The EMS and its Newsletter

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1. The European Mathematical Society

The European Mathematical Society (EMS) has as its main objective the development of all aspects of mathematics in European countries. In particular, the society aims to promote research in mathematics and its applications, with particular attention to issues of mathematics education and the relationship between mathematics and society. Ultimately, the EMS has the goal of establishing a sense of identity among European mathematicians.

Created by and for the European mathematical community, the EMS is an effective intermediary between mathematicians and those responsible for policies and European Union funds.

The EMS was founded in 1990 in Madralin near Warsaw (Poland). Discussions to form the EMS began in Helsinki in 1978 during the International Congress of Mathematicians. Debates were held at the European Council of Mathematics at the instigation of Sir Michael Atiyah.

This year (2010) the EMS celebrates its 20^{th} anniversary. A special celebration has been prepared, which will be held in Sofia, Bulgaria, on 12 July 2010. There will be a presentation of the most important moments in the life of the society by David Salinger (Publicity Officer between 2001 and 2005) and Vasile Berinde (Publicity Officer between 2006 and 2010) and photos in the EMS album will be shown. The celebration will include brief speeches by former presidents, vice-presidents and members of previous executive committees of the EMS.

The EMS is a society of societies. Most of its members are societies of mathematicians from different European countries. Today the membership of the EMS comprises about 50 mathematical societies in Europe, about 20 academic institutions, three institutional members and about 2,000 individual members who have joined through their national societies. The full list of EMS members appears at http://www.euro-math-soc.eu/member-societies.html.

The highest decision-making body is the EMS Council. The EMS Council has delegates from all national societies affiliated to the EMS and also has delegates representing individual members of the society. Therefore a meeting of the council could include a hundred people from across Europe. Obviously it is not practical to have council meetings very often and indeed the council only meets every two years. Between council meetings, the Executive Committee (EC) represents the company and carries out the mandates of the council. The EC consists of 10 members, including the president, two vice-presidents, the secretary and the treasurer. It meets at least twice a year and, by necessity, works most of the time through email (many votes are carried out electronically). It is also responsible for appointing subcommittees to address specific aspects of the work of the society. The Publicity Officer and the Editor-in-Chief of the Newsletter of the EMS are also invited to the meetings of the EC.

The EMS is responsible for organizing the ECM (European Congress of Mathematics), which is held every four years and is where the EMS prizes are awarded. These prizes (with a 6,000 euro cash award) were established with the purpose of recognizing outstanding contributions in mathematics carried out by young researchers of not more than 32 years of age.

The EMS Prizes Committee is appointed by the EMS. It consists of 15 internationally recognized mathematicians covering a wide variety of fields. The first prizes were awarded in Paris in 1992. Subsequently, they were awarded during the ECMs at Budapest 1996, Barcelona 2000, Stockholm 2004 and Amsterdam 2008.

The Felix Klein Prize was established by the EMS and the Institute for Industrial Mathematics in Kaiserslautern. It is given to a young scientist or a small group of young scientists (normally under 38 years old) for using sophisticated methods that lead to the solution of a concrete and difficult industrial problem, a solution that completely satisfies the industrial sector. The Felix Klein Prize is awarded every four years at the ECM and is allocated 5,000 euros.

The next European Congress of Mathematics, which will be the sixth, will be held in Krakow, Poland, 2-7 July 2012. A new prize will be introduced in this ECM: the EMS Otto Neugebauer Prize in the history of mathematics (sponsored by Springer).

The EMS is also involved in the formation of the Abel Prize Committee. The Abel Prize is awarded annually by the National Academy of Sciences and Letters from Norway with an endowment of about 700,000 euros.

2. Website of the EMS

The EMS has a new website at http://www.euro-math-soc.eu that contains all the information relating to the society. Everyone is encouraged to take a look at the page. It contains information on:

- News from the EMS, such as the next European Congress of Mathematics, the next meeting of the EMS Council, etc.
- Announcements of conferences that will take place in a European institution. The website of the EMS has a form through which users can send conference announcements for publication in this section.
- Job opportunities for European mathematicians.
- Information regarding the EMS awards and the various committees and subcommittees.
- A list of national societies attached to the EMS and their contact details.
- An interface for individual membership registration of the EMS and payment of the registration fee by credit card.
- It is planned to add the listings of recently published books, including small reviews, in the style of the book review section that has appeared in the Newsletter of the EMS.

