talks on such topics which give mathematicians in unrelated fields a chance to get an overview of this development. The joint committee sponsoring these sessions might also give feedback to the Program Committee for talks in other areas which could attract more participation from mathematicians in their applied area.
c. The program might include some less formal talks of broad interest possibly in the evenings. Ideas here range from something like the Gibbs lectures given at the AMS to non-research topics like a survey of mathematical software now available for research or teaching. Getting names for such speakers may especially need suggestions from the community at large.

We hope that all National Committees and their delegations will consider these questions prior to the General Assembly and will feel free to raise any other idea in this discussion.

## REPORT OF THE CREDENTIAL COMMITTEE TO THE 12th GENERAL ASSEMBLY OF IMU, 1994

The Committee verified that on July 31, 1994, there were representatives from 48 countries with a total of 108 votes. Absent were 8 countries.

The Committee also verified that on August 1, 1994, there were representatives from 49 countries with a total of 110 votes. Absent were 7 countries.

Professor A. Marzollo, UNESCO, was present on both days as an observer.

## Appendix 5

# REPORT OF THE FINANCE AND DUES COMMITTEE TO THE 

## 12 th GENERAL ASSEMBLY OF IMU, 1994

The Committee consisted of C.L. Terng, USA (Chairperson); A. Gonchar, Russia; O. Lehto, Finland; D. Nguyen, Vietnam; J.Siciak, Poland and J. Palis, IMU Secretary;

The Committee studied the financial report for the years 1989-1993 presented by the Secretary of the IMU, and examined the budget for the period 1995-1998 prepared by the Executive Committee.

The Committee recommends to the General Assembly the acceptance of the financial report for the years 1990-1993 and the Executive Committee budget for the 1995-1998 period.

The budget for 1995-1998 has been prepared on a basis of about 10\% increase in the dues of the Union. The committee supports the proposal of this raise of the basic unit dues to 1200 Swiss Francs. The increase is justified in view of the projected inflation for the next four years.

It is to be pointed out that the IMU can operate with notable efficiency based on such a limit budget only because it gets institutional support. The most important contribution is made by IMPA to the Secretary, Prof. Jacob Palis.

In addition, several professional societies made generous contributions to the Special Development Fund during the past four years. This allowed IMU to support many more young mathematicians from developing countries to participate in the ICM 94 and to substantially increase the support to the important activities of Commission on Development and Exchange.

Finally, the Committee expresses its thanks to the Executive Committee and in particular to the Secretary, Prof. Jacob Palis, for the preparation of the clearly written financial reports and proposed budget.

INTERNATIONAL MATHEMATICAL UNION

## Approved Budget for the years 1995-1998, in Swiss francs

## EXPENDITURE

| Schedule A: | $\mathbf{1 9 9 1} \mathbf{- 1 9 9 4}$ | $\mathbf{1 9 9 5} \mathbf{- 1 9 9 8}$ |
| :--- | ---: | ---: |
| Secretarial help, IMU office | 19.400 | 15.000 |
| Secretarial help, President | 2.000 | 3.000 |
| ICMI | 10.000 | 11.000 |
| CDE | 5.500 | 6.000 |
| Office expenses (including postage) | 7.500 | 8.400 |
| Travel expenses of the E.C. | 25.000 | 27.600 |
| President's and Secretary's expenses | 2.000 | 2.000 |
| Contribution to ICSU | 5.000 | 7.000 |
| IMU Bulletin | 2.000 | 2.000 |
| Audit fee | 2.000 | 2.000 |
| General Assembly - 1998 | 3.500 | 4.000 |
| World Directory of Mathematicians | 18.000 | 20.000 |
| Contigencies | 2.000 | 2.000 |
|  |  |  |
| Subtotal | $\mathbf{1 0 4 . 5 0 0}$ | $\mathbf{1 1 0 . 0 0 0}$ |
|  |  |  |

