RECENT RAISING PUBLIC AWARENESS ACTIVITIES

The London Mathematical Society (LMS) set up the Mathematics Promotion Unit in 2004 with the aim of raising awareness in the UK of mathematical issues and providing a resource to policy makers, the media and the wider public.

The MPU is based at the LMS and is now part sponsored by the Institute of Mathematics and its Applications (IMA). As well as providing press and media services (both advising the mathematics community on strategy and handling press queries), it has also created a MATHS-PROM Network, which aims to bring together people who have a promotion focus and are working in a wide range of mathematical organisations. This is based around an email list and also quarterly speaker meetings aimed at the promotion community.

The MPU collates statistics on mathematics education in the UK, from qualifications at age 16 to undergraduate and teacher training and also compiles an annual survey on behalf of the Heads of Department of the Mathematical Sciences (HoDoMS) on the Health of Mathematical Sciences Departments in UK Universities.

It has worked with the Royal Society to produce 'Maths Inside' leaflets to accompany science research exhibits at the Summer Exhibition and highlight the mathematics that underlies the research. It is planned to do this every year.

It has also been part of the British Association (BA) Mathematical Sciences Section Committee, which works to put on mathematics based events at the annual BA Festival of Science. Last year, there were sessions on Euler, on a symmetry based analysis of viruses and on mathematics based careers. Next year, the committee hopes to put on even more events, including a play for schoolchildren, a session on mathematics and magic and the contribution of mathematics to British maritime history.

In 2007, the MPU worked with the Engineering and Physical Sciences Research Council on a mathematics awareness raising event for politicians. This was held in the Houses of Parliament and attracted a significant number of MPs and members of the House of Lords.

The LMS and IMA have launched a new triennial award, the Christopher Zeeman Award, to recognise individual mathematicians whose work in the promotion of mathematics has been outstanding.

The LMS runs annual popular lectures designed to be intelligible to a non-specialist audience. There are two lectures and the event travels between London and another location such as Edinburgh, Manchester and Birmingham. It also runs the Holgate lecture scheme which funds lectures locally for 8 – 13 year olds. In addition, the society also has a series of videos and DVDs suitable for school use.

The IMA runs RPA activities including: a school speaker scheme; branch talks; conferences (in particular Mathematics Works and Mathematics 2008); distributing mathscareers posters and postcards; education grants (financially assisting educational activities relating to mathematics).

The International Centre for Mathematical Sciences (ICMS) was created in 1990. It is wholly owned by Edinburgh University and Heriot-Watt University. Its primary aims are to create an environment in which mathematical sciences will develop in new directions and to encourage and exploit those areas of mathematics that are of relevance to other sciences, industry and commerce, internationally and especially in the developing world.

In July 2007, the International Centre for Mathematical Sciences jointly organised the 25th

Journées Arithmétiques conference which brought 150 number theorists to Edinburgh. A public lecture by Andrew Granville on Patterns in the Primes was organised as part of this workshop. This was attended by around 100 people. www.ja2007.org

For 2008 and beyond, ICMS is actively encouraging public engagement within its activities. Workshop organisers are being asked to consider the possibility of reaching a wider audience for their workshop activity through public lectures and Spitalfields Days. (www.lms.ac.uk/meetings/spitalfields.html)

In June 2008, a large ICMS workshop on Geometric Analysis, Elasticity and PDE is being at Heriot-Watt university in Edinburgh with an expected attendance of 150. A public lecture is planned as part of this workshop. Also, in 2008, ICMS is organising "Film^3 Maths At The Movies" as part of the Edinburgh International Science Festival. ^ The aim is to present three rarely seen and very different examples of independent film that bring together the ideas that mathematics is at the core of life, nature and the physical world. Cube, Pi and Flatland the Film are being screened at the Edinburgh Filmhouse in April 2008 with introductions by local mathematicians.

OTHER SIGNIFICANT GROUPS

There are many and can broadly be split between RPA activity and educational enrichment, although this division is not exclusive. All of the groups listed below are part of the MATHS-PROM network.
RPA:
- the Fun Maths Roadshow (part of the Liverpool Mathematical Society)
- the Royal Institution Christmas lectures 2006 by Professor Marcus du Sautoy
- the Science Museum has a mathematics gallery which it is considering renewing
- the Council for the Mathematical Sciences is a policy body aiming to influence governement on higher education and research issues. It is made up of the LMS, the IMA, the Royal Statistical Society, the Edinburgh Mathematical Society and the Operational Research Society
- the Advisory Committee on Mathematics Education is a policy body aiming to influence government on school level issues. It is based in the Royal Society

Education:
- the Royal Institution (has a mathematics programme which puts on masterclasses for school children)
- the Millennium Mathematics Project (based at Cambridge University)
- Maths Inspiration (a project run by freelancer Rob Eastaway)
- the Further Maths Network (aims to increase the availability of teaching in Further Mathematics and is part of Mathematics in Education and Industry)
- the more maths grads project (funded by the Higher Education Council for England)
- mathscareers (careers website created by the CMS – also has an RPA aspect)
- National Centre for Excellence in Teaching Mathematics (high profile government funded initiative to help teachers with their continuing professional development)
- the UK wide Maths Year 2000 had significant impact in RPA terms and continues in the form of a website
- many other individuals running local activities such as Steve Humble's Dr Maths in the north-east and Chris Budd's Bath Taps in Bath

PRIORITY AREAS FOR EMS-RPA COMMITTEE

Networking the various activities going on internationally and raising awareness of them.

INCREASING THE FLOW OF INFORMATION

It is important to keep all interested parties aware of what is going on. A regular (say quarterly) emailed newsletter would be helpful. Also, occassional meetings.

RPA CONTACT

The Mathematic Promotion Officer (currently Caroline Davis) reports to the MPU Steering Group which is chaired by a vice president of the London Mathematical Society (currently Professor Alice Rogers) and has a representative from the IMA. Communication should be channelled through the MPU Officer.

Caroline Davis
Mathematics Promotion Officer
E:caroline.davis@lms.ac.uk
T:020 7927 0804