In the past, members of national societies who wished to belong to the EMS had to inform their society, who then subscribed them at the end of the year. Recently, the EMS has installed a module on its website that allows any user to register with the company directly at any time. Annual dues are:

• Members of any national society: 23 euros.

- Members of societies with reciprocal (American Math. Soc., Australian Math. Soc. and Canadian Math. Soc.): 34 euros.
- Other members: 46 euros.
- Researchers with no more than two years after completion of their thesis: introductory fee of 11 euros.

As shown, the fee is quite economical. In return, besides collaborating with the purposes of the EMS, each member receives four printed issues of the newsletter each year.

3. The Newsletter of the European Mathematical Society

The idea of the EMS participating in editorial activities is probably as old as the society itself. The most notable result has been the creation of the Journal of the EMS (now published by Springer-Verlag on behalf of the EMS) in 1999. Almost simultaneously came the first serious plans for commercially operating publishing. The birth of this was announced by the then president of the EMS Rolf Jeltsch at the closing ceremony of the ECM in Barcelona in July 2000.

To operate as a publishing company, the European Mathematical Society has created a company called the European Mathematical Foundation (EMF). Although the EMF is legally a separate structure from the EMS, the statutes of the foundation ensure the decisive influence of the EMS. Additionally, the editorial boards of journals and book collections of the EMF are composed of mathematicians approved by the EMS. Legally, the EMF is the governing body of the EMS Publishing House, which is the publisher of the EMS.

The EMS Publishing House is a non-profit organization dedicated to the publication of journals and high quality books at all academic levels and in all fields of pure and applied mathematics. A growing proportion of the mathematical community are not satisfied with the publishing industry. The policy prices of some commercial publishers are often discussed and there is a widespread feeling that financial considerations are the first priority, while editorial and scientific issues come in second. One of the goals of the publisher of the EMS is to reverse that order of priority. Prices of publications are set as low as possible. The profits from the sale of publications are used to maintain the editorial on a sound financial basis and any excess funds are spent on achieving the aims of the EMF, as stated in its statutes.

The EMS Publishing House publishes 11 scientific journals and 10 book series, apart from the EMS Newsletter and the Oberwolfach Reports. The website is at http://www.ems-ph.org/.

The Newsletter of the EMS, which is published in English, is intended to distribute information relevant to European mathematicians in general and for members of the EMS in particular. It is similar to the Notices of the AMS. Its philosophy is to include articles on relevant research topics in both pure mathematics and in the interaction of mathematics with other areas of knowledge, which combines the information with entertaining content for researchers in mathematics.

The first issue of the Newsletter of the EMS came out in September 1991. Four issues are published annually. Currently the newsletter is published in March, June, September and December. The latest issue released was 75. The newsletter webpage lists all the issues published since 1999. They

can be downloaded for free from http://www.ems-ph.org/journals/all_issues.php? Issn = 1027-488X.

The Editorial Board is composed of the following members:

- Editor-in-Chief: Vicente Muñoz.
- Associate Editors: Vasile Berinde, Krzysztof Ciesielski, Robin Wilson, Martin Raussen.
- Copy Editor: Chris Nunn.
- Editors: Chris Budd (Applied Math./Appl. of Math.), Jorge Buescu (Book reviews), Mariolina Bartolini Bussi (Math. Education), Dmitry Feichtner-Kozlov (Personal Column), Eva Miranda, Madalina Pacurar (Book reviews), Frédéric Paugam, Ulf Persson, Themistocles M. Rassias (Problem Corner), Erhard Scholz (History of Mathematics), Olaf Teschke (Zentralblatt Column).

The usual sections of the EMS Newsletter are:

- Editorial. The editorial aims to maintain recent and updated information on topics relevant to the society.
- News. One of the main objectives of the publication is the dissemination of information of interest to the European mathematical community. This includes news from the EMS (such as summaries of what was discussed at meetings of the Executive Committee or EMS Council meetings, announcements of congresses sponsored by the EMS or the Council Meetings, and important information from subcommittees of the EMS) and other news, such as conferences with a European emphasis, raising public awareness of mathematics, news on mathematics olympiads, etc.
- Feature. These are articles of survey type, explaining some breakthrough results or recent developments in a particular area. Research papers on pure mathematics and applied mathematics (such as mathematics and industry, and music and maths) are published. Most of the time these articles are written by a researcher at the request of the Editorial Board (we are very grateful for the cooperation of most of the people to whom we approach to ask for one of these 'jobs'). On other occasions, they are reprints or translations of articles previously published elsewhere (generally from national society newsletters). Obituaries of important mathematicians recently deceased also appear under this heading. Finally, we also receive items sent by an author to an editor to be considered for publication in the newsletter.
- History. Articles on mathematics with history. These are very similar to Feature articles and they are devoted to historical mathematical issues. The editor in charge of this section is Erhard Scholz.
- Interviews. Another jewel of the newsletter is the interviews on topics of interest to European readers, e.g. an interview with a mathematician who has received a major award (every year we publish an interview with the winners of the Abel Prize, which is regularly reprinted by the AMS) or an interview on a particular topic or with a mathematician who has had a long career.
- Research centres. Martin Raussen is responsible for maintaining this column, which regularly presents one of the ERCOM research centres or a research centre of excellence.
- Education. Mariolina Bartolini Bussi is responsible for the sections on mathematics education. She maintains the columns on the

