

Report from the EMS Council in Bled (25–26 June 2022)

Richard Elwes

The EMS Council is the governing body which meets every two years to take the decisions that will determine the society's future. After a condensed online meeting in 2020, the Council was able to hold an in-person meeting with a full agenda on the weekend of 25–26 June 2022, in the stunning surroundings of Bled (Slovenia). The meeting was generously and efficiently hosted by the University of Primorska, represented by rector Klavdija Kutnar. On Saturday evening, the meeting was addressed by Boštjan Kuzman from the Society of Mathematicians, Physicists and Astronomers of Slovenia (DMFA) who introduced the assembled company to Josip Plemelj (1873–1967) who grew up in Bled and went on to make important contributions to the theory of harmonic functions and related fields, as well as becoming the first chancellor of the University of Ljubljana. His beautiful villa in Bled is now managed by the DMFA and available to visit and as a venue for small meetings.

Officers' reports and finance

The Council was opened on Saturday morning by EMS Vice President Betül Tanbay with the unfortunate news that the President, Volker Mehrmann, had that morning tested positive for COVID and, despite being on site, would need to participate over Zoom. The President then presented his report, recalling several of the major developments during his tenure, which ends this year. Many of the items in his report were revisited later during the meeting. He reminded the Council that the EMS website¹ and database have been rebranded and rebuilt, with much of the expertise and leadership provided by EMS Press, while the *EMS Newsletter* has been transformed into the *EMS Magazine*. The EMS's 30th anniversary was celebrated (two years late) at a very enjoyable event in March 2022 at ICMS in Edinburgh. A celebratory brochure was distributed to mark the event (and is available online²).

¹ <https://euromathsoc.org/>

² *Thirty Years of EMS*, available at <https://euromathsoc.org/about>



Lake Bled (by Arne Mueseler / arne-mueseler.com / CC-BY-SA-3.0)

The EMS has joined the European Open Science Cloud (EOSC) in order to raise the voice of mathematics in the developments and, if possible, to join major research proposals.

Following the success of the Caucasian Mathematical Conferences (the third of which took place in 2019 in Rostov-on-Don), the Executive Committee has decided to launch a series of Balkan Mathematical Conferences. The first will take place in July 2023 in Pitești jointly with the Congress of Romanian Mathematicians.

The President noted that funding for mathematics by the EU, particularly the European Research Council (ERC), has substantially reduced in recent years. A major reason for this is that the number of applications from the mathematics community is low. This is a major problem, and so far EMS initiatives aimed at improving this situation have not had a big impact, but it will be important to continue addressing this problem.

The Treasurer (Mats Gyllenberg) delivered his report next, stating that the EMS is in robust financial health. This, of course, is good news, but part of the reason for this is the pandemic, which has reduced opportunities to spend money on scientific activities. The Executive Committee is committed to spending money on scientific activities, a major part of the EMS's *raison d'être*. This is reflected in proposals for a new "EMS Young Academy" and "EMS Topical Activity Groups" (more details below). Recalling that for financial purposes the society is governed by Finnish law, the Council approved financial statements for 2020 & 2021, as well as the budgets for 2023 & 2024, and the appointment of both professional and lay auditors.

Membership and publicity

EMS Secretary Jiří Rákosník reported on the EMS membership, with individual members having recently exceeded 3,000. The Council regretfully approved the termination of the membership of the Mathematical Society of the Republic of Moldova, which has fallen behind on its membership fees and has been non-responsive to communications. Sadly, the Emmy Noether Research Institute for Mathematics has terminated its membership with effect from January 2023. On the positive side, the Mathematical Society of South Eastern Europe (MASSEE) has joined the EMS as an associate member, and the Council was pleased to agree an arrangement of reciprocal membership with the Indonesian Mathematical Society. There were no other applications for corporate membership.

