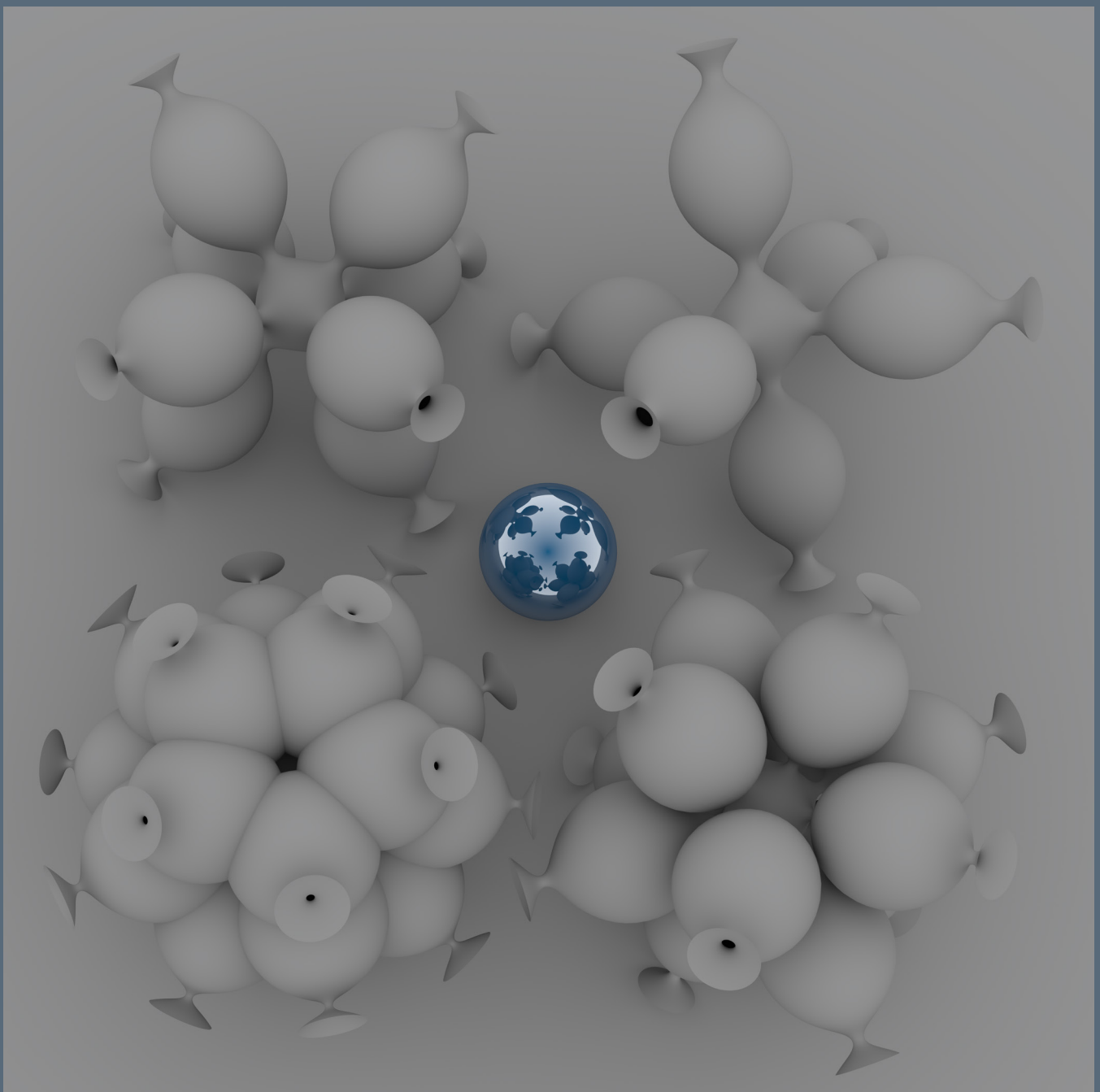




LONDON
MATHEMATICAL
SOCIETY
150 YEARS

London Mathematical Society

Report of the Trustees for the period 1 August 2014 - 31 July 2015



INTRODUCTION

2014-15 has been an incredibly exciting year for the Society and one of the busiest in its history. The Society is celebrating its 150th Anniversary throughout 2015 and, as well as carrying out its extensive range of usual activities, it has launched a series of new, innovative and enhanced events, programmes and projects to commemorate this momentous occasion. A review of the Anniversary activities held up until 31 July 2015 is included in this report. Highlights include: the Anniversary Launch, held exactly 150 years to the day of the Society's first meeting on 16 January 1865, featuring fascinating talks about mathematics and how it applies to everyday life, and which was live-screened to schools and colleges around the country; the Anniversary Dinner, at which philanthropist Dr James Simons spoke powerfully about the benefits of investing in mathematics; the Artist Associate Scheme which brings together art and science and explores the visualisation of mathematical concepts in pieces that will engage with a wide audience; the expanded Popular Lectures series including a talk from 2014 Fields Medallist Martin Hairer; and the expanded 4-day Women in Mathematics event *It All Adds Up 2015* attended by over 600 women from school age students through to academics. Many more activities are planned through to the end of 2015 and the Society intends to ensure that all of the activities create a strong legacy for the Society to build on to help support the future health and vitality of the discipline beyond the Anniversary year.

The long-term sustainability of the mathematics people pipeline continues to be a priority for the Society

and the first awards were made in 2014-15 under two new schemes launched to address this, the 150th Anniversary Postdoctoral Mobility Grants and the Teacher CPD Grants (Continuing Professional Development) for mathematics teachers. The first Undergraduate Summer School was also held, attracting a competitive field of over 50 undergraduate attendees.

The Society maintains its important position as a small grants funder for mathematicians on a variety of schemes impacting widely across the UK and beyond, offering support for conference organisation and attendance, research in pairs and visits, mentoring partnerships and training.

As a publishing house the Society maintains its solid position in the market, achieving strong returns on its journals and books, using all of these resources to fund its charitable activities. This year the Society has conducted a major review of its journals contract and it continues to maintain awareness of issues in the publishing industry and to plan for any potential adverse effects on its publishing income.

Ensuring that the wider public has the opportunity to engage with mathematics and recognise its importance to so many aspects of everyday life is of real importance to the achievement of the Society's aims. The 150th Anniversary has provided a number of opportunities for the Society to engage with people beyond its usual audience and on a much wider scale. The Society hopes to continue to build on this foundation in its future work. By ensuring widespread public recognition of the value placed on research mathematics, the Society

hopes to encourage increased support of the discipline by Government and other national policy makers, to ensure the future health of mathematics. As part of this the Society hosted its first Spring Reception in 2015, attended by people from a number of Government departments, Livery Companies, finance professional bodies and other related industries and mathematics-influenced disciplines to assist the Society in making connections with various different areas that use mathematics and with those who are influential in terms of policy

and funding, in order to further the understanding of the importance of mathematics to society, the economy and many other areas.

This report provides an overview of the full range of activities undertaken by the Society in meeting its charitable objectives during 2014-15. Further information can be found on the Society's website, lms.ac.uk, and further information on the Society's 150th Anniversary activities can be found at lms.ac.uk/2015/150-years-london-mathematical-society.

The London Mathematical Society has, since 1865, been the UK learned society for the dissemination and promotion of mathematical knowledge. Our mission is to advance mathematics through our members and the broader scientific community worldwide.

- 346 new members in 2014-15 including 141 Teacher Training Scholars
- Online direct debit payments launched
- 150th Anniversary membership offer launched

The Membership

Members are the core of the London Mathematical Society. Mathematicians drive the Society and volunteer contributions are vital to the Society in defining its priorities, delivering its activities and achieving its objectives. The Society at present has 27 committees with 246 volunteer committee roles and other individual roles, as well as 33 volunteer roles representing the Society on external committees. A large cross-section of the mathematical community is directly involved in the work of the Society, engaging widely with other organisations across the UK and beyond.

Communications

Communications with members are of key importance in ensuring that the Society keeps abreast of the most interesting and exciting developments in mathematics and the mathematicians associated with this work. The Society acknowledges achievements in mathematics through its prize-giving and in those it invites to become Honorary Members, as well as those who are invited to give talks and lectures. Effective communications ensure that the Society can identify the current prevalent concerns within the community and can work to address these. The network of LMS Representatives in UK mathematics institutions is central to these communications. As of 2014-15 the Society has 60 LMS Representatives and is actively seeking to recruit more to ensure that all UK mathematical departments are directly connected to the Society through a representative. The Society's Newsletter functions

as a central resource for news and events and also solicits articles for the Readers' Opinions page. The regular mid-month LMS e-Update keeps members informed of upcoming events and grant deadlines as well as a list of mathematical meetings and conferences that have received Society grants. The Society hosts a number of 'Blogs' on its website in order to provide opportunities for dialogue with and between its members and the broader mathematical and scientific community on a variety of subjects. Currently operating Blogs are: Members; LMS Departmental Representatives; Open Access; Elections; Infinitesimals; De Morgan Forum.

Recruitment Drive

An active recruitment drive has been undertaken in 2014-15 which has seen a healthy new intake of members. As part of the legacy of its Anniversary year, the Society has introduced a Special Offer so that new members, who are elected in 2015 and who pay their fees by direct debit, will be entitled to a 50% discount on subscription fees for the subscription years 2015-16 and 2016-17.

New members are now able to apply for membership online, with the result that there are now more applications from younger members and from international members, thereby increasing the impact of the Society across the generations and more globally. Members are also now able to pay their subscriptions via an online direct debit scheme, and the Society is continuing to develop the website to improve the membership experience.

Reciprocity agreements

In 2014/15, the Society formed a Reciprocal Agreement with the Singapore Mathematical Society. As a result, full members of both societies

may join the other society at the reciprocal rate. The Society now has reciprocal membership agreements with 20 Societies across the world.

In 2015-16 the Society will.....

- review the Society's Newsletter to ensure it is meeting members' needs
- introduce more online facilities for members

150th ANNIVERSARY CELEBRATIONS

The Society's inaugural meeting was held on 16 January 1865. For its 150th Anniversary year in 2015 the Society has implemented an exciting and varied programme of events and projects to celebrate this momentous occasion.

- 150th Anniversary Launch livestreamed to schools and colleges
- Dr James Simons speaks at the 150th Anniversary Dinner
- 600 attendees at 150th Anniversary Women in Mathematics Day
- 2014 Fields Medallist Martin Hairer gives 150th Anniversary Popular Lecture
- UK Departments toast the Society's 150th Anniversary

For its 150th Anniversary Year, the Society put together an extensive and varied programme of events aimed at the widest promotion of mathematics in the UK, covering Mathematics and Culture, Scientific Meetings, Promoting Mathematics, Special 150th Grants and Prizes and Publications.

The celebration events come under the overarching theme of 'Mathematics: Unlocking Worlds', with a particular focus on:

- 150 Years of the LMS and Mathematics
- Mathematics as Part of our Culture
- New Ways of Communicating Mathematics

The aims of the celebratory year have been to communicate the following key messages to as wide an audience as possible:

- Mathematics transforms people's lives
- Mathematics is everywhere and for everyone
- Mathematics Research: Curiosity, Creativity, Discovery

The celebratory programme has run throughout 2015, and will continue to the end of the Anniversary year. An overview of the events which have so far taken place follows.

