EUROPEAN MATHEMATICAL SOCIETY

Report on the Meeting of the Executive Committee
Hamburg June 30-July 2, 1995

Eva Bayer Fluckiger, Jean-Pierre Bourguignon, Alberto Conte, Isabel Labouriau, Aatos Lahtinen, Peter Michor, Andrzej Pelczar, V.A. Solonnikov and David Wallace were present. László Márki was excused.

Rainer Ansorge (for GAMM, the German Applied Mathematical Society, at the opening of the meeting), Mireille Chaleyat-Maurel (Public Relations Officer), John Coates (Chairperson of the Committee for a European Bibliographical Database), Jens Erik Fenstad (for the European Science Fondation), Adrien Jami (Chairperson of the Committee on Applications of Mathematics), Ina Kersten (President of the German Mathematical Society (DMV)), Stewart Robertson (Chairperson of the Publications Committee), Berndt Wegner (for the FachInformationsZentrum Karlsruhe), Tuulikki Mäkelainen (Secretary of the European Mathematical Society) were invited.

SCIENTIFIC ACTIVITIES

European Congress of Mathematics

ECM2 July 22-26, 1996 Budapest (Hungary)

The first announcement has come out in June. It is also available by anonymous ftp both from the Mathematical Institute of the Hungarian Academy of Sciences (circle.math-inst.hu:/pub/ecm2), and on the server EMIS of EMS (http://www.emis.de). It is possible to register by e-mail (ecm2jbms@math-inst.hu)

The theme of the Congress is “The Unity of Mathematics”. The scientific programme is progressing well, with the list of main speakers nearly finished.

Diderot Mathematical Forum

This series covers fundamental mathematics, applications of mathematics and their relationship to society. The conferences will take place simultaneously in three European cities connected by telecommunication. An audience of 100-200 participants is planned in each town. The general scheme includes a plenary session, several parallel sessions, round tables and one lecture for a wider public, with multimedia support.

For the year 1996, there are plans for two conferences, each lasting for two days. “Mathematics and Finance” will be organized by P. Embrechts (Zürich) with the following towns and respective local organizers : London (M. Davis), Moscow (A. Shiryaev), Zürich (H. Bühlmann). J.L. Lions (Paris) has initiated contacts for a conference on “Mathematics and Space” in the three towns : Amsterdam, Münich, Toulouse.

Some topics which could be considered for 1997 are : “Mathematics and climate”, “Mathematics and Risk”, “Mathematics and Health”, “Mathematics and Art”...

EMS Lectures

Thanks to the very efficient work of E. Bayer Fluckiger, the first EMS lectures in Besançon (France) on June 12-15, 1995, were a great success, with about 90 participants. Professor H.W. Lenstra Jr gave four lectures which were videotaped. There were seven other speakers, both established mathematicians and young people. A survey paper should be prepared by the lecturer and submitted to JEMS. Bids for the 1997 lectures are requested in this issue of the Newsletter.

Towards a European Bibliographical Database

Important points raised by the EMS Committee for a European database are the following :

Definition of the structure of the database.

Server presentation of abstracts and résumés of articles to be published in major printed journals should be considered.

Collaboration and coordination with other bodies.

The EMS Committee for a European Bibliographical Database could act as an international advisory board for Zentralblatt. It could also act as an advisory board for the operation consisting in bringing the Jahrbuch der Mathematik to a database (in collaboration with AMS).

Revision of the Mathematical Science Classification Index for the year 2000 should be kept in mind. The goals of EMS in regard to the database will be defined.

RELATIONS WITH MATHEMATICAL INSTITUTIONS

International Mathematical Union (IMU)

The President had discussions with the President of IMU, David Mumford. EMS can have observer status. Joint activities of EMS and IMU are expected, mainly on WMY 2000.

African Mathematical Union (AMU)

J.-P. Bourguignon is invited to give a lecture at the Congress of AMU in Ifrane (Morocco) in September 1995. He will be asked to represent the EMS at the opening ceremony and at other occasions during the Congress. Information gathered at this meeting will be useful for the activities of the EMS Committee for Developing Countries.

European Science Foundation (ESF)

ESF consists of National Research Organizations and Academies. It has a general Assembly, Executive Committee and Special Committees. There are five standing Committee with scientists as members and three levels of programmes : Euroconferences (financed by Brussels), Networks (Financed by ESF) and Scientific Programmes (financed by members countries).

EMS has three series of Euroconferences running; a new series on number theory and arithmetic geometry was proposed to the ESF.

ESF acts as an advisory board to the EU, particularly in the following areas :

- Scholarly publishing
- Reflection on large facilities (EMIS and *Zentralblatt für Mathematik* Database could be one of these)
- Cooperative programmes with third world countries.

The President had fruitful discussions with the General Secretary of ESF, Dr Fricker. ESF wishes to cooperate with EMS to enhance the role and visibility of mathematics within the European Union (EU), and stressed the need to represent both pure and applied mathematics. The first Summer School of EMS, in Hungary, could be supported by ESF.

An ESF-ESTA (European Science and Technology Assembly)-EMS joint Committee is formed to write a draft on how mathematics can be more present in the Programmes of the Commission. K.H. Hoffmann and J.P. Bourguignon were appointed to represent the EMS in this Committee.