ICMI (International Commission on Mathematical Instruction) and the ERME (European Society for Research in Mathematics Education).

- Book reviews. The book review section includes detailed reviews (one or two pages long) of two or three books, produced by an expert reviewer on the subject of the book in question. In general, these book reviews are of great interest as they include comments on the contents of the book, the strengths and weaknesses of the book, the historical context of the item and many other details. The editors in charge of this section are Jorge Buescu and Madalina Pacurar. In this section, we may have the analysis of two books on one subject or reviews of other commercial products, such as mathematical software and movies.
- Personal column. Dmitry Kozlov Feichtner-Kozlov is in charge of this section (appearing twice a year), which includes the awards to mathematicians (for European mathematicians in the broadest sense of the term or for prizes awarded in Europe) and a list of recently deceased European mathematicians. Any reader can send information to the editor to be taken into consideration for possible inclusion.
- Problem corner. Themistocles Rassias is responsible for the section of mathematical problems. This is a section of ludic flavour, where problems are proposed and solutions are given later. This section is published twice a year.
- Letters to the editor. This section is open to readers who want to send their complaints, comments or feedback to the newsletter for distribution to other readers. Of course, only letters to the editor that are of interest to the European mathematical community (in the opinion of the Editorial Board) are published. These letters contain the opinions of the sender and are not underwritten by the Editorial Board of the Newsletter or the EMS.

We are very proud of the large number of requests we have received asking for reprints of articles published in our newsletter.

4. And a request to the reader

In 2004, I was asked to be part of the Editorial Board of the Newsletter. I was in charge of the Book Reviews Section, a task that was relatively simple and very enjoyable. In July 2008, I became Editor-in-Chief of the Newsletter, a position that was held until then by Martin Raussen. Since then, I have already been in charge of preparing seven issues of the newsletter. It is an exciting but also an exhausting task. I must confess that the most rewarding moment is when I receive the new issue of the newsletter and I browse it in my hands.

The reason for this article is to do a little publicity for both the EMS and its newsletter. Olga Gil, former president of the RSME (Real Sociedad Matemática Española/Spanish Royal Mathematical Society), was a member of the EC of the EMS from 2005 to 2008. With her I had the chance to talk about the task of making more Spanish mathematicians aware of the importance of an organization like the EMS. Clearly something similar can be said about mathematicians from other European countries. In the first EC meetings that I attended, I could see the scope of work performed (with quite modest means) by the EMS. What surprised me most pleasantly was the efficiency of the EC.

I want to use these lines to make two requests to researchers across Europe. On the one hand to ask for your support for the European Mathematical Society by registering as individual members of the EMS. Many of us are members of our national mathematical society and the AMS, but not so many are members of the EMS. The EMS has slightly over 2,000 individual members, a number very similar to the number of members of a medium size national society of a European country, like the Spanish Math. Soc. (RSME). In contrast, the AMS has more than 32,000 members.

Let me mention a few reasons that will encourage membership of the EMS:

- The EMS focuses on European mathematicians. Its annual budget is around 100,000 euros, of which about 2/3 goes to the publishing and distribution of the EMS Newsletter. Much of the activity generated by the EMS is with little financial support.
- The strength of an institution is also given by the number of its members. It is obvious that increasing the number of members is an essential step for the EMS.
- EMS members receive four issues of the newsletter every year. The newsletter is freely downloadable through the website but for 23 euros a year the printed edition of the magazine is good value for money.

On the other hand, I remind everyone that their participation in the newsletter by sending articles, information, participating as a reviewer, etc., will be always very welcome and is much needed.

I hope that you will enjoy reading the EMS Newsletter.

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