Schedule B:

| Symposia, confer, IMU Lectures | 56.000 | 65.000 |
| :--- | ---: | ---: |
| ICMI scientific activities | 18.000 | 22.000 |
| CDE scientific activities | 15.000 | 40.000 |
| Program Committee for ICM 98 | 5.500 | 6.000 |
| Travel grants | 15.000 | 25.000 |
| Subvention to ICM 1998 | 24.000 | 26.000 |
|  |  |  |
| Subtotal | $\mathbf{1 3 3 . 5 0 0}$ | $\mathbf{1 8 4 . 0 0 0}$ |
| Total | $\mathbf{2 3 8 . 0 0 0}$ | $\mathbf{2 9 4 . 0 0 0}$ |

INCOME:

| Membership dues (175x1200) | 187.000 | 210.000 |
| :--- | ---: | ---: |
| ICSU subvention | 20.000 | 26.000 |
| Sales of W.D.M. | 12.500 | 10.000 |
| Special Development Fund | 15.000 | 25.000 |
| Interest on bank accounts | 3.500 | 23.000 |
| Tot a I | $\mathbf{2 3 8 . 0 0 0}$ | $\mathbf{2 9 4 . 0 0 0}$ |

Appendix 7

## INTERNATIONAL MATHEMATICAL UNION - IMU

 12th GENERAL ASSEMBLY, Lucern, Switzerland, 1994LIST OF PARTICIPANTS
DELEGATES, ALTERNATES AND OBSERVERS

| Reg | Code | Country | Group | Name |
| :---: | :---: | :---: | :---: | :---: |
| 001 | 1 | Argentina | II | MACIAS, Roberto |
| 002 | 1 | Argentina |  | SANCHEZ, Christian Urbano |
| 003 | 1 | Australia |  | MORRIS, S.A. |
| 004 | 1 | Australia | III | RUBINSTEIN,J. H. |
| 005 | 1 | Australia |  | SLOAN, I.H. |
| 006 | 1 | Austria |  | GRUBER, R.P. |
| 007 | 2 | Austria | II | HELMBERG, G. |
| 008 | 1 | Austria |  | HLAWKA, E. |
| 009 | 2 | Austria |  | REICH, L. |
| 010 | 1 | Belgium |  | MAWHIN, J. |
| 011 | 1 | Belgium | III | SCHMETS, J. |
| 012 | 1 | Belgium |  | VANHECKE, L. |
| 013 | 3 | Bosnia | - | AVDISPAHIC |
| 014 | 3 | Bolivia |  | SOLOGUREN, S. |
| 015 | 1 | Brazil |  | MENDES, P. |
| 016 | 1 | Brazil | IV | VIANA, M. |
| 017 | 1 | Brazil |  | SOARES, M. |
| 018 | 1 | Bulgaria | I | SENDOV, B. |
| 019 | 1 | Cameroon | I | HOGBE NLEND, H. |
| 020 | 1 | Canada |  | FILLMORE, P. |
| 021 | 1 | Canada | IV | FRIEDLANDER, J. |
| 022 | 1 | Canada |  | HUSSIN, V. |
| 023 | 1 | Canada |  | TIMOURIAN, J. |
| 024 | 1 | Chile | I | REBOLLEDO, R. |
| 025 | 1 | Chinene Math. Society |  | CHANG, K. |
| 026 | 1 | Chinese Math. Society |  | FENG, K. |
| 027 | 2 | Chinese Math. Society | III | LI, Z. |
| 028 | 2 | Chinese Math. Society |  | SHI, S.Z. |
| 029 | 1 | Chinese Math. Society |  | YANG, L. |
| 030 | 1 | Math.Soc.located in Taipei,China |  | HWANG, C. |
| 031 | 1 | Math.Soc.located in Taipei,China | II | WANG, H.C. |
| 032 | 2 | Math.Soc.located in Taipei,China |  | CHANG, G.J. |
| 033 | 2 | Math.Soc.located in Taipei,China |  | LIU, F.C. |
| 034 | 1 | Croatia | I | IVANSIC, I. |
| 035 | 1 | Cuba | 1 | LAGOMASINO,G.L. |
| 036 | 2 | Cuba | I | MARTINEZ-FINKELSTHEIN |
| 037 | 1 | Czech Rep. |  | FIEDLER, M. |
| 038 | 1 | Czech Rep. | II | JARNIK, J. |
| 039 | 2 | Czech Rep. |  | PUDLAK, P. |