A team composed, to start with, of J. Ball, J.P. Bourguignon, K.H. Hoffmann and L. Lemaire is to develop the EMS own draft. Some persons from the Committee of Applications of Mathematics should join the team.

European Union (EU)

The President has been in regular contact on various issues with Jack Metthey, a member of Ms Cresson's staff (she is the commissionner of DG XII).

The Committee for the European Union is renamed "Committee on Relations with European Institutions".

INFORMATION SERVICES

European Mathematical Information Service (EMIS)

The EMS server (EMIS) is functioning at http://www.emis.de. It provides at present or will do in the near future :

An Electronic Library (ELibEMS)

The EMS Server collects electronically accessible mathematical journals and proceedings. The electronic versions of a printed journal can be problematic and a solution ought to be sought for the future. To improve the coverage of journals, charges could be considered; a sum to be paid with the membership fee was proposed.

The possibility of publishing abstracts or back volumes of printed journals could be considered.

The editorial board for ELibEMS could consist, to begin with, of the Committee for Electronic Publishing.

Information

Information on EMS, mathematical societies in Europe and the main part of the Newsletter.

Mathematical activities

Joint ventures with other societies or the possibility of mirroring information from other agencies should be explored.

Openings and positions

This service also depends on other sources for the data ; nevertheless, this point is considered to be important for EMS.

Links should be established between member societies' servers as well as to IMU server. In order to respect data protection, written consent of individual members is needed to have their data on the server.

Which agencies are to be allowed to mirror EMIS and at what fee is to be decided later.

Newsletter

The material in the Newsletter will be arranged in a format suitable for the server. A new cover design is under consideration. Information about conferences could be deleted from the printed Newsletter and inserted in the server. This should save money. After their hard and good work over almost five years, the Southampton team asks to be replaced. A new team should be constituted very soon in order to take over in the spring of 1996.

APPLICATIONS OF MATHEMATICS

The meeting in Hamburg included a special meeting with the Committee on Applications of Mathematics.

The second Euroconference on Applications of Mathematics is about Mathematical Methods in Turbulence Models (1996). Planning for the third one will start soon.

Cooperation with other societies in applied fields, like ECOMATH and ECMI, has been fostered and will continue. The Bernoulli Society should be contacted for possible future cooperation.

In order to increase the interest of pure mathematicians in applied areas, it is suggested to include short survey papers in the Newsletter and to have a round table in Budapest.

The question of the subject classification was raised. Applied fields should be reclassified according to the mathematics involved rather than by the field of application. Needed is a group of experts in applied areas, working with some editors of Zentralblatt to develop a scheme, but this may be too ambitious.

It was decided to increase the presence of applied fields in EMS activities (summer schools, Diderot Mathematical Forum, EMC, EMS Lectures, database, server, brochure,...)

WORLD MATHEMATICAL YEAR 2000 (WMY 2000)

Issues 1 and 2 of the Newsletter WMY 2000 are now on the server EMIS. The third issue is in preparation.

One of the activities which is already beginning is the preparation of postage stamps with portraits of mathematicians. After France, Italy has started a project for a joint European or possibly world series of stamps. Suggested names for mathematicians to be represented on stamps are : Lagrange, Riemann, Hilbert.

The long history of Science in Europe could be a European topic for WMY 2000. J.P. Pier (Luxembourg) leads a group working on the history of mathematics in the period 1950-2000.

It is suggested to apply to UNESCO for support of a programme, that could be called "Memory of Mathematicians". It would consist of a database of mathematicians, whose contribution has been important, with biographical data and information on where to find relevant documents.

The EMS Committee for Education could develop a draft for mathematical training in Europe by the year 2000.

The EMS Committee appointed for WMY 2000 is composed as follows : Mireille Chaleyat-Maurel (France), Alberto Conte (Italy), Stephen Gelbart (Israel), Vagn Lundsgaard Hansen (Denmark), Michael

Hazewinkel (Netherlands), Osmo Pekonen (Finland), Jose Francisco Rodrigues (Portugal). The chairperson will be appointed at the Besançon meeting.

VISIBILITY

Server

The address of the server should be announced in the Newsletter, on Internet, in Newsletters of member societies, on servers of member societies and offered for publication to AMS Notices.

Brochure

The contents of a brochure, describing the activities of EMS is in preparation.

With the brochure, national societies could distribute a separate leaflet giving further information on EMS, maybe a translation of the brochure and instructions on how to join EMS in their respective countries.

The list of member societies should not be in the brochure but on the server.

Recommendations

Member societies should be urged to mention their membership of EMS in their letterheads, their publications, and wherever else appropriate.

A good example

The Executive Committee of the Italian Mathematical Society (UMI), in order to increase the number of Italian members of EMS, has decided to offer a volume of the "Opere dei Grandi Matematici Italiani" to all members of UMI who also join the EMS.

MISCELLANEOUS

Relationship with member societies

EMS Vice-President D. Wallace will be in charge of strengthening the relationship between EMS and member societies. As a first task, he will ask member societies to publicize ECM2.

Relationship with Science Museums

The renovated mathematics section of the French Science Museum "Cité des Sciences et de l'Industrie / La Villette" (Paris) was inaugurated by the President. It received wide publicity in France (radio, press).