EMS Publicity Officer Richard Elwes was absent, but delivered his report via video, updating the delegates on his activities, in particular the growth of the EMS social media platforms: the Twitter account @EuroMathSoc has recently passed 10,000 followers, the Facebook account (also @EuroMathSoc) is approaching 5,000, and a LinkedIn page has recently been launched. An EMS YouTube page was set-up in 2020 initially to host the EMS video "The Era of Mathematics" (created with the support of the EMS Education

Committee). He offered the view that the EMS should aim to increase the use of its YouTube page in future. He also discussed other avenues of publicity including displaying new designs for EMS flyers and posters.

Elections to Executive Committee

The most exciting part of any Council meeting is the election of new officers. In previous years the election of the President has often been unopposed, but this time the Council was delighted to have three top quality candidates for the next EMS Presidency. After impressive presentations from all three, the Council was pleased to elect Jan Philip Solovej as President for the term 2023–26. Two unopposed elections followed: Beatrice Pelloni as Vice President, and Samuli Siltanen as Treasurer. This left one election for member-at-large of the Executive Committee: after strong presentations by four candidates, Victoria Gould was elected.

Changes to statutes and bylaws

The Council approved changes to the EMS's statutes and bylaws, several purely technical (for example to correct outdated or inconsistent terminology), but some substantive. Two changes will apply to future Council meetings. Firstly, the Executive Committee will be able to decide to enable delegates to participate virtually, and secondly a Nomination Committee will be set up to short-list candidates for future EMS elections. (As now, candidates will still be able to be proposed from the floor at the Council meeting.)

Most significantly, the Council approved the establishment of two major new initiatives: an EMS Young Academy for early career mathematicians, and EMS Topical Activity Groups. More details of these exciting developments will follow in future editions of the Magazine.

European Congress of Mathematics and other meetings

Following the great success (despite equally great setbacks) of the 8th European Congress of Mathematics in Portorož in 2021, Juan González-Meneses, chair of the Organizing Committee, reported on plans for the 9th ECM in Seville (15–19 July 2024). Preparations are going well, with support from all the Spanish mathematical societies. The organisers will provide 150 grants for young people and people from less advantaged countries, and satellite events are expected all over Spain.

In a significant increase in the EMS's offering, the Executive Committee has decided to open calls for proposals of large cross-institutional events. These might include special semesters, interdisciplinary study groups, or large showcase events targeting

new theories or emerging problems. They might involve the interaction of more than one mathematical area, or the discussion between mathematics and other disciplines.

The goal will be for these events to be spread across Europe, complementing existing infrastructure for mathematical meetings. However, they will not provide funding for programmes and workshops organised in settings which are already well served. Instead, proposals will be required to deploy significant funding to support regions and communities that do not otherwise have the infrastructure or finances to organise such large-scale events.

Reports from EMS committees

The Council received reports regarding each of the EMS's ten standing committees, which carry out a great deal of the society's work. This began with the Education Committee, where Vice President Betül Tanbay relayed the regrettable news that the chair, Jürg Kramer, has recently resigned, and that the Executive Committee is searching for a replacement. She discussed the committee's many and varied activities, on both the theoretical and practical sides of mathematical education. These include the EU-funded INNOMATH project³ to develop resources for gifted mathematics school-students, supporting the creation of the EMS video "The Era of Mathematics" in 2020 (available on the EMS YouTube channel), and undertaking a major survey and pedagogical research on the secondary-tertiary transition.

³ <https://innomath.eu/>

EMS Secretary Jiří Rákosník conveyed to the meeting that the Meetings Committee has also undertaken a huge amount of work in the last two years evaluating more than 60 applications for EMS support for summer schools and other scientific events. Since this committee will become even busier in the future with the start of the Topical Activity Groups, the committee will be increased in size. He also reminded the Council that the deadline for applications has been moved from September to July to give the Meetings Committee more time for its deliberations.

Carola Schönlieb, chair of the Committee for Applications and Interdisciplinary Relations (formerly the Committee for Applied Mathematics), reported that the committee has been substantially renewed, both in its name, with nine new members in 2022, and a revised programme and mode of operation. It is a busy committee which has formed several individual working groups, including on prize nominations and relations with other bodies such as the European Research Council. The committee collaborates with other EMS organs, most notably the Meetings Committee.