Launch of the 150th Anniversary Celebrations

The 150th Anniversary Launch was held on 16 January 2015 at The Goldsmiths' Hall, London, exactly 150 years to the day since the Society's inaugural meeting in 1865. The aim of this event was to introduce the celebratory year

and to recognise and promote 150 years of UK Mathematics along with the historical and continuing value and prevalence of mathematics to society and in day-to-day life - from entertainment to everyday objects. Three hundred people, including many mathematicians, distinguished guests and schools, attended in Goldsmiths' Hall, and the event was live-streamed so that secondary schools and sixth form colleges around the UK could join in remotely or view the recorded talks online after the event. The event aimed to reach the widest possible audience and to illustrate that mathematics is for everyone and that everybody uses it, whether consciously or not. The talks showcased the exciting ways in which mathematics touches so many parts of our daily lives and were given by mathematicians at the cutting-edge of mathematics research, whose successes have contributed to, amongst other things, the invention of the Xbox KINECT motion sensor, and the linking of signals to masts which enables the use of mobile phones, as well as the mathematics in the making of TV classics such as Dr Who and Sherlock and blockbuster films including Harry Potter and the Life of Pi. The event was expertly hosted by Maggie Philbin and the speakers were Professor Andrew Blake, Professor Robert Calderbank, Professor Nigel Hitchen, Professor Frances Kirwan, Robert Pieké, James Reid and Steve Thompson. Further information can be found online: lms.ac.uk/2015/anniversary-launch.

The first half of the Anniversary Year has been a great success and examples of the activities which have taken place so far are outlined below.

Anniversary Dinner with speaker James Simons

On 18 June 2015 the Society held an invitation-only Anniversary Dinner at The Goldsmiths' Hall, London, the same venue at which the Society held its Centenary Dinner in 1965. Dr Jim Simons was the prestigious after-dinner speaker, who with his wife, Marilyn Hawrys Simons, co-founded the Simons Foundation, a charitable organisation that supports projects related to education, health, and scientific research in the US. Dr Simons is the founder and Chair of Math for America, a foundation aimed at improving basic science and mathematics education in cities, and the evening was closed by Professor Sir Michael Atiyah, Fields Medallist and former President of the Society. The Dinner was attended by around 100 eminent figures from the business and academic worlds.

lms.ac.uk/2015/anniversary-dinner

Mathematics and Culture

People in science, technology and finance are more and more aware of the crucial importance of mathematics, but this awareness is not so evident outside these communities. The value of mathematics is not only to be measured in terms of its critical relevance to these areas, though. It has great intrinsic beauty, which is what has inspired people to study it for millennia. Old stereotypes are being challenged, and the subject is increasingly recognised as a part of our culture. During the Anniversary year the Society has organised a number of exciting events and activities to celebrate and promote mathematics

and culture to the widest possible audiences.

Artist Associate Scheme

As part of the Anniversary programme, the Society funded an Artist Associate Scheme to create a project based on mathematics. The winners of this Scheme were a distinguished architect, George Legendre, and renowned artist, Mark Francis, who were sponsored to create artwork based on mathematics. Their pieces were unveiled at the LMS Anniversary Dinner on 18 June, and will subsequently be displayed at other venues to engage with the widest possible audience. Both artists have been working closely with mathematicians to explore the visualisation of mathematical concepts. In this way, their work aims to expand our understanding of mathematics, and change how we perceive fields of research that are often inherently abstract.

lms.ac.uk/2015/mathematics_and_culture

Scientific Meetings and Lectures

An exciting programme of scientific meetings has formed part of the 150th celebrations and has included enhanced activities for LMS sponsored events as well as activities organised specifically to recognise the Anniversary year. Some examples are:

150th Anniversary Celebratory Day at the Joint B(A)MC

The 4-day Joint British Mathematical Colloquium/British Applied Mathematics Colloquium (BMC/BAMC) was held at the University of

Cambridge in April, attracting over 580 attendees. A day of the event was specifically allocated to celebrate the LMS 150th Anniversary. Two highly distinguished mathematicians spoke during the day of celebrations, Professor Robert Calderbank and Professor Sir Andrew Wiles. In addition, a series of LMS-sponsored Scheme 3 Research Groups workshops were held. The day closed with a Society meeting attended by over 200 people, which was live streamed to facilitate wider participation, and followed by a 150th Anniversary Reception, prior to the Colloquium Dinner.

lms.ac.uk/2015/bamc-lms

Scientific Lectures

As part of the celebrations a number of distinguished mathematicians have given lectures at venues throughout the country including:

- the 150th Anniversary *Mary Cartwright Lecture* was given by Professor Maria Esteban, (Université Paris-Dauphine) who spoke at a Society meeting in London on 27 February 2015
- the 150th Anniversary *Hardy Lecturer* was Professor Nalini Joshi (University of Sydney) who spoke at various venues across the country as well as at the Society's General Meeting in London on 3 July 2015
- the 150th Anniversary *Invited Lecturer* was Professor Michael Shapiro (Michigan State University) who gave a course of ten lectures at Durham University from 16 to 20 March 2015
- the British Society for the History

of Mathematics (BSHM) Day was held at De Morgan House and celebrated the life of Augustus De Morgan. The event was curated by Professor Adrian Rice.

lms.ac.uk/events/society-meetings

It All Adds Up: celebrating 150 years of women across the mathematical sciences

In April a 4-day event was held at and co-sponsored by the University of Oxford, expanding on the Society's Annual Women in Mathematics Day. Two days were programmed for school students and two days for university mathematicians and mathematical scientists. School students heard inspiring talks by female mathematicians and attended workshops where they tackled stimulating mathematics themselves. The school students had the opportunity to talk to undergraduates and others about mathematical possibilities beyond school level. For university mathematicians and mathematical scientists there was a mix of lectures by invited speakers, panel discussions, contributed talks by early career researchers, and posters. Participants had plenty of opportunities to meet other mathematicians, including at a conference dinner. Over 600 people attended across the four days. Sponsorship for the event was gratefully received from the University of Oxford Mathematical Institute, the University of Oxford Vice-Chancellor's Diversity Fund, Oxford University Press, Jane Street and Schlumberger.

lms.ac.uk/2015/women-in-maths-oxford

150th Anniversary Regional Meetings

The LMS Regional Organisers have been involved in providing enhanced regional meetings for 2015. The Northern Regional Meeting was held at Lancaster University on 7 April where the meeting incorporated a Wikipedia Editathon. The workshop was on Homotopical Algebra and Geometry. The Midlands Regional Meeting at the University of Warwick on 8 July celebrated the 150th Anniversary through the involvement of international speakers. The topic of the conference was Finite Simple Groups. The South West and South Wales Regional Meeting will be held at Southampton University on 14 December and will include two high profile speakers from the USA. The topic for the workshop is Aspects of Homotopy Theory.

lms.ac.uk/events/society-meetings

LMS-CMI Research Schools during the Anniversary Year

Five Research Schools are being held throughout 2015. The first School was held at Loughborough from 13 to 17 April, followed by one at Sussex in June, at Warwick from 1 to 5 July and at Oxford from 5 to 10 July. The final school will be held in Oxford and Hay-on-Wye from 14 to 20 September.

lms.ac.uk/content/lms-cmi-research-schools

Promoting Mathematics

For the Society, a large part of celebrating the 150th Anniversary has been to utilise the opportunity to become an even more effective

advocate for mathematics and to respond creatively to changes in communications technology. One of the Anniversary themes is specifically to explore and exploit new ways of communicating mathematics. The Anniversary Launch on 16 January 2015 began a year-long programme of events which has aimed to effectively engage and inform the general public about mathematics and to use live-streaming to reach the widest possible audiences. The Society YouTube and Twitter accounts have also been used to good effect, with over 3,500 Twitter followers and 34,000 views on YouTube since the launch of these in the past year. Other events that fall under this heading are as outlined below.

Queen of the Sciences

The inaugural meeting of the Society was held at University College London on Monday, 16 January 1865, with Augustus De Morgan, the Society's first President, giving the opening address. The Society is therefore delighted that throughout 2015 University College London Library has hosted an exhibition celebrating the Society's history: *Queen of the Sciences: A Celebration of Numbers and the London Mathematical Society*. The exhibition catalogue is also available online.

ucl.ac.uk/library/exhibitions/queen-of-the-sciences/queen-sciences-exhib-cat.pdf

Mathematics Departments join in the 150th Anniversary Celebrations

The Society has been keen to involve as many of its members and the wider mathematics community as possible in celebrating such a

momentous occasion. Through the LMS Representatives network the Society has encouraged mathematics departments across the UK to hold LMS 150th Anniversary receptions, either as a standalone activity or as part of another event already being organised, the condition being that a toast should be made to the continued health of the Society and mathematics. 22 of these celebrations have already taken place across the UK, and a further 11 are planned.

lms.ac.uk/2015-events-listing

150th LMS Popular Lectures

For the 150th Anniversary the annual Popular Lectures series has been expanded from the usual two speakers, to four, each giving two talks at different locations around the country. These talks aim to bring mathematics to the general public, encouraging interest and excitement in the field. The speakers for these lectures are Professor Martin Hairer, Professor Ben Green, Dr Hannah Fry, and Dr Ruth King, with lectures taking place in London, Birmingham, Glasgow, and Leeds throughout the year. 450 people attended the first lecture in London on 25 June.

lms.ac.uk/events/popular-lectures

150th Anniversary Prizes

To mark the 150th Anniversary the Society has awarded two special additional prizes in 2015. The Hirst Prize and Lectureship for the History of Mathematics, for contributions to the study of the history of mathematics was awarded to Dr John O'Connor

and Professor Edmund Robertson. A Prize for the Communication of Mathematics, for excellence in communication of mathematical ideas, was awarded to Professor Chris Budd. The Society also elected a larger than usual number of Honorary Members in 2015. Six Honorary Members were elected, all eminent mathematicians, based overseas: Professor Joan Birman (Barnard College, Columbia University), Professor Robert Calderbank (Duke University), Professor Shafi Goldwasser (Massachusetts Institute of Technology and Weizmann Institute of Science), Professor Donald Knuth (Stanford University), Professor Robert Langlands (Princeton University) and Professor Maryam Mirzakhani (Stanford University).

hms.ac.uk/2015/special_grants_and_prizes

150th Anniversary Grants

The Society has put in place a number of special grants in recognition of the 150th Anniversary including the 150th Anniversary Postdoctoral Mobility Grants, the Undergraduate Summer Schools and the Teacher CPS Grants for Mathematics Teachers.

Spring Reception

The Society held its first ever Spring Reception in April 2015, generously hosted by Richard Golding with invaluable organisational support from Trevor Llanwarne, both supporters of the Society. Attendees at the reception were from various Government Departments, Livery Companies, finance professional bodies, consultancy, technology

and accountancy firms as well as academics from a number of different mathematics-influenced disciplines. The aim of the Reception was to help the Society make connections with various different areas that use mathematics and with those who are influential in terms of policy and funding, in order to further the understanding of the vital importance of mathematics to many walks of life. The Reception was attended by 70 guests and received very positive feedback.