| 040 | 1 | Denmark | II | FUGLEDGE, B. |
| :---: | :---: | :---: | :---: | :---: |
| 041 | 1 | Denmark |  | HANSEN, V.L. |
| 042 | 1 | Egypt | I | ASHOUR, A. |
| 043 | 1 | Finland | II | LEHTO, O. |
| 044 | 1 | Finland |  | RICKMAN, S. |
| 045 | 1 | France |  | BISMUT, J.M. |
| 046 | 1 | France |  | HERMAN, M. |
| 047 | 1 | France |  | LABORDE, C. |
| 048 | 2 | France | V | PUEL, J.P. |
| 049 | 2 | France |  | CHALEYAT-MAUREL, M. |
| 050 | 1 | France |  | PANSU, P. |
| 051 | 1 | France |  | TITS, J. |
| 052 | 3 | UNESCO - France |  | MARZOLLO, A. |
| 053 | 1 | Georgia | II | GORDEZIANI, D. |
| 054 | 1 | Georgia |  | KIGURADZE, I. |
| 055 | 1 | Germany |  | AIGNER, M. |
| 056 | 1 | Germany |  | BIERSTEDT, K.D. |
| 057 | 1 | Germany | V | GROETSCHEL, M. |
| 058 | 1 | Germany |  | HIRZEBRUCH, F. |
| 059 | 1 | Germany |  | WINKLER, Z. |
| 060 | 1 | Greece | I | ARTEMIADIS, N. |
| 061 | 1 | Hong Kong | I | SHUM, K.P. |
| 062 | 1 | Hungary |  | BABAI, L. |
| 063 | 1 | Hungary | III | KATONA, G.O.H. |
| 064 | 1 | Hungary |  | SOS, V.T. |
| 065 | 1 | Iceland | I | STEFANSSON, J.R. |
| 066 | 1 | India |  | DANI, S.G. |
| 067 | 1 | India | III | PARIMALA, R. |
| 068 | 1 | India |  | PARTHASARATHY, K.R. |
| 069 | 1 | Iran | II | SEDDIGHI, K. |
| 070 | 1 | Ireland | II | GOLDSMITH, B. |
| 071 | 1 | Ireland |  | HOLLAND, F. |
| 072 | 1 | Israel |  | DVORETZKY, A. |
| 073 | 1 | Israel | III | LINDENSTRAUSS, J. |
| 074 | 1 | Israel |  | LUBOTZKY, A. |
| 075 | 1 | Italy |  | CILIBERTO, C. |
| 076 | 1 | Italy |  | CERCIGNANI, C. |
| 077 | 1 | Italy | IV | CONTE, A |
| 078 | 2 | Italy |  | ROBBIANA, L. |
| 079 | 1 | Italy |  | SBORDONE, C. |
| 080 | 2 | Italy |  | VOLCIC, A. |
| 081 | 1 | Ivory Coast | 1 | NEZIT, P. |
| 082 | 1 | Japan |  | ARAKI, H. |
| 083 | 1 | Japan |  | IITAKA, S. |
| 084 | 1 | Japan | V | MORIMOTO, M. |
| 085 | 1 | Japan |  | SAWADA, T. |
| 086 | 1 | Japan |  | YAMAGUTI, M. |