Sophie Dabo reported via Zoom on the Committee for Developing Countries, which she chairs. The committee has 11 members and 17 associate members and cooperates with local organisations in developing countries towards several goals. These include developing mathematical curricula and MSc and PhD programmes, funding researchers to attend and organise conferences, helping to build libraries. The committee administers the designation *Emerging Regional Centre of Excellence (ERCE)* which is awarded to suitable institutions for a period of four years (renewable). Currently there are 7 ERCE centres. Since 2017, the committee has administered the *Simons for Africa* programme funded by the Simons Foundation, which supports researchers in Africa. To date



Council delegates and guests (photo courtesy of University of Primorska)

more than 210 applications have been evaluated with almost 58 % success. An important source of funding for the committee's work is donations from EMS members through a link on the EMS website.

Adam Skalski, the chair of the ERCOM (European Research Centres on Mathematics) committee, delivered a report. This committee brings together the scientific directors of 30 mathematical research centres around Europe to work on issues of common interest. He discussed the committee's activities and invited the Council to view their website ercom.org.

Betül Tanbay (EMS Vice President) reported that the Ethics Committee is continuing to function. Its activities include maintaining the EMS Code of Practice⁴, encouraging journals and publishers to respond to allegations of unethical behaviour in a conscientious manner, and providing a mechanism whereby individual researchers can ask the committee to help them pursue claims of unethical behaviour. The committee has also recently set up a webpage in cooperation with the Committee for Publications and Electronic Dissemination on predatory journals and publishers.⁵

Frédéric Hélein (Executive Committee) reported on the work of the European Solidarity Committee, which supports research-related activities for researchers from financially weaker countries (for example travel grants to young mathematicians). However, throughout the COVID pandemic, there has been little demand for this type of activity. The committee also handled the Kovalevskaja grants for the participation of young mathematicians at the ICM. Unfortunately, this large amount of work was in vain, once the ICM moved online. With many members' terms due to expire this year, this committee will need to be replenished.

Thierry Bouche, chair of the Committee for Publishing and Electronic Dissemination, reminded the Council that this committee has existed since April 2017, replacing the former Publications Committee and Committee for Electronic Publishing. The committee has carefully studied the evolving open access landscape and written strategy documents in response to the initiative *Plan S*, arguing for the importance of a diversity of models beyond "Gold" Open Access which is often favoured by aggressively commercial publishers. The committee also supervises the work of the European Digital Mathematics Library (see below), while a subgroup is working to evaluate the functioning of zbMATH Open from the perspective of a user. Committee member Tomaž Pisanski delivered a presentation on the problem of ranking and classifying mathematical journals, noting some discrepancy between Scimago and zbMATH Open.

Jorge Buescu (EMS Vice President) informed the meeting about the many activities of the Committee for Raising Public Awareness, including its involvement in the International Day of Mathematics⁶, its on- and off-line outreach activities, and notably the POP MATH

portal⁷, an online calendar and map of popular mathematics events across Europe.

Alessandra Celletti, chair of the Committee for Women in Mathematics, reported on its work. The committee has proposed interviews of women mathematicians for the *EMS Magazine*, facilitated nominations for international prizes and EMS Lectures, and supported applications for summer schools at the Institut Mittag-Leffler jointly with the society of European Women in Mathematics. The chair and committee member Stanisława Kanas published the article "Underrepresentation of women in editorial boards of scientific and EMS journals" in the *EMS Newsletter*⁸ as part of their work on this topic. The committee monitors the gender gap in the editorial boards of EMS publications and helps to address such imbalances. On the 20th of May 2022, the committee organised the successful first *EMS Women in Mathematics Day*, within the broader initiative of "May 12th", a celebration of women in mathematics in memory of Maryam Mirzakhani.