Publications

Sir Christopher Zeeman Archive

To mark the occasion of his 90th birthday in the year of the Society's 150th Anniversary, the Zeeman family produced an online archive of Sir Christopher's lifetime work. The Society was delighted to act as host to the archive of one of its Past Presidents which was launched on 19 March 2015 at the University of Oxford. The family invited the general public to send in birthday greetings along with any personal stories and photos from time spent with Sir Christopher. These were collated into a special one-off

celebratory book for his birthday. This was presented as a surprise to Sir Christopher and Lady Rosemary at the launch of the LMS online archive of his work.

lms.ac.uk/2015/zeeman-archive-launch

Proceedings of the London Mathematical Society

As well as being the 150th Anniversary of the Society, 2015 also sees the 150th Anniversary of the Proceedings of the London Mathematical Society including the first paper published and the speech given by Augustus de Morgan at the first Society meeting. The Proceedings has published many famous papers in its 150 years including particular papers by Hardy and Ramanujan, Turing, Marstrand, Atiyah, and Donaldson, to name but a very few, each of them a landmark in their field. During 2015 Oxford University Press has kindly agreed to make several famous papers published by the Society freely available. These are being publicised via Twitter and are available on the website.

lms.ac.uk/2015/publications

Other 150th Anniversary activities in 2015-16

A number of other projects to celebrate the Society's 150th Anniversary are currently in development, and will run through to the end of 2015. These include:

- a Mathematics Festival at the London Science Museum in November

- a 60-minute film, *Thinking Space*, exploring mathematical thinking, which will be divided into a series of short interviews with 9 mathematicians for use in publicising the Society and UK mathematics
- the Launch of the *Who's Where in UK Mathematics Directory*, as a central resource of mathematicians across the UK to facilitate research collaboration across academia and industry
- an Anniversary edition of the Member's Handbook
- a book with author John Heard on the Society's history, from its foundation until just after the First World War
- Local Heroes Exhibitions celebrating local mathematicians, at a series of museums across the UK
- a lecture and reception at the British Science Festival
- London Open House Day
- a Computer Science Colloquium at the Royal Society
- a public lecture and a reception at the Young Researchers in Mathematics Conference
- the Aitken Lectureship, part of the Society's partnership with the New Zealand Mathematical Society
- a joint meeting with the Edinburgh Mathematical Society
- a joint meeting with the European Mathematical Society
- a collection of Mathematical Impact Case Studies for publication on the LMS website
- a joint meeting with the Royal Astronomical Society and the Institute of Physics

Further details on all 150th Anniversary activities can be found at:
lms.ac.uk/content/150-years-london-mathematical-society

SUPPORTING MATHEMATICS RESEARCH

Objective: to advance mathematical knowledge by enabling mathematicians to undertake research and collaboration, and by supporting them in their efforts

- £768,693 awarded in grants to support mathematics
- Further sponsorship of the Mentoring African Research in Mathematics programme secured
- Introduction in core grants of funding available to career break mathematicians and to cover child care costs

The Society's grants schemes are at the centre of the Society's work to advance mathematical knowledge and support mathematicians in their research and collaborations. There are 21 grant schemes in operation, (for a full list see Annex 5) covering various activities ranging from facilitating research conferences, to small grants supporting education, to providing funds to help with childcare and career breaks, to developing international mentoring activities. The Society also supports research by maintaining its Library, with various collections available for researchers' use, and by awarding a number of prizes annually to recognise mathematical research excellence.

Grants

In 2014-15 a total of £768,693 was awarded in grants to support mathematical activities, a 34% increase from the previous year. The Programme Committee is adopting a more stringent approach to approving grant applications – in particular placing increased emphasis on the need for applicants to adhere to the Society's Statement on Women in Mathematics.

The Society continues to award generally smaller grants relative to other funding available elsewhere, and in doing so fulfils a particular role in the mathematical funding landscape. The Society's grants can offer mathematicians the opportunity to organise much-needed smaller-scale conferences, work collaboratively through short visits and enable the development of research partnerships all of which significantly contribute to career development and impact on UK mathematical research at

its roots. To ensure that the wider mathematical community is aware of funding available from the Society there are ongoing efforts to promote grant schemes as widely as possible, including through the LMS Representatives network and through advertisements in the Society's Newsletter, and there has been a marked increase this year in the number of applications for the core grants (Schemes 1-5 and 8, details of which can be found in Annex 5) – particularly for conferences, joint research groups in the UK and research in pairs. As was the case in 2013-14, there is a continued rise in the number of applications for international short visits. The increase in applications demonstrates the real need for this funding within the community.

Through its core grant schemes the Society has supported many mathematicians and their research. In 2014-15: 50 grants were made to organisers of conferences in the UK under Conference Grants (Scheme 1); 16 mathematicians were funded to support visitors to the UK under Scheme 2; Schemes 3 and 4 enabled 42 Joint Research Groups and Research Pairs to engage in collaborative research activities within the UK and more widely; 6 grants were awarded to support collaborative visits between the UK and Africa (Scheme 5); and 9 Postgraduate Research Conferences were supported through Scheme 8 at which 375 postgraduate students attended.

The grant-making committees actively keep under review all grant schemes to ensure that these best meet the requirements of the mathematical community. Two new

grant schemes, established last year to help meet identified needs, made their first awards this year: to help improve postdoctoral mobility (150th Anniversary Postdoctoral Mobility Grants); and to support continuing professional development for mathematics teachers (Teacher CPD grants).

The Society has been developing an online grants application system with the intention of creating a streamlined, web-based process for applying for grant schemes and submitting grants reports. Development of the system is steadily progressing, and is scheduled to undergo the first online tests later this year.

As well as supporting UK-based mathematics, the Society also supports mathematical activities on an international level. In 2014-15, a total of £22,336 was awarded in grants to support mathematics in Africa and Russia, under the Society's Scheme supporting conferences in Africa organised by the African Mathematics Millennium Science Initiative (AMMSI) and the Young British and Russian Mathematicians (YBRM) Scheme. 9 grants were awarded to organisers of conferences across Africa. 3 mathematicians were funded to support visits to the UK from Russian mathematicians. The YBRM grant scheme is due to conclude at the end of 2015.

The current partnerships under the Mentoring African Research in Mathematics (MARM) programme continued this year. MARM operates in collaboration with the African Mathematics Millennium Science Initiative (AMMSI), using LMS

funding combined with funding from the International Mathematical Union Commission for Developing Countries (IMU CDC). The programme aims to slow the academic 'brain-drain' in Africa, in which talented mathematicians often move abroad due to lack of opportunity at home, thus eroding the mathematics people pipeline within the continent. This is the fourth round of the programme and the current partnerships mean 17 awards have now been made in Cameroon, Congo, Ethiopia, Ghana, Ivory Coast, Kenya, Morocco, Nigeria, Rwanda, South Africa, Tanzania and Uganda. From a relatively low-level investment the outcomes of MARM have been substantial, having an effect on the next generation of African mathematicians, improving and enhancing academic curricula, supervising PhD study and leveraging further funding into African institutions, amongst many other achievements. The programme was showcased at the Mentoring Emerging Nations: Achievements and Opportunities (MENA O) Symposium held in alignment with the International Congress of Mathematicians in August 2014. Matched funding has been secured from the IMU CDC to continue the MARM programme for a fifth round.

Prizes

The Society awarded a full portfolio of LMS Prizes this year, including the IMA-LMS David Crighton Medal, in recognition of the exceptional contributions being made to the mathematical community. The Councils of the LMS and IMA have agreed to move the Christopher Zeeman and David Crighton Medals to

biennial cycles in future. The Society was pleased to be able to award the first Anne Bennett Prize this year, to Dr Apala Majumdar. The Society was delighted to also award the inaugural Shephard Prize, to Professor Keith Ball. This Prize was added to the Society's Prizes portfolio following a very generous donation from Professor Geoffrey Shephard. Two special prizes were also awarded for the 150th Anniversary – a Communications Prize to Professor Chris Budd and the Hirst Prize and Lectureship for the History of Mathematics to Dr John O'Connor and Professor Edmund Robertson.

Library

The Society's Library is housed at University College London (UCL) to ensure accessibility to a wide audience. The Library Committee meets regularly with representatives from the Science Library at UCL to review selected international journals under the Society's Journal Exchange Scheme, and to review the services offered by UCL Library to members of the Society. This year three Library Placement Students were recruited as part of ongoing digitisation work for the Society's archives and resources, working particularly on electronically transcribing the Minute Books from 1866 to 1894 and the correspondence contained in the Hirst Letters, both of which are in preparation for digitisation. Further work has also taken place on the development and promotion of the Philippa Fawcett Collection. The Society received a donation to its Library of 15 volumes of Yoshinara, as well as a donation to its Archive of artefacts from the family of Henry Perigal (Society Member 1868-1897), related to his

work on dissection-based proof. At the De Morgan Day, part of the 150th Anniversary celebrations, the Society received De Morgan's 'Book of Logarithms' as a donation to its Library.

Computer Science

This year's Computer Science Colloquium, on the theme of *Computational Mathematical Modelling for Improved Understanding of Biological Systems*, attracted 50 attendees and involved high-profile speakers from across the UK. Feedback from the event indicates it was a real success and the Society looks forward to hosting similar events in support of the Computer Science-Mathematics interface in future years. Since 2005, the Society has, in addition, funded the costs of an overseas speaker at the British Colloquium for Theoretical Computer Science (BCTCS). In 2014 the LMS-sponsored Keynote Speaker was Professor Jeffrey Shallit (University of Waterloo) at the event held at the University of Loughborough. In collaboration with the Smith Institute, the LMS Computer Science Committee has looked to commission further Knowledge Transfer Papers. The LMS-KTN Knowledge Transfer Reports are an initiative coordinated jointly by the Industrial Mathematics Knowledge Transfer Network (IM-KTN) and the Society. The reports are being produced as an occasional series, each one addressing an area where mathematics and computing have come together to provide significant new capability that is on the cusp of mainstream industrial uptake. They are written by senior researchers in each chosen area, for a mixed audience in business and government. The reports are designed to influence

managers and decision-makers by raising awareness of new tools and techniques, in a format that allows them to assess rapidly the potential for impact and exploitation in their own

fields, alongside information about potential collaborators and suppliers. It is anticipated that further papers will be published in 2015-16.

In 2015-16 the Society will.....

- continue the development and testing of an online system for grant applications and reports
- implement the additional funding for mathematicians who are on a career break to attend LMS sponsored mathematical conferences; furthermore additional funding will be made available to mathematicians who have childcare costs to attend conferences
- actively promote and further the participation of women speakers at LMS sponsored events and conferences
- offer travel grants to support UK mathematicians attending the 7th European Congress of Mathematics (7ECM) in Berlin in July 2016

REPRESENTING AND PROMOTING MATHEMATICS

Objective: to promote widely mathematical sciences research and its broad benefits to decision makers, policy advisers, funders and users of mathematics

- 4 responses issued to Government and national agencies' consultations
- Mathematics represented at House of Commons SET for Britain poster competition for the second time
- First Spring Reception held to open up communications with key Government and industry figures

Through its external and public relations the Society aims to ensure that the centrality of mathematics to so many aspects of society is represented to Government, other national policy-makers and influential organisations and individuals in order to inform debate and improve decision-making. The Society undertakes significant collaborative work advocating for mathematics both individually and through the Council for Mathematical Sciences (CMS).

Public affairs

The Society has undertaken extensive public affairs work over the past year in promoting mathematics to decision-makers and policy advisers within what has been a challenging political and economic climate. It has responded to various consultations by the Department for Education, Ofqual and Research Councils UK, and inquiries from the House of Commons and House of Lords Science and Technology Select Committees, in doing so ensuring the mathematical community's views are heard with a view to influencing policy decisions.

The LMS Research Policy Committee has continued to seek robust evidence to inform its policy contributions. A *Who's Where in UK Mathematics Directory* is under development, with publication intended for later in 2015. The Committee has closely examined the outcomes of the Research Excellence Framework and is considering how best to represent the mathematical community in preparation for the next REF.

For the second year the mathematical sciences, through the Council for

Mathematical Sciences (CMS), were represented in the prestigious SET for Britain poster competition at the House of Commons, which brings together young researchers across all SET (Science, Engineering and Technology) disciplines with Members of Parliament. This year the gold medal for the mathematical sciences (again sponsored by the Clay Mathematics Institute), and £3,000 prize winner, was Dr Peter Buchak (Imperial College London) for his poster titled, *Lighting the Path: the mathematics of imaginary numbers in very real problems of holey optical fibre fabrication*. Dr Lorna Ayton (University of Cambridge) won the Silver award and £2,000 for her research on *Reducing the sound generated by aeroengines*, and Dr Miho Janvier (Dundee University) won Bronze and £1,000 for her research on *Statistical studies of solar storm geometry for better space weather predictions*. Participating in the competition has meant that the importance and intrinsic value of mathematics to all areas of life was and will continue to be demonstrated directly to Members of Parliament. Andrew Miller MP, then Chairman of the Parliamentary and Scientific Committee, said, "This annual competition is an important date in the parliamentary calendar because it gives MPs an opportunity to speak to a wide range of the country's best young researchers".

Over the last year the Society has worked with the Department for Education (DfE) on matters regarding the Reformed GCSE, AS and A-level qualifications and the teaching of mathematics in schools. A total of four LMS consultation responses have been issued (this in addition to statements

issued by the Council for Mathematical Sciences noted below). The Education Secretary of the Society has attended meetings of the A Level Content Advisory Board (ALCAB), which was established under the Russell Group to advise the DfE on curriculum content.