| 087 | 3 | Kazakhstan |  | SULTANGAZIN, U.M. |
| :---: | :---: | :---: | :---: | :---: |
| 088 | 1 | Korea, Rep. of |  | CHANG, K.S. |
| 089 | 2 | Korea, Rep. of | II | CHOI, B.D. |
| 090 | 1 | Korea, Rep. of |  | WOO, M.H. |
| 091 | 1 | Mexico |  | ACOSTA, M.E.C. |
| 092 | 1 | Mexico | II | AGUILAR-GONZALEZ, M. |
| 093 | 2 | Mexico |  | EUDAVE-MUNOZ, M. |
| 094 | 2 | Mexico |  | NEUMANN COTO, M. |
| 095 | 1 | Netherlands | III | THOMAS, E.G.F. |
| 096 | 1 | Netherlands |  | VAN DER WEIDE, J.A.M. |
| 097 | 1 | New Zealand | I | CONDER, M.D.E. |
| 098 | 1 | Nigeria | I | KUKU, A. |
| 099 | 1 | Norway | I | STOERMER, E. |
| 100 | 3 | Palestinian Math. Society |  | SHEBAN |
| 101 | 2 | Philippines | I | CEJALVO, F. |
| 102 | 1 | Philippines |  | NAVARRO, M.P. |
| 103 | 1 | Poland |  | CIESIELSKI, Z. |
| 104 | 1 | Poland |  | HULANICKI, A. |
| 105 | 2 | Poland | III | JAKUBCZYK, B. |
| 106 | 1 | Poland |  | SICIAK, J. |
| 107 | 2 | Poland |  | SIMSON, D. |
| 108 | 1 | Portugal | I | DIAS-ADUDO, F.R. |
| 109 | 1 | Russia |  | ARNOLD, V. |
| 110 | 1 | Russia |  | GONCHAR, A. |
| 111 | 1 | Russia | V | IBRAGIMOV, I. |
| 112 | 2 | Russia |  | LAVRENTIEV, M. |
| 113 | 1 | Russia |  | OSIPOV, Y. |
| 114 | 1 | Russia |  | ZIZCENKO, A. |
| 115 | 2 | Saudi Arabia | I | AL-SALMAN, S.A. |
| 116 | 1 | Saudi Arabia |  | AL-THUKAIR, F. |
| 117 | 1 | Singapore | I | TAN, E.C. |
| 118 | 1 | Slovakia | II | BRUNOVSKY, P. |
| 119 | 1 | Slovakia |  | JENDROL, S. |
| 120 | 1 | Slovenia | I | LEGISA, P. |
| 121 | 2 | Slovenia |  | PETEK, P. |
| 122 | 1 | South Africa | II | BECKER, R. I. |
| 123 | 1 | South Africa |  | VAN DER WALT, A.P.J. |
| 124 | 1 | Spain |  | ALSINA, C. |
| 125 | 1 | Spain | III | AROCA, J. M. |
| 126 | 1 | Spain |  | MARGALEF-ROIG, J. |
| 127 | 1 | Sweden |  | HEDBERG, L.I. |
| 128 | 1 | Sweden | III | SJOEGREN, P. |
| 129 | 1 | Sweden |  | THOMEE, V. |
| 130 | 1 | Switzerland |  | CARNAL, H. |
| 131 | 1 | Switzerland | III | CHATTERJI, S.D. |
| 132 | 1 | Switzerland |  | SIGRIST, F. |


| 133 | 1 | UK |  | BALL, J.M. |
| :--- | :--- | :--- | :---: | :--- |
| 134 | 1 | UK |  | HITCHIN, N.J. |
| 135 | 1 | UK | V | LANCE, E.C. |
| 136 | 1 | UK |  | RINGROSE, J.R. |
| 137 | 1 | UK |  | WRIGHT, J.D.M. |
| 138 | 1 | USA |  | DOUGLAS, R. |
| 139 | 1 | USA |  | GRAHAM, R. |
| 140 | 2 | USA |  | KREIDER, D.L. |
| 141 | 1 | USA |  | POLLAK, H.O. |
| 142 | 1 | USA |  | RICHARDS, D. |
| 143 | 1 | USA | I | OCTAV, C.L. |
| 144 | 1 | Venezuela | I | NGUYEN, D.T. |
| 145 | 1 | Vietnam | II | KADFLBURG, Z. |
| 146 | 1 | Yougoslavia |  | PERIC, V. |
| 147 | 1 | Yougoslavia |  |  |

## Code:

| 1 | Delegates |
| :--- | :--- |
| 2 | Alternate Delegates |
| 3 | Observers |