Publications and projects

Fernando Pestana da Costa, editor-in-chief of the *EMS Magazine* since September 2020, reported on many recent improvements, with the name, format, and design having changed from issue 119 in March 2021. The EMS Press has constructed a new webpage⁹ where articles can be read and downloaded either individually or as an entire issue. The EMS will appreciate the support of national societies in continuing to promote the *EMS Magazine* and acquire good contributions.

André Gaul, the managing director of the EMS Press, reported remotely. In 2019, a new company fully owned by EMS was established in Berlin, focused on independent, fair, and sustainable publishing using modern electronic tools. A completely new platform was built, and the Subscribe to Open (S2O) business model has been rolled out. EMS Press publishes 25 journals, with the new *Memoirs of the EMS* (first volume published in May 2022) catering for longer works than typical research articles. Book production amounts to approximately 12 titles per year. Unified EMS and EMS Press branding has been developed, and the EMS Press also provides significant technology to the EMS (e.g. website, document cloud, unified login system, submission forms, etc.).

Editor-in-chief Klaus Hulek of zbMATH Open delivered his report on what is now the world's biggest dedicated database on mathematical literature, with around 4.4 million documents and more than 39,000 software packages. It is published by FIZ Karlsruhe, the EMS, and Heidelberg Academy of Sciences and Humanities. He

⁷ <https://www.popmath.eu/>

⁸ A. Celletti and S. Kanas, Underrepresentation of women in editorial boards of scientific and EMS journals, *EMS Newsl.* **118**, 60–63 (2020)

⁹ <https://euromathsoc.org/magazine>

⁴ <https://euromathsoc.org/code-of-practice>

⁵ <https://euromathsoc.org/predatory-publishing>

⁶ <https://www.idm314.org/>

described the enormous preparations that were needed for the 2021 transition to open access, when *Zentralblatt MATH* became *zbMATH Open*, with financial support from the German government. The goal is to grow beyond an open access interface, to a fuller open data platform. Recently added features include enhanced author profiles, including non-ASCII scripts (e.g. Arabic, Chinese, Japanese, Cyrillic, ...). The first year of open access shows very good results with around 60,000 unique visitors per month, and increased numbers of searches, completed documents, and reviewer commitments. Reviewers are rewarded for their efforts with reductions on EMS publications.

Thierry Bouche, chair of the European Digital Mathematical Library¹⁰, delivered a report. The EuDML is a distributed library taking contents from several sources, and was created in a project partly financed by the European Commission in 2010–2013. Its service continues despite the lack of funding since then, and runs in a reduced capacity thanks to voluntary work from motivated partners.

A report was delivered by Zoltán Horváth, the president of the very active and successful project EU-MATHS-IN (European Service Network of Mathematics for Industry and Innovations). This was established by EMS and ECMI (European Consortium for Mathematics in Industry) in 2011, intended as a one-stop-shop at the European level, to facilitate exchanges between application-driven mathematical research and its use in innovations in industry, science, and society. He reported on plans for new tools and requested that the EMS help promote this network's important activities.

Russian war in Ukraine

On both days of the meeting, there was impassioned discussion of topics around the Russian invasion of Ukraine, and the measures the EMS has taken in response. The EMS President re-affirmed that the society stands in full solidarity with the people of Ukraine and especially our Ukrainian colleagues, but at the same time must continue to strive for the unity of the international mathematical community. He described the measures that have been taken so far, including the suspension of the EMS membership of the Euler Institute and the decision not to cooperate with Russian governmental organisations. Further possible steps were discussed, but as well as being politically sensitive, there are also many significant technical and legal complications here, considering the EMS's own regulations and its obligations under Finnish law.

The meeting closed with warm thanks to our Slovenian colleagues for once again hosting a major EMS event, following the ECM in 2021 in Portorož, with great accomplishment and kindness.

Richard Elwes is the EMS publicity officer and a senior teaching fellow at University of Leeds (UK). As well as teaching and researching mathematics, he is involved in mathematical outreach and is the author of five popular mathematics books.

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¹⁰ <https://eudml.org/>