Within the mathematics research community the LMS President has represented the Society widely at various events, ensuring national and international recognition for the Society and for UK mathematics as a whole and ensuring the Society's and UK's input into international discussions. Meetings attended include the International Mathematical Union General Assembly and International Congress of Mathematicians in Korea, a meeting of the Presidents of European Mathematical Societies held in Innsbruck and meetings with the Government Minister for Universities, Science and Cities and the Chief Executive of the Engineering and Physical Sciences Research Council (EPSRC). The President also represented the Society at Parliamentary and Scientific Committee meetings and a Parliamentary Links Day.

Council for Mathematical Sciences

The Society is a founding member of the Council for the Mathematical Sciences (CMS) which aims, through its member bodies, to draw together the mathematical community to speak with one voice on national issues of mutual concern. The CMS provides a forum for the consideration of matters of joint interest; it responds and makes representations to Government and others on appropriate issues. The CMS represents mathematics to government, in particular to the

Department of Business, Innovation and Skills (BIS). It meets regularly with EPSRC and the Higher Education Funding Council for England (HEFCE). The CMS is also now a member of the Parliamentary Collaboration Steering Group for STEM (Science, Technology, Engineering and Mathematics) learned societies.

The Society, as part of CMS, took part in Voice of the Future in March 2015 and Parliamentary Links Day in June 2015.

The Society has played an active contributory role in the formulation of CMS responses to various consultations and calls for evidence, which over the last year have included the *Nurse Review of the Research Councils – Call for Evidence* and the *Dowling Review of Business-University Research Collaborations*. The CMS again put forward nominations for the EPSRC Strategic Advisory Network (SAN), two of whom were selected, and the Strategic Advisory Team (SAT), two of whom were also selected in April 2015.

CMS' work has continued to ensure that the importance of mathematics is now increasingly recognised at Government level.

Collaborative working

The Society works actively and collaboratively through its membership of and funding for a number of mathematics and science organisations to ensure the interests of mathematics are represented in national policy and public debates and to ensure the Society is kept informed of external policy issues. Membership includes the UK Parliamentary and Scientific Committee, Science Council, British

Science Association, Joint Mathematical Council, Campaign for Science and Engineering (CaSE), and the Foundation for Science and Technology. The Society also works in association with the UK Heads of Departments of Mathematical Sciences (HoDoMs), and the LMS Vice-President Ken Brown and the Chair of the Good Practice Scheme, Professor Peter Clarkson, both led sessions at the HoDoMs conference in April 2015. The Society is also represented on the Parliamentary Affairs Committee run by the Society of Biology in association with the Royal Society of Chemistry, the Institute of Physics and other STEM learned bodies.

The Society provides funding for the Isaac Newton Institute (INI) and the International Centre for Mathematical Sciences (ICMS) as major organisations supporting mathematical research in the UK, as well as for the Advisory Committee on Mathematics Education (ACME).

The Society and the IMA have continued their collaborations throughout the year, including the award of the David Crighton Medal, won in 2015 by Professor Frank Kelly. Joint press statements have been issued by the two Societies over the past year on A-level results and the Christopher Zeeman Medal.

Development Activities

The Society has introduced a series of formal dinners to assist in developing a community of external influential supporters from a wide range of backgrounds, who it is hoped will support the Society in building the healthy future development of the mathematical sciences. These

dinners included the successful 150th Anniversary Dinner at Goldsmiths Hall. The Society also hosted its first Spring Reception in 2015, making connections with various Government departments, Livery Companies and different sections of the financial and other industries, further details of which can be found in the 150th Anniversary section of this report.

International Congress of Mathematicians 2014

The 2014 International Congress of Mathematicians (ICM) was held in Seoul, South Korea. The Congress is held every four years and attracts eminent mathematicians from around the world. The Society was strongly represented at the event, several LMS Officers attended including the President, General Secretary and Programme Secretary, along with other Society representatives. The delegation gave presentations and attended talks and seminars. The Congress was also an excellent networking opportunity for sharing experiences with colleagues from other mathematical organisations and institutions around the world.

The Society attended the Congress exhibition where it displayed promotional material as well as a range of journals and publications. Delegates were also able to join the Society. The Society was also involved in publicising the Fields Medal winner announcement, which was particularly important this year for UK mathematics as Professor Martin Hairer (University of Warwick) received the first Fields Medal for a UK-based mathematician since 1998. The Fields Medal winners also included the first ever female recipient, Professor Maryam Mirzakhani (Stanford

University).

The Society was also able to showcase the MARM programme at the Mentoring Emerging Nations: Achievements and Opportunities

(MENAO) Symposium held during the Congress. The Society was able to demonstrate this important international scheme to the 300 attendees at the event.

In 2015-16 the Society will.....

- publish the *Who's Where in UK Mathematicians Directory*
- continue to commission the gathering, analysing and reporting of evidence with respect to UK mathematics.
- continue to bring to the attention of decision-makers and policy advisers national data on mathematics and the UK mathematics landscape
- continue to represent mathematics research and education to Westminster, Whitehall and other national funding bodies and ensure that mathematics is explicitly considered during discussions regarding STEM subject areas

DISSEMINATING MATHEMATICS

Objective: to disseminate mathematical knowledge and make it available worldwide.

- Introduction of Author Guide for LMS journals
- Review of journals contract continues
- 795 people attended 10 Society meetings

Through its publications and meetings the Society aims to disseminate high-quality mathematical research and thinking worldwide. The Society currently publishes 13 peer-reviewed journals, 7 of which are in collaboration with other learned societies and institutions, as well as 2 book series and individual book titles. The Society also hosts regular meetings and lecture series involving some of the most renowned UK and international mathematicians.

The Society's publications serve a dual purpose, in not only disseminating mathematical research but in providing the Society with an income which it utilises in furtherance of its other charitable activities.

Publications

Publications Committee continues to implement a three year plan based on the Publications Strategy adopted by Council in 2012. A key aspect of this is the protection of publishing income, whilst allowing the flexibility to explore new opportunities in publishing.

During the last year the Society has continued a major review of its journals contracts with a view to streamlining the processes for the majority of its journals from January 2017.

In May 2015 Publications Committee approved a new Guide for Authors for the core LMS journals.

Society meetings

Society meetings enable both members of the mathematical community and the wider public to meet, hear about

and discuss current mathematical thinking and developments. In 2014-15 Society meetings were held in Lancaster, Plymouth and Warwick as well as London.

The Society also held a meeting at the International Congress of Mathematicians in Seoul at which Jean-Pierre Bourguignon (LMS Honorary Member) gave a talk titled *The Life of a Mathematician may have several sides*. A reception was also held at which the Charge d'Affaires of the UK Embassy in South Korea, Andrew Dalgleish, congratulated the Fields Medal winners, in particular Professor Martin Hairer (the ninth UK-based Fields Medal winner) and spoke of the international impact of mathematics.

The Mary Cartwright Lecture was given by Maria Esteban at the Society Meeting held in February 2015. A Society Meeting was also held at the joint British Mathematical Colloquium and British Applied Mathematical Colloquium (BMC-BAMC) in Cambridge as part of the Society's 150th Anniversary Celebratory Day, which included lectures by Sir Andrew Wiles and Robert Calderbank.

In 2014-15, the Society hosted two meetings that focused on the History of Mathematics. The first was a meeting that looked at Mathematics and the First World War, held in September 2014 to mark the centenary of the outbreak of the War. The day comprised a series of talks on the impact of mathematics during the War and the impact of the War on mathematics. The second was a joint meeting with the British Society for the History of Mathematics to mark the LMS 150th Anniversary. This 'De

Morgan Day' was held in De Morgan House and was dedicated to the Society's first President, Augustus De Morgan. Over 60 people attended and the event included six talks, a rendition of the Astronomer's Drinking Song and an exhibition on Augustus De Morgan curated by Professor Adrian Rice.

Lecture series

The Society's funding for visiting international lecturers helps enable UK-based mathematicians to engage in dialogue with current mathematical thinking from across the world.

International lecturers included the 2015 LMS Invited Lecturer, Professor Michael Shapiro (Michigan State University), who gave the Invited Lectures Series at Durham on Cluster algebras and integrable systems. The 150th Anniversary Special LMS Hardy Lecturer, Professor Nalini Joshi (University of Sydney) visited the UK in June and July 2015 to give lectures at Bath, Glasgow, Imperial College, Kent, Lancaster, Leeds, Loughborough and Oxford before giving the 150th Anniversary Hardy Lecture at the General Society Meeting in London on Symmetry through Geometry.

A Graduate Student Meeting was held prior to the General Society Meeting and 150th Anniversary Hardy Lecture in July. Over 40 graduate students attended, of which 12 gave short presentations on their own research.

All of the Society's meetings and lectures are open to members and non-members alike and are free to attend. In 2014-2015, 795 people have attended the meetings, and were able to hear about important current developments in mathematics research.

Spitalfields Days

Spitalfields Days are one-day events of Survey Lectures for a general mathematical audience, which are attached to either long-term meetings or symposia on specialist topics. The events are named Spitalfields Days in honour of the Spitalfields Mathematical Society, a precursor of the London Mathematical Society, which flourished from 1717 to 1845.

A Spitalfields Day on *Mathematics of Quantum Uncertainty: New Advances and Prospects* was held in 2014-15.

In 2015-16 the Society will.....

- increase focus on journal development and further improve communications with editors, editorial boards and the LMS publishing partners
- continue to seek new opportunities for publishing high-quality mathematical research
- hold a Joint Mathematical Weekend with the European Mathematical Society (EMS) as part of the LMS 150th Anniversary and the EMS 25th Anniversary celebrations
- hold a Society Meeting, jointly with the Institute of Physics and the Royal Astronomical Society, on “Einstein’s Legacy” to mark the centenary of the Theory of General Relativity
- host a joint Society Meeting with the Edinburgh Mathematical Society on the subject of Big Data
- host a Society Meeting and a “Meet the Editors” panel session at the European Congress of Mathematics in Berlin
- facilitate at least two LMS-EP SRC Durham Symposia

SUSTAINING THE MATHEMATICAL COMMUNITY

Objective: to promote equality of opportunity and a culture of fairness across all career stages, ensuring the long-term sustainability of the mathematical research community

- First 150th Anniversary Postdoctoral Mobility Grants visits undertaken
- First Undergraduate Summer School held
- Travel Grants for Young Researchers to the Heidelberg Laureate Forum scheme launched
- School students and undergraduates attended Women in Mathematics Day for the first time
- LMS-CMI Research Schools attended by over 190 early career researchers and postgraduates

The Society has recognised increasing concern among the community regarding career progression across academia generally and within mathematics specifically. Decreasing statutory funding leading to fewer opportunities for graduates and postgraduates has caused concern about the sustainability of the 'mathematics people pipeline'. Ensuring that talented mathematicians are enabled to progress securely through the various career stages is of profound importance – and not only to academia but to wider industry and the economy more generally. This objective focuses the Society's work in this area, particularly with respect to the transitions between the early career stages (undergraduate to postgraduate and postgraduate to postdoctoral) and to women in mathematics and the wider diversity agenda.

Early career progression

The Society operates a number of schemes to help support the early career progress of mathematicians for undergraduates, postgraduates and postdoctoral researchers.

Undergraduate Summer Schools

The Undergraduate Summer Schools aim to introduce exceptional non-final year undergraduates to modern mathematics and, in particular, to make them think seriously about a future academic career. The inaugural School, in Loughborough, attracted a very competitive field of nominees from across many UK institutions. 53 students attended the School which included a combination of short lecture courses with problem solving sessions and colloquium style talks.

Mathematical experts from the UK and overseas conducted sessions which carried on into the evening.

