

EDINBURGH MATHEMATICAL SOCIETY

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President's Newsletter: October 2015

As I step down from the Presidency of the Society, it is once again my pleasure to recall some of the highlights of the last year for you all. Let me begin by thanking the Society for the opportunity to serve it as President, and to say how much I have enjoyed the role and the opportunities to represent the Society which it has afforded me.

Over the last year there has been quite a bit of "behind the scenes" work going on.

David Pritchard, outgoing Convenor of the Education Committee, has been expanding the Society's profile on the educational front. The Society, together with the Scottish Mathematical Council (SMC), is now represented on the Royal Society of Edinburgh's Learned Societies Group. This group keeps a watchful eye on Scottish policy developments across the STEM subjects, and engages in regular communication with various wings of the Scottish Government. It is welcome that mathematics is now properly represented on this body. An example of its work is a paper on "Vision for Science and Mathematics Education" which is available on the Society's website. David has also been spearheading our interaction with the SQA in order that the Scottish academic mathematics community might reach a level of communication with SQA which will secure longer-term confidence in the fitness-for-purpose of the SQA's Mathematics qualifications, as well as helping ensure that incidents such as this past summer's "crocodile" debacle become a thing of the past. Apart from all this David has overseen a bumper crop of high-quality applications to the Education Fund, and it is gratifying to see the Society supporting so many mathematics-based events in secondary and primary schools the length and breadth of Scotland. David has worked tirelessly for the Society over the last four years and I personally am deeply indebted to him. We welcome Niall Dodds as his replacement and wish him well in the role.

Michael Grinfeld, outgoing Convenor of the Publications Committee, has likewise been a solid and reliable source of support to me over the years. The Proceedings has faced some difficult issues, not least its ongoing backlog which is partly due to a continuingly healthy submission rate. I'm happy to report that Michael has engineered a solution – increasing the rate of publication to four volumes per year from three – that will simultaneously protect the Society's position, ensure increased visibility of the Proceedings, and make a good start on dealing with the backlog. The Society's contract with CUP is up for renewal next year and a group (currently consisting of Jozsef Farkas, Michael Grinfeld, Richard Steiner, Ian Strachan, Stephen Theriault and Martin Youngson) has been formed to take responsibility for the negotiations. I would like to thank Michael for all his hard work on behalf of the Society over the last three years, and we welcome Stephen Theriault as his replacement and wish him well in the role.

There has been a view expressed in various quarters that the heads of Scottish departments of mathematics might usefully organise together, and with the EMS, on matters of mutual interest within the Scottish higher educational framework. I am therefore glad to report that a meeting was held in June to which the heads of departments of the main universities in Scotland with

significant research activity were invited, and at which I represented the EMS. Iain Gordon, Head of the School of Mathematics at the University of Edinburgh, emerged as the convenor of this group and will be facilitating its future work. In particular there are issues around the impact agenda and the continuation of SMSTC which are of current common interest and towards which its initial efforts might be directed.

The Society has been continuing to endeavour to engage with the SFC in the light of the matters upon which I reported in the last issue of this newsletter. After a long struggle to set up a meeting, a group consisting of Kenny Brown, Dugald Duncan, Iain Gordon and myself met with Alice Brown (Chair), Laurence Howells (Chief Executive – and a maths graduate) and Paul Hagan (Director of Research) early in September. It was agreed that the EMS and the leadership of the Scottish Heads of Departments of Mathematics should meet with the SFC leadership on a six-monthly basis. However it was disappointing to find that some of the issues we had previously raised with Stuart Fancey appeared not to have made it to the attention of the SFC leadership. Our hopes for a review of the REGa multipliers were cruelly quashed, but there was a welcome suggestion that SFC would be keen to explore the possibility of a UK-wide framework for future REGa multipliers (albeit with the possibility of regional variations).

The Society continues to participate in the Council for Mathematical Sciences (CMS) based in London which has offered its support for our campaign on the REGa multipliers. Although it is primarily concerned with issues south of the border – HEFC and BIS as well as relations with EPSRC -- it has agreed to have a standing item on its agenda for RUK issues. Watch this space!

Now let me turn to some of the Society's more "visible" activities.

Many members will have noticed that we now have a website at www.ems.ac.uk with a look fit for the 21st century. If you haven't visited it recently, please do so. It is now a very much more pleasant experience than that of old. Many thanks to PhD student Andrius Stikonas of the University of Edinburgh for helping making this long-held dream a reality!

The Society's 2014–15 lecture programme once again featured a wide variety of excellent, enjoyable and stimulating talks by eminent speakers, including Fields Medallist Martin Hairer with a mesmerising simulation of Brownian motion. Tadashi Tokieda delivered the Society's 6th "Popular Lecture" on Science from a Sheet of Paper which contained something for everyone (from trisecting angles for the purists to materials which expand and contract in different directions when subjected to pressure and are therefore highly suitable for the construction of stents to relieve blood clots). Next year's Popular Lecture will be given by Reidun Twarock – who has made some stunning progress on the mathematics of viruses such as the common cold – on Friday 19th February 2016 – please be sure to make a date in your diaries.

We held a highly successful joint meeting with the Catalan Mathematical Society (SCM) in Barcelona in May. Many thanks to Jozsef Farkas, who was the driving force behind this meeting from the EMS side, and all the other organisers, both practical and mathematical, in Scotland and Catalunya. We intend to return the invitation and host a second joint meeting with the SCM in 2017. The meeting has aroused a lot of interest in Europe and we have now been approached both by the Basque mathematical community and the Portuguese Mathematical Society with a view to exploring possible future activities with them.

On the 10th and 11th of December we are holding a joint meeting with the London Mathematical Society as part of their 150th birthday celebrations. The theme of the meeting is "Big Data" and we look forward to a variety of talks exploring this topical issue from a variety of angles. And we of course congratulate our sister society on her anniversary!

The Research Support Fund continues to be a popular resource for mathematicians in Scotland, and is also attracting record numbers of high-quality applications. For details of how to apply for funding, see the Society's website. We continue to offer support for undergraduate mathematics societies based in Scotland, and we are developing a policy on support for mathematics outreach events.

The Society's annual activity for postgraduate students at The Burn continues to flourish under the direction of Raluca Eftimie and Dumitru Trucu. A new feature this year has been the introduction of a prize for the best student presentation. This was not uncontroversial, with some expressing reservations about making our Scottish mathematical culture overly competitive, but the concept of the prize was overwhelmingly backed by student participants at the Burn meeting.

Many of you will be about to attend – or will have just attended – the EMS/LMS training session on Unconscious Bias on 14th October. As mathematicians we all welcome the richness that people from diverse sectors of society can bring to our profession and are keen to ensure that we don't inadvertently place members of certain sectors at a disadvantage. Many thanks to Natalia Bochkina and Tara Brendle for organising this event from the EMS side.

It has been decided to increase the standard annual rate of subscription to the Society to £24. This is the first rise for many years, and I hope that you will continue to believe that this offers good value for money in the light of the many activities which the Society supports.

As the AGM approaches, I would like to take this opportunity to thank the very many people who have given generously of their time to the Society, on its committees, on the PEMS Board, and as EMS representatives to outside bodies. Thanks in particular are due to the Society's continuing officers, Jozsef Farkas, Richard Steiner and Jon Pridham as well as to David Pontin who continues to convene the RSF committee and Raluca Eftimie who organises the Burn meeting. I would also like to thank the annual report coordinators Richard Steiner and Mark Chaplain, and Frances Reid for her sterling work in the Society Office. Thanks are due to individuals stepping down from various roles: Tibor Antal as Librarian and Jean-Baptiste Gramain, Uli Kraehmer and Gabriel Barrenechea and Jerry Swan as GC university representatives. As I've mentioned above, two of the Society's key representatives, David Pritchard and Michael Grinfeld, are also stepping down from their roles as Convenor of the Education Committee and the Publications Committee respectively. I would like to express my heartfelt thanks to both for all the work they have done for the Society over the years. Finally, I would like to thank my successor Ian Strachan for all the support and advice he has offered me over the last year, and which has convinced me that the Society will be in an excellent pair of hands for the next two years. I wish him good luck and every success in the Presidency and assure him of my continuing support over the upcoming year.

Tony Carbery.