LMS-CMI/Heilbronn Research Schools

Following the success of the Society's pilot scheme running Research Schools for UK and overseas postgraduate students and early career researchers, the Scheme was extended to support 5 more Research Schools in 2015 and to seek proposals for Research Schools in 2016. The Scheme operates in partnership with the Clay Mathematics Institute (CMI) with additional support from the Heilbronn Institute. In 2014-15, 3 LMS/CMI/Heilbronn Research Schools took place at the University of Loughborough (*Statistical Properties of Dynamical Systems*), the University of Warwick (*Regularity and Analytic Methods in Combinatorics*) and the University of Oxford (*Developments in Modern Probability*), attracting over 190 participants. 2 further Research Schools will take place in September 2015 at the University of Oxford (*Computational Algebraic Topology*) and at Baskerville Hall, Hay-on-Wye (*Diophantine Equations*). As such, in 2015, over 260 students and early career researchers will have accessed this training, assisting their academic and career progression.

150th Anniversary Postdoctoral Mobility Grants

The 150th Anniversary Postdoctoral Mobility Grants Scheme is designed to help early career researchers get through the difficult stage from submitting their PhD thesis to gaining their first postdoctoral employment by supporting a period of study and research in a new institution, affording

them the opportunity to make new connections and develop their research. In 2014-15 14 postdoctoral graduates made visits to institutions ranging across the UK, Europe and US. A further 10 awards have been made for visits in 2015-16 and the LMS Council has agreed to extend the Scheme for a further year to 2016-17. Application numbers to the Scheme have been high for both rounds indicating strong demand within the community for this type of support.

Undergraduate Research Bursaries

The third round of the Undergraduate Research Bursaries Scheme received record numbers of applications in 2014-15 and 21 bursaries were awarded to students at 13 different institutions. The Scheme clearly has widespread recognition and is well supported across the community. The Bursaries aim to give experience of research to undergraduates with research potential in order to encourage them to consider a scientific research career. Feedback from grantholders has indicated how valuable this scheme has been in gaining understanding of exactly what a research career entails.

In addition to these specific schemes other ongoing activities continue to support early career researchers. These include providing funding for the Young Researchers in Mathematics (YRM) Conference, held in 2015 at the University of Oxford in partnership with Oxford Brookes University and attended by 180 early career researchers. The YRM is a national conference specifically for postgraduate students, planned, organised and run by the students themselves. In addition, the Society funded the LMS

Prospects in Mathematics event, which was held at the University of Oxford in December 2014 and attended by 55 undergraduates. The meeting is primarily aimed at final year undergraduates interested in pursuing a PhD in mathematics. Both of these events are held annually and are supported by the Society, being held each year at different institutions across the UK. These meetings are important events that encourage and support students in the pursuit of a career in mathematics research.

Women in Mathematics

The Society continues its commitment to improving the proportion of women in mathematics and to helping ensure that equal opportunities are embedded within working practices for the benefit of everyone working and studying within university departments. The Women in Mathematics Committee has representatives from all 5 constituent bodies of the CMS as well as from the European Women in Mathematics Committee, ensuring it speaks for the entire mathematical community. The Chair of the Women in Mathematics Committee represents the Society on the Athena Forum.

In conjunction with the Heads of Departments of Mathematics (HoDoMs), the Society operates the LMS Good Practice Scheme, with the aim of helping departments of mathematics to take practical actions to improve the participation of women and to share examples of good practice with other departments. The Scheme offers support in applying for an Athena SWAN award for those departments seeking recognition for their work in this area.

As part of this initiative a LMS Good Practice Scheme workshop was held in London in October 2014 which focused on tackling 'unconscious bias'. This topic was chosen in response to an identified need from the community. At the workshop training was provided by the Equality Challenge Unit (ECU) to help participants identify and overcome their own unconscious biases, and materials and information were provided to help participants deliver sessions within their own departments. Over 110 people have attended the GPS workshops held to date, representing over 50 institutions. The LMS Good Practice Scheme and its events are intended to help mathematics departments implement best practice policies, contributing towards the achievement of Athena SWAN status, and ultimately working towards ensuring that negative, unhelpful or discriminatory practices preventing fair career progression are eliminated. Feedback from the events to date has been overwhelmingly positive. 33 mathematical sciences departments now hold Athena SWAN awards, and 30 of these are registered LMS Good Practice Scheme Supporters.

The LMS Good Practice Scheme Steering Group has been working on updating the statistics from the *Advancing Women in Mathematics* report and hopes to publish these in 2015.

As part of its 150th Anniversary celebrations the Society, in partnership with the University of Oxford, held a 4-day Women in Mathematics event, *It All Adds Up 2015*. For the first time school age students (from years 9-13) were invited to attend the event and the first 2 days were specifically designed for them. For the first time also undergraduates were invited to join with the postgraduates and researchers, and did so for the remaining 2 days. Attendees enjoyed a varied programme of events. School students experienced inspiring mathematical talks and fun activities. University students and academics heard lectures from invited speakers, panel discussions, contributed talks from early career researchers, and participated in mathematical crafts and poster sessions and academics. The event provided a hugely valuable opportunity for women mathematicians to meet and network with other women who are active and successful in mathematics. By involving school students the event was also conceived to inspire and encourage girls to continue studying mathematics and to demonstrate the possibilities mathematical study can offer. Over 600 people attended the event across the 4 days and feedback had been overwhelmingly positive. Information on the event can also be found in the 150th Anniversary section of this report.

In 2015-16 the Society will.....

- continue to run at least four LMS/CMI/Heilbronn Research Schools in 2015, with a view to extending the partnership arrangements for the future
- seek sponsorship to continue to run those activities which provide support to early career researchers
- develop further events for school age students and undergraduates to improve gender diversity in the mathematics people pipeline

ENGAGING WITH EDUCATION AND THE PUBLIC

Objective: to support mathematical education in schools, colleges and universities, and to encourage the public and young people to appreciate and engage with mathematics

- Popular Lectures series expanded and hosted in locations across the UK in celebration of the 150th Anniversary
- First awards made under mathematics Teacher CPD Grants Scheme
- 300 attendees visited De Morgan House as part of 'Open House London 2014'

The Society is keen to ensure that as far as possible the wider public and young people have the opportunity to engage with and appreciate mathematics and recognise its contributions to society.

It operates a number of initiatives which aim to achieve this. In 2015 the Society has particularly utilised the 150th Anniversary to engage with the public on a larger scale than ever before. It is hoped that in doing so a lasting legacy for mathematics can be established. Further details of activities implemented for the 150th Anniversary can be found in the earlier section of this report.

Education

The LMS Education Committee works on a number of different activities and schemes, including grants for education, public lectures and responses to consultations. This year the Committee initiated the Teacher CPD grants, and made 60 awards, supporting the professional development of mathematics teachers and the improvement of mathematics teaching. The Education Committee responded to the Ofqual consultation *Developing new GCSE, A-Level and AS Qualifications for first teaching in 2016*. In addition, the Education Secretary represented the Society on the A Level Content Advisory Board (ALCAB) and has worked to establish succession arrangements following the disbanding of ALCAB.

The Education Committee also responded to the Quality Assurance Agency for Higher Education's (QAA) consultation on its draft *Subject Benchmark Statement for Mathematics, Statistics and Operational Research*, the revision

to the mathematics benchmark statement. The Education Secretary represented the Society on the QAA Review Group.

Popularisation

As a part of the LMS 150th Anniversary celebrations, the Education Committee has doubled the number of Popular Lectures for 2015 from 4 to 8, and events will be held across the UK. Further details can be found in the 150th Anniversary section of this report. A sub-committee of the Education Committee focuses on popularisation events to ensure that these have greatest possible impact.

The Education Committee was also pleased that Gresham College agreed to extend its agreement with the Society to host a joint annual lecture. Professor Reidun Twarock of the University of York gave the 2015 LMS-Gresham lecture at the Museum of London, *Geometry, A New Weapon in the Fight Against Viruses*.

Mathematics was represented at the Big Bang Young Scientists and Engineers Fair held in March 2015, with a range of interactive demonstrations and activities, which once again proved to be very popular. The Joint Promotion of Mathematics Steering Group (JPM) produced three leaflets in conjunction with the Royal Society and exhibitors at the Royal Society's Summer Science Exhibition in July 2015.

The Society took part in 'Open House London' for the fourth year. Opening up De Morgan House, the Society's central offices, has allowed over 1,300 people to visit the building over the

past three years, learning about the Society's history and its current work in supporting mathematics.

In 2015-16 the Society will.....

- conclude its successful, influential and legacy-generating year of exciting events and initiatives in celebration of the Society's 150th Anniversary in 2015, and will consolidate plans to ensure the events have a lasting effect beyond the Anniversary year
- issue further LMS policy position statements to support mathematics Higher Education and education in schools
- develop the LMS website with content regarding education which is of interest to the wider world of mathematics, as well as to those involved in higher education

MANAGING THE SOCIETY EFFECTIVELY

Objective: to manage the Society's affairs and resources effectively and efficiently, operating where appropriate to make a not-for-profit financial return on activities, and to seek a variety of funding sources to support the Society's work.

The Society aims to ensure that its resources are put to best possible use in achieving its mission and objectives. In all its operations it aims to ensure the longevity of the Society and plan for future circumstances, while also meeting the current needs of mathematics and its community.

In doing so the Society ensures it follows best governance practices by operating in accordance with its Charter, Statutes and By-Laws and by referring to guidance from the Charity Commission and, where appropriate, professional advisors (Annex 1).

The Society is governed by a Council of Member Trustees, elected by the membership from the mathematical community (Annex 1). Day-to-day operations are undertaken by a FTE staff of 18 (Annex 4), with two staff members having been employed on a temporary basis specifically to assist with the 150th Anniversary celebrations. Council has chosen to delegate decision making on a number of matters to 15 standing committees and has also set up a number of temporary ad-hoc committees to deal with specific items of business (Annex 2). Council also maintains and reviews annually a Risk Register with respect to all activities undertaken by the Society.

The Society runs its financial operations in accordance with best accounting practices and ensures that all its plans and activities are

underpinned by a sound financial basis. The Society's financial and governance affairs are externally audited on an annual basis.

More detailed information on how the Society operates is available in the sub-sections that follow:

- Governance and Public Benefit
- Financial Review
- De Morgan House
- Statement of Trustees' Responsibilities

Governance and the Public Benefit

The Society's governing body is its Council, members of which are also the Trustees of the charity. The Council consists of 20 members of the Society of whom 8 are Officers (including the President) and 12 are Members-at-Large, including one 'Member-at-Large (Librarian)'.

The Officers of the Society, together with the Executive Secretary, comprise the Finance and General Purposes Committee (F&GPC), which is responsible for implementing Council's decisions, for ongoing financial management.

All candidates for election to Council are provided with information on the roles and responsibilities of Trustees. Those elected attend an induction normally in advance of their first Council meeting, which includes information on the work of Council, its strategies and plans, the operation of the financial systems, the administration of the Society and the responsibilities of a Trustee. All Council members are required to return a Declaration of Interests, a Declaration as a Fit and Proper Person, and to sign up to the Society's Anti-Bribery policy; these declarations must be renewed by all Trustees on an annual basis.

Council met 5 times in 2014-15: in October and November 2014 and in February, April and July 2015 (F&GPC met 4 times: in September 2014 and in January, March and June 2015).

Council has established several standing committees, which advise Council, and to which it has delegated some decision making. A list of all committees and committee membership is given in Annex 2. A

review of the terms of reference of the committees is being undertaken to ensure that the Society has the appropriate committees to effectively implement its strategies and activities.

As Trustees, Council members receive reimbursement only for expenses actually incurred in attending meetings or representing the Society. However, if a Trustee works over and above normal Trustee's duties, the Society may pay for that service if there is a written agreement produced in advance between the Society and the Trustee outlining the work to be undertaken and stating the exact or maximum amount.

The Society depends heavily on the unpaid voluntary work of very many of its members and others across the mathematical community, such as those who referee papers submitted to the Society's publications, those who edit those publications or serve on the Society's Editorial Advisory Boards, those who serve on the Society's committees and those who represent the Society on other bodies, together with the members of the Council themselves, many of whom undertake heavy burdens for the Society. The Society appoints representatives on external bodies and committees; these are listed in Annex 3.

In order to attract more voters, appeal to a wider range of members and offer a more modern approach to the election process the Society has introduced e-voting as part of its election processes and has engaged the Electoral Reform Services (ERS) to provide the voting element of the election procedures. The first ERS administered elections took place in

2012. At the 2014 election a total of 594 valid votes were cast, 95% of which were online votes. This was a turnout of 26% of voters which is higher than elections in other similar societies and is a 53% increase in the proportion of members voting prior to the implementation of e-voting.

Council is in the process of reviewing the Charter, Statutes and By-Laws of the Society and has set up a working group for this purpose, under the chairmanship of the General Secretary.

Public benefit

Council has referred to the Charity Commission's general guidance on Public Benefit when reviewing its aims and objectives and in planning the Society's future activities.

Council holds that the development and extension of mathematical knowledge, expanding humanity's ability to determine and affect the natural, artificial and social worlds, leads overwhelmingly to public benefit,

providing for improved health and wealth for nations and individuals and providing for tools to understand and sustain the world in which we live. The Society's activities directly correlate with its mission and objectives and are focused on supporting mathematicians in their endeavours, through grants for collaboration; by sharing of knowledge through conferences and publications; by improving the quality of mathematics education for people of all ages; by promoting mathematics and its impact on everyday life to the general public; and by encouraging policies that will benefit mathematics.

Members of the general public are able to participate without charge in all Society activities of a suitable level. Charges for events aimed at professional mathematicians, whether or not members of the Society, are kept low, a policy that is maintained when deciding on criteria for grant awards; publications are sold at prices that keep them competitive in the academic publishing world.

Financial Review

The Society remains in a strong position financially and has significant reserves. Given the continuing volatility in the economic climate the Society will keep under review where resources might best be used to further the Society's aims.

In the period 2014/15, expenditure exceeded income (excluding gains on investment assets) by £112k. This was mainly due to the implementation of a large programme of enhanced charitable activities to commemorate the Society's 150th Anniversary.

The gain on Investments was £437K.

During the year, the value of the Society's assets rose from £14.7m to £15m.

Publications income is in a steady state, and is guaranteed by existing contracts until December 2016. At the same time the Society will continue to seek new opportunities for the expansion of the Society's publishing programme. However, Council is acutely aware of the potential risks to publications income and continues to keep these under review.

The sources of income (see Figure 1, p.35) were:

<i>Publications</i>	70.9%
<i>Investments</i>	13.9%
<i>Conference facilities and rentals</i>	8.4%
<i>Grants and Contracts</i>	2.8%
<i>Members' subscriptions</i>	3.5%
<i>Advertisements in LMS Newsletter</i>	0.3%
<i>Donations</i>	0.1%
<i>Other</i>	0.1%

Figure 2 (p.35) shows expenditure (including support costs) broken down by objective. These were:

<i>Advancing mathematics (eg. membership, links with the mathematics community, library, prizes)</i>	9.4%
<i>Enabling mathematics (eg. grants, and training courses)</i>	31.3%
<i>Disseminating mathematics (eg. publishing, meetings and lectures)</i>	27.1%
<i>Promoting mathematics (eg. decision/policy makers, education, public, media)</i>	18.7%
<i>Governance (eg. trustees expenses, professional services)</i>	5.6%
<i>Other (eg. conference facilities costs, managing residential properties, Investment management fees)</i>	7.9%

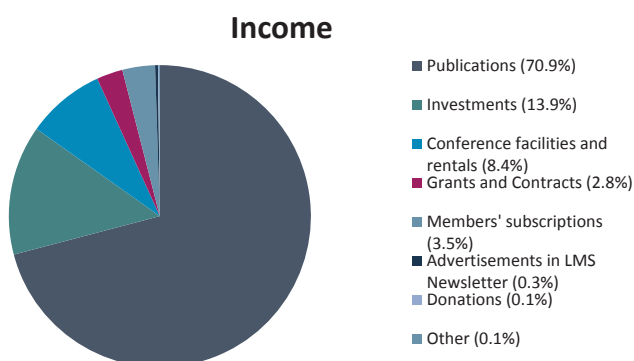


Figure 1

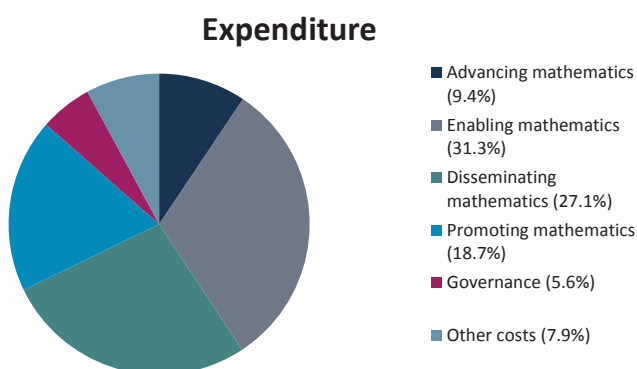


Figure 2

Budgets are set by Council on the recommendation of F&GPC, based on bids from budget holders, in line with the strategic objectives of the Society. Expenditure is monitored quarterly by F&GPC, which is responsible for recommending any variation in the budgets set by Council.

The full audited accounts of the Society, including the accounting policies, are annexed to this Report.

Risk management

Council and F&GPC annually review the Society's Risk Register identifying and quantifying potential risks to the Society and its plans and objectives, and laying out systems and strategies

for mitigating those risks. These are addressed under the following headings: Governance and Management, Law and Regulation, Reputation, External and Environment, Financial, and Operational. In certain cases Council has established Designated Funds to set against potential risks (see Reserves below); the risks or commitments that are covered by each fund are reviewed and revised annually.

The Risk Register includes the potential threat to Publications income, which in the worst-case scenario could have a devastating effect on the income which the Society derives from its learned journals. This income contributes to the Society meeting its charitable objects. In the past year, Council has sought information and expert advice in order to be better prepared for possible future changes to the publishing models and income streams. At its last Strategic Retreat Council considered various financial models derived from certain assumptions regarding the potential future income of the Society. Open Access publishing remains under close consideration.

Reserves

Council reviews its policy on reserves on an annual basis. The unrestricted reserves comprise a General Fund and other Designated Funds. In addition there are several Restricted Funds. Council has several specific Designated Funds to meet the potential costs of activities, to set against risks relating to the building and to publishing (see above) and to meet grant awards made for projects or activities which span a number of years – these are given at Annex 6.

The Society has a broad-ranging programme of activities in support of its strategic objectives as described in this report. While some activities are supported from Restricted Funds, all need continuity of funding. Due to the scale and future risks to academic publishing (a key part of the Society's income), Council continues to operate from the basis that it is prudent to hold a General Fund from which income can be drawn to maintain and extend its charitable activities. The General Fund acts both to provide income for activities not funded from Designated or Restricted Funds, and also as a 'free reserve', providing adequate working capital for the Society to operate effectively and efficiently, and for the pursuit of the Society's objectives as Council may from time to time determine.

The Society holds several Restricted Funds, as described in the audited accounts. These originate from various donations and bequests, and are invested and accounted for on an aggregated 'total return' basis.

Grant Awards and Commitments

Where the Society has contractual or constructive obligations to make grant payments these amounts are accrued in the accounts in accordance with the requirements of the Statement of Recommended Practice (SORP). Resources expended on grants shown in the Statement of Financial Activity (SoFA), therefore, recognise (within the year the grant is awarded) both liabilities and provisions for grant commitments. Normally grant commitments will be claimed by the end of the financial year, although the claim period may be extended by

a further year where the start or end date of the grant so requires.

The Society also awards some grants with conditions for payment (such as delivery of a specific level of service or other specific output). Such commitments are reserved in the Designated Funds, and the grants are only recognised in the SoFA when the recipient of the grant has provided evidence of the specific service or output.

Investments

The Society decided to invest up to 20% of its relevant assets in residential property, as valued at the time of purchase, with the remainder given over to the Society's investment managers. Investment in such residential property would be directly managed by the Society rather than the investment managers. The percentage calculation excludes the value of De Morgan House, though this could be reviewed at any point. Also excluded are any investments made by the investment managers in the property area of asset classes.

1. Quoted investments

The current quoted investment strategy for the portfolio, which is managed by investment managers Schroders (Cazenove), has been modelled to achieve RPI + 4% per annum nominal return over five years (a 4% return in real terms after allowing for average service sector wage inflation). Due to the change in the investment climate Council agreed to accept a lower than 4% return in order to reduce risks. Close attention is paid to our investment policy and

to the performance of Schroders, with whom we have regular meetings.

The drawdown each year, as agreed by Council, follows the 'Yale model' and consists of 50% of the previous year's drawdown together with 3.5% of 50% of the current value of the portfolio.

Thus the drawdown is determined by a formula and so may be less or greater than the dividends and interest received: it is shown in the SoFA as Investment Income. The growth in the value of the Society's investments (capital plus income) is the sum of this drawdown and the figure shown in the SoFA for Gains on investment assets. The scale of the Society's activities is designed to match this level of return through the annual budgeting process.

The majority of the Society's reserves – both Restricted and Unrestricted – are invested and managed by the Society's investment managers, Schroders. It is Society policy to review on a regular basis the performance of those professional bodies it employs. Accordingly, Council has an Investment Sub-Committee, which includes six external financial experts, to provide professional advice on the Society's investments and on Schroders' performance. Council has confirmed an investment mandate with discretionary powers with Schroders, based on a 'total return' basis, designed to maximise investment income while maintaining the real value of the investments.

The investment managers have discretion in both the mix and selection of investments in order to meet the growth targets for the portfolio, without exposing to undue

risk the Society's reserves, on which its future capacity to maintain its activities depends. The primary long-term target is that the Society's portfolio produces a total return of inflation (RPI) plus 4% pa. The portfolio has exposure to a range of equity, cash, fixed-interest investments and alternative asset classes in both UK and overseas markets, accessed via a single investment in the Schroder Charity Multi-Asset Fund. A summary of the main categories of investments and the geographical split is provided in the notes to the financial statements in accordance with the Charities' SORP. The Schroder Charity Multi-Asset Fund is a common investment fund designed for charities seeking to maintain the real value of their capital over the medium to long term whilst generating a sustainable and reliable distribution level (from income and capital). The portfolio which aims to deliver returns similar to equity markets but with a lower level of volatility, is well diversified across asset classes. This approach is considered by the trustees to give optimum total return without exposing the Society's investments to undue risk; it is consistent with the principles set out in the Charity Commission guidelines Investment of Charitable Funds, Basic Principles (CC14) and conforms with the Trustee Act 2000.

2. Residential property investments

As a safeguard against possible poor performance of the stock exchange, the Society expanded its investments portfolio to include residential property and owns three long lease residential properties in the Central London area, all of which are rented out. The rental derived is shown on the SOFA under

'Investment Income'. The growth in the value of the Society's residential property investment will be shown in the SoFA as Gains on investment assets. The primary long-term target

of the Society's residential property is to produce a yield of 4% pa and to increase in capital value by at least the rate of inflation.

Staff management

The Society currently employs a team of full and part time staff, who are predominantly based within De Morgan House. A list of staff in post during the period is at Annex 4.

The Executive Secretary is responsible for staff-related issues with strategic overview provided by the Society's Personnel Committee.

De Morgan House

The Society holds a long lease (to 2118) from Bedford Estates on De Morgan House, 57-58 Russell Square, London, WC1. It uses these premises: (a) to house its administrative headquarters; (b) to hold its meetings and conferences in the promotion of mathematics; (c) to let out offices on the upper floors to other organisations on a commercial basis; and (d) for function rooms which it lets to other organisations for their own purposes. The last category includes other mathematical and charitable organisations, where there is both a mathematical and financial benefit. Discounts are available and some rooms are offered at either reduced rates or at no charge for this last category as part of the Society's charitable giving. £41,004 has been granted in charitable giving for LMS rooms in this manner.

The use of the Conference Facilities for mathematical meetings and as a source of revenue achieved the highest level of income and occupancy since the operation began in 2006. There were no changes in the letting of office space with the building remaining at full occupancy.

Statement of Trustees' Responsibilities

The trustees are responsible for preparing the Trustees' Report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England and Wales requires the trustees to prepare financial statements for each financial year which give a true and fair view of the state of the affairs of the charity and of the incoming resources and application of resources of the charity for that period. In preparing these financial statements, the trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities' Statement of Recommended Practice (SORP);
- make judgements and estimates

- that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in business.

The trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and enable them to ensure that the financial statements comply with the Charities Act 2011, the Charity (Accounts and Reports) Regulations 2008 and the provisions of the Royal Charter. They are also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

For and on behalf of the Council of the London Mathematical Society:



.....
Professor Terry Lyons
(President)

16th Oct 2015

.....
(Date)

Annex I - Council, Executive Team and Professional Advisors

Members of Council during the period 1 August 2014 to 31 July 2015

President:	Terry Lyons
Vice-Presidents:	Ken Brown John Greenlees
Treasurer:	Robert Curtis
General Secretary:	Stephen Huggett
Programme Secretary:	Robert Wilson (until September 2014) Iain Stewart (from December 2014)
Publications Secretary:	John Hunton
Education Secretary:	Alice Rogers
Members-at-Large:	June Barrow-Green (Librarian) Alexandre Borovik (from November 2014) Tara Brendle (from November 2014) Francis Clarke David Evans Cathy Hobbs Rebecca Hoyle (from November 2014) Diane Maclagan (from December 2014) Elizabeth Mansfield Beatrice Pelloni Colva Roney-Dougal (until November 2014) Michael Singer Gwyneth Stallard Iain Stewart (until December 2014) Ulrike Tillmann (until November 2014) Alexander Veselov (until November 2014)
In attendance:	Simon Tavaré (President Designate) (from November 2014)

Executive Management Team during the period 1 August 2014 to 31 July 2015

Executive Secretary:	Fiona Nixon
Publisher:	Susan Hezlet
Head of Finance and Accounting:	Ephrem Abate
Head of Society Business:	Lindsay Walsh
Head of Conferences & Building:	Dominic Clark

External Advisers

Auditors: Kingston Smith LLP, Devonshire House, 60 Goswell Road, London, EC1M 7AD
Investment Advisers: Cazenove/Schroder & Co. Limited, 12 Moorgate, London, EC2R 6DA
Bankers: National Westminster Bank plc, 208 Piccadilly, London, W1A 2DG
Solicitors: Bates Wells & Braithwaite, 2-6 Cannon Street, London, EC4M 6YH

Registered Address

London Mathematical Society, De Morgan House, 57-58 Russell Square, London, WC1B 4HS

www.lms.ac.uk

Charity Registration Number

252660

Annex 2 - Committee Membership (as at July 2015)

Membership of Committees as at 31 July 2015

Computer Science Committee: A. Czumaj (*Chair*), N. Alechina, J. Cooke (*British Computer Society – Formal Aspects of Computing Science Specialist Group*), J. Davenport (*Institute of Mathematics and its Applications (IMA)*), P. Jimack, Robert Leese, F. Moller (*Academy of Computing*), John Shawe-Taylor, I. Stewart, C. Turner (*Engineering and Physical Sciences Research Council (EPSRC) observer*), *Vacancy*.

Education Committee: Education Secretary (*Chair*), Vice-President K. Brown, F. Berkshire, R. Emanuel, A. Gardiner, K. Golden (*Heads of Departments of Mathematical Sciences (HoDoMS)*), K. Houston, V. Neale, P. Ransom, A. Veselov, J. White.

Finance and General Purposes Committee: President (*Chair*), Vice-Presidents, General Secretary, Treasurer, Programme Secretary, Publications Secretary, Education Secretary, Executive Secretary.

International Affairs Committee: President (*Chair*), Programme Secretary, Publications Secretary, C. Budd (*UK representative to International Commission on Mathematical Instruction (ICMI)*), C. Campbell (*Delegate of President of the Edinburgh Mathematical Society (EdMS)*), A. Fitt (*IMA*), S. Huggett, D. Mond, C. Roney-Dougal, R. Sutherland (*Joint Mathematical Council (JMC)*), J. Toland (*International Mathematical Union (IMU) Executive*), N. Walkey (*Royal Statistical Society (RSS)*).

Investment Sub-Committee: Treasurer (*Chair*), All Members of Finance and General Purposes Committee, R. Bogni, M. Davis, J. Dodd, L. Hughston, S. Mossaheb, *Vacancy*.

Library Committee: Librarian (*Chair*), Publications Secretary, LMS Archivist N. Kavalleris, T. Mann.

Nominating Committee: P. Davies (*Chair*), K. Ball, M. Bridson, S. Donkin, P. Glendinning, C. Hobbs (Council), D. Tranah, A. Wilkie.

Personnel Committee: Vice-President K. Brown (*Chair*), Publications Secretary, D. Applebaum, J. Barrow-Green, A. Rogers, Executive Secretary.

Prizes Committee: President (*Chair*), M. Ainsworth, J. Barrow-Green, A. Corti, A. Goriely, B. Green, Y. Le Jan, C. Mouhot, *Vacancy*.

Programme Committee: Programme Secretary (*Chair*), F. Clarke (*Deputy Programme Secretary*), D. Evans, D. Leslie, E. Mansfield, A. Pushnitski, I. Roulstone, G. Stallard.

Publications Committee: Publications Secretary (*Chair*), Vice-President J. Greenlees, J. Anderson (*Deputy Publications Secretary*), J. Chuang, F. Clarke, A. Corti, C. Hobbs, P. Jørgensen, S. Taylor, R. Thomas, T. Ward, M. Ware, Publisher.

Publications Nominating Group: Publications Secretary (*Chair*), C. Batty, J. Brodzki, D. Calderbank, F. Kirwan, A. Sobolev, S. Stevens, J. Wright, Publisher.

Research Meetings Committee: B. Pelloni (*Chair*), Vice-President J. Greenlees, A. Neves, S. Olhede, N. Peake, D. Schuetz (*Durham representative*), M. Speight, S. Velani, N. Woodhouse (*Clay Mathematics Institute (CMI) observer*), D. Craig (*EPSRC observer*), J. Woolf.

Research Policy Committee: Vice-President K. Brown (*Chair*), Vice-President J. Greenlees, P. Clarkson (*HoDoMs*), P. Davies, A. Etheridge, J. Giansiracusa, M. Singer, R. Thomas, R. Twarock, *Vacancy*.

Women in Mathematics Committee: G. Stallard (*Co-Chair*), Vice-President J. Greenlees (*Co-Chair*), S. Beg (*Operational Research Society (ORS)*), T. Brendle (*Edinburgh Mathematical Society (EdMS)*), P. Clarkson, A. Davies, C. Hobbs, E. Hunsicker, J. Freeman (*RSS*), M. Mazzocco (*IMA*), J. McKee, B. Pelloni (*European Women in Mathematics (EWM)*), A Taormina, *Vacancy*.

Ad hoc Committees and LMS Appointments as at 31 July 2015

2015 Celebrations Committee: President (*Chair*), Vice-President J. Greenlees, General Secretary, Treasurer, Programme Secretary, Librarian, P. Goddard, S. Oakes, Executive Secretary, Head of Society Business.

Development Committee: Treasurer (*Chair*), President, President Designate, Vice-Presidents, General Secretary, Executive Secretary.

Good Practice Scheme Steering Group: P. Clarkson (*Chair*), A. Davies, P. Davies, Vice-President J. Greenlees, J. Levesley (*HoDoMS*), G. Stallard (*Co-Chair of Women in Mathematics Committee*), A. Taormina.

Journals Editors Group: Publications Secretary (*Convenor*), Editors for the Bulletin, Journal and Proceedings (BJP), 3 members of the BJP Advisory Board, Book Reviews and Obituaries Editors of the Bulletin, Managing Editor for the Journal of Topology, Member of the Journal of Topology Editorial Board, Editors of Journal of Computation and Mathematics (JCM), Member of the JCM Advisory Board, Publisher, Managing Editor.

LMS–IMA Joint Working Group (LMS members): President (*Chair*), Vice-President J. Greenlees, Executive Secretary.

LMS-IMA Crichton Medal Committee 2015 (LMS Members): President, M. MacCallum, A. Rogers.

Mentoring African Research in Mathematics (MARM) Board: J. Ball (*Chair*), H. Clemens (*IMU*), S. Huggett (*LMS*), F. Neumann (*LMS*), W. Ogana (*AMMSI*), J. Toland, Executive Secretary.

Newsletter Editorial Board: A. Mann (*General Editor*), Council Webmaster, Programme Secretary (*Reports Editor*), D. Singerman (*Newsletter Reviews Editor*), *Vacancy (Council)*.

Newsletter Review Group: S. Huggett (*Chair*), J. Collins, L. Di Vizio, R. Elwes, M. Freiburger, C. Hollings, S. Oakes.

Joint Promotion of Mathematics Steering Group: LMS Vice-President J. Greenlees (*Chair*), LMS Education Secretary, K. Houston (*LMS*), N. Steele (*IMA*), A. Stevens (*IMA*), LMS Head of Society Business.

Standing Orders Review Group: General Secretary (*Chair*), President, J. Barrow-Green, A. Borovik, Executive Secretary.

Website Working Group: S. Huggett (*Chair*), Vice-President J. Greenlees, Council Webmaster, J. Barrow-Green, A. Borovik, P. Cameron, Executive Secretary.

Council Diarist: F. Clarke

Council Webmaster: S. Huggett

LMS/EMS Newsletter Correspondent: D. Chillingworth

Scrutineers: C. Lance, R. Sharp.

Annex 3 - External Representatives (as at July 2015)

Representatives on external committees and boards as at 31 July 2015

A Level Content Advisory Board (ALCAB): Education Secretary

Athena Forum: G. Stallard.

British Science Association Mathematics Section: Education Secretary.

British Mathematical Colloquium Scientific Committee: J. Hunton, S. Rees, P. Rippon.

Council for the Mathematical Sciences Board: President, Vice-President K. Brown, Vice-President J. Greenlees, Executive Secretary (any 3 of).

Council for the Mathematical Sciences-Engineering and Physical Sciences Research Council (CMS-EP SRC) Liaison Sub-Group: President, Vice-President K. Brown, Vice-President J. Greenlees, Executive Secretary (any 3 of).

European Mathematical Society Council: President, Programme Secretary, B. Pelloni, C. Roney-Dougal.

Heads of Departments of Mathematical Sciences Committee: General Secretary.

International Centre for Mathematical Sciences (ICMS) Board: M. Kim.

International Centre for Mathematical Sciences (ICMS) Programme Committee: D. Rand, U. Tillmann.

International Commission on Mathematical Instruction (ICMI) UK representative: C. Budd.

Isaac Newton Institute (INI) Management Committee: U. Tillmann.

Isaac Newton Institute (INI) Scientific Steering Committee: J. Ball, M. Harris.

Isaac Newton Institute (INI) Correspondents: B. Pelloni.

Joint Mathematical Council (JMC): Education Secretary.

Parliamentary and Scientific Committee: President, Vice President J. Greenlees, Executive Secretary.

Science Council: President, Executive Secretary.

Staff in post in the period 1 August 2014 to 31 July 2015

Executive Secretary's Office

Executive Secretary	F. Nixon
PA to the Executive Secretary	C. Chessis
Head of Finance and Accounting	E. Abate
Accounts Assistant	V. Kolesnykova ◊
Administrative Editor, LMS Newsletter	S. Oakes ◊*

Publications

Publisher	S. Hezlet
Managing Editor	O. Törnkvist ◊
Senior Assistant Editor	B. Holmes
Assistant Editor	K. Wright

Society Business

Head of Society Business	L. Walsh
Membership and Activities Officer	E. Fisher
Council and Society Officer	K. Henderson
Society Communications Officer	J. Johnston
Education and Research Officer	D. Turton
Grants Administrator	S. Daly ◊
Grants and Membership Assistant	M. Shearer ◊ (until 31 October 2014) A. Byrne (from 29 October 2014)
Anniversary Programme Administrator	A. Thresher (until 17 July 2015)
Anniversary Communications Assistant	J. Garrick (from 5 January 2015)

Conferences and Building Group

Head of Conferences and Building	D. Clark
Receptionist and Facilities Coordinator	Z. Edah-Tally
Facilities Assistant	A. Waidson ◊

◊ Part-time posts

* not based at De Morgan House

Annex 5 - Grant Schemes

General policy on grant-making

The grant schemes are funded from the Society's resources received from its endowments, investments and publishing activities and are one of the primary mechanisms through which the Society achieves its central purpose, namely to 'promote and extend mathematical knowledge'. The principles for its grant-giving are:

- As a charity the Society is able, and wishes, to take advantage of different opportunities and to work within a different regulatory framework from other funding bodies, such as the Engineering and Physical Sciences Research Council (EPSRC). Its grant schemes are focused accordingly.
- The Society's funds are under pressure, and it is not able to make awards as often or as fully as it would like.
- The Society does not normally meet the full cost of an activity. Rather it will aim to give added value to an event largely funded by other means, or to bridge the gap between cost and the resources that might reasonably be made available by a university department.
- It does not pay Full Economic Costs.
- It does not make grants to cover departmental overheads, secretarial costs, etc., which could be seen as part of normal departmental provision.
- The Society does not normally make grants to cover room hire, although consideration will be given to cover room hire charges at De Morgan House.
- Applicants are expected to make economical travel arrangements where possible.
- The Society expects that organisers of conferences and activities who are seeking grants from the Society will invite both male and female speakers (or explain why this is not appropriate or possible) and give consideration to the provision of mechanisms to enable participation by people with children or family responsibilities, in line with the Society's policy on Women in Mathematics.
- The Society will not allow its limits for individual grant schemes to be exceeded by artificially sub-dividing an application into a number of separate requests under different headings.
- The Society considers it to be the responsibility of the institution to which the grant is paid to check receipts in accordance with its normal financial procedures.

The Society's committees that assess applications for grants are made up of mathematicians with a wide spread of research interests. Under most schemes, proposals are judged by the committees themselves, although they may seek advice. Each committee judges each application on its merits.

Any mathematician working in the UK is eligible to apply for a grant but for some schemes if they are not a member of the Society, then the application must be countersigned by a member who is prepared to support the application.

Summary of grant and training schemes

Conference Grants (Scheme 1)

Grants are made to the organisers of conferences to be held in the UK. Priority is given to the support of meetings where an LMS grant can be expected to make a significant contribution to the viability and success of the meeting. Support of larger meetings of high quality is not ruled out, but for such meetings an LMS grant will normally cover only a modest part of the total cost.

Under this Scheme grants are made for meetings held to celebrate the new appointments of lecturers at UK universities.

Visitors to the UK (Scheme 2)

The aim of the Scheme is to provide grants to mathematicians based within the UK to partially support visitors to the UK; the visitors should give lectures in at least three separate institutions.

Support of Joint Research Groups (Scheme 3)

The Scheme is to provide support for groups of mathematicians, working in at least three different locations (of which at least two must be in the UK), who have a common research interest and who wish to engage in collaborative activities.

Research in Pairs (Scheme 4)

The Scheme is to provide small grants to mathematicians within the UK to help support visits for collaborative research.

International Short Visits (Scheme 5)

The Scheme is to provide grants to mathematicians within the UK to support visits for collaborative research either to or from a country in Africa, or countries in which mathematics is in a similar position.

Computer Science Small Grants (Scheme 7)

The aim of the Scheme is to provide small grants to researchers based within the UK to help support visits for collaborative research at the interface of Mathematics and Computer Science.

British Colloquium for Theoretical Computer Science

The Society supports the annual meeting which provides a forum in which researchers in theoretical computer science can meet, present research findings, and discuss developments in the field. Specifically, the Society funds the costs of a speaker who is ordinarily from overseas and who is introduced as the 'LMS Keynote Lecturer in Discrete Mathematics'.

LMS Workshop-Symposia

The Society supports research workshops, which may be held anywhere in the UK and are an opportunity for a small group of active researchers to work together for a concentrated period on a specialised topic. Applications to support the development of research in an area not ready for a larger-scale application are welcomed; applications for partial support for larger events will only exceptionally be supported.

LMS Grace Chisholm Young Fellowship

These fellowships, named after Grace Chisholm Young, aim to provide some support when a mathematical career is interrupted by family responsibilities, relocation of partner, or other similar circumstance, making possible

some continuous mathematical activity and so enabling the fellow to be in a position to apply for posts when circumstances allow. Each holder will be based in a specific Mathematics Department in a University or Research Institute in the UK; the host is expected to provide an email address, use of library and IT facilities and access to research literature. The normal duration of a fellowship is one year.

LMS Childcare Grants

The Society recognises that parents are sometimes prevented from attending conferences and meetings and making research visits because there is no provision for the extra costs incurred in looking after children either at home or (when necessary) at the place visited. It is the LMS' view that institutions should make provision for childcare costs but, while this is not largely the case, the Society is willing to make a supplementary grant as a contribution to the costs.

Small Educational Grants

These grants support such activities as popular lectures, exhibitions, masterclasses, mathematical competitions, etc., that help to encourage joint mathematical ventures between higher education institutions and schools, or the development of projects that would improve the 'public image of mathematics'.

Mentoring African Research in Mathematics (MARM)

The aim of the programme is to enable all mathematicians in Africa to pursue academic careers of the highest standard. The Society believes that enhancing and developing academic research and research institutions in Africa will help ensure that pursuing world-class mathematical careers within Africa will be both achievable and a more attractive option than moving permanently to the developed world. Over time, the strengthening of the mathematical community within Africa will benefit not only the African community but mathematics as a whole. Grants are awarded for 2-year academic partnerships between European and African institutions for activities including exchange visits, lectures and workshops, conferences, PhD supervision and mentoring support.

Support for Mathematics in Africa

The Society awards grants to contribute to the travel costs of postgraduates attending conferences organised or supported by the African Mathematics Millennium Science Initiative (AMMSI). Additionally a grant has been made to the European Mathematical Society Committee for Developing Countries to support their work donating books and journals to developing countries.

Support for Young Mathematicians and Early Career Researchers

Postgraduate Research Conferences (Scheme 8)

The aim of this Scheme is to support research conferences, organised by and for research students, to be held in the UK.

LMS Prospects in Mathematics

The Society provides support for this annual event, primarily for final year mathematicians who are considering applying for a PhD after they have completed their studies to discuss current research and potential career opportunities.

Young Researchers in Mathematics Conference

The Society provides a grant for the Young Researchers in Mathematics Committee to help support the Young Researchers in Mathematics Conference, a mathematics conference specifically targeting early career researchers.

Young British and Russian Mathematicians

Each year, the Scheme allows up to three young Russian mathematicians to spend a few weeks in Britain giving a series of survey lectures on the work of their Russian seminar, and up to three young British mathematicians to spend a few weeks in Russia giving a series of survey lectures on the work of their school.

Mathematics Teacher CPD Grants

The Scheme is to provide opportunities for mathematics teachers to attend training which is specifically mathematical. Any application for a grant under this scheme must be made by a teacher of mathematics or Initial Teacher Education provider based in the UK. The grants are open to teachers of mathematics from primary school to A-Level or equivalent.

The grants are to support teacher attendance at one or two day conferences/events organised by professional mathematical organisations. The grants are also to assist providers of professional development to run conferences and courses that allow participants to further their professional development. The grants can also cover the costs of external trainers in schools or educational institutions.

Undergraduate Research Bursaries in Mathematics

The Scheme aims to give experience of research to undergraduates with research potential to encourage them to consider a career in scientific research. Grants are awarded for a 6-8 week summer research project undertaken with the guidance of a research supervisor.

LMS 150th Anniversary Postdoctoral Mobility Grants

The purpose of the grants is to support a period of study and research in mathematics between three and six months at one or more institutions other than the holder's home institution. They are intended to support promising researchers during the transitional period between having submitted their thesis and the start of their first postdoctoral employment.

LMS/CMI/Heilbronn Research Schools Programme

The purpose of the Research Schools is to provide training for young researchers in a core area of mathematics. Students and post-docs can meet a number of leading experts in the topic as well as other young researchers working in related areas.

The series aims at the highest international standing of these research schools, allowing for support of both international lecturers and participants. The main criteria for funding are the topicality and the mathematical significance of the course material, the general alignment with the mission of the LMS and the Clay Mathematics Institute (CMI) and the likely demand for places nationally and internationally, and the standing of the proposed lecturers in the international mathematical community.

Undergraduate Summer Schools

The goal of the summer schools is to introduce exceptional non-final year undergraduates to research mathematics and, in particular, to make them think seriously about an academic career at this stage. The Summer Schools are a combination of short lecture courses with problem solving sessions and colloquium style talks. Talks are given by lecturers mostly (though not exclusively) from the UK, including high-profile speakers. The Schools are for around 50 students and involve 10 lecturers. The event is hosted by a UK university for a period of 10 days in summer.

Annex 6 - Reserve Funds

Reserve Funds

Council takes a long term view with regard to the Total Funds of the Society, in respect of helping both current and future beneficiaries. There is a need to rebuild the investment portfolio and guarantee a real return. Over the last ten years the value of the portfolio has reduced by approximately 25% in real terms. Council considers that the present level of the Total Funds should (if possible) be increased to the level of £15m-£20m by 2020.

General Fund

The General Fund is to provide for the general operation of the Society including its charitable activities not funded from Designated or Restricted Funds. Within the Society's reserves, the General Fund is deemed an expendable reserve to be used in pursuit of the Society's objectives as Council may from time to time determine. At present the fund exists to assure the availability of resources for the Society's grant schemes and other continuing charitable activities in future years. This manages the risk to the Society's ability to generate income to provide for such activities and offers a contingency against threats such as open access.

General Fund	£10,789,420
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Building and Development Reserve Fund

This reserve, originally built up for the Society to purchase or rent its own property was utilised in part in the purchase of a leasehold property. The agreed purposes and recommended levels as from the next financial year would be:

Rehousing and re-establishing the administration for one year were De Morgan House (DMH) to be lost through fire etc.	£195,000
Costs of venue hire for all LMS meetings held in DMH	£15,000
Costs of re-establishing our work	£13,000
Dilapidations, were the Society to leave DMH	£23,000
External redecoration	£34,000
Internal redecoration	£45,000
Major modifications and developments, unexpected repairs/replacement	£275,000
	£600,000

Printing and Publication Reserve Fund

This fund is to provide a reserve to meet the costs of producing and publishing the Society's LMS periodicals should the Society's income from these periodicals be unable to cover such commitments.

The agreed purposes and recommended levels are:

Repaying subscriptions income if we ceased to trade, and other commitments	£1,725,000
Buffer against over/under shooting the budget	£175,000
New ventures. Based on the costs of launching and producing a new journal, but its failing to gain subscriptions	£825,000
Insurance against breach of copyright and libel (including legal fees)	£275,000
	£3,000,000

Grants Payable Reserve Fund

This fund is set aside for grant awards to mathematical projects or activities which span a number of years. Such grants are reviewed annually and are paid once the recipient of the grant has provided a progress report with satisfactory performance of the project.

Grants awarded and approved by Council to be paid in future accounting periods	£181,000
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Special Activities Reserve Fund

Gifts and bequests received by the Society to be used for diverse activities in support of the Society's objectives	£31,880
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LMS 150th Anniversary Fund

This fund is set aside for LMS 150th Anniversary celebration activities, which span 2-3 years. The fund is only for special projects, including the project administrator costs, but not the enhancement costs which are under the remit of Committee budgets.

LMS 150th Anniversary	£115,396
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Annex 7 - Auditor's Report

Independent Auditors' Report to the Trustees of The London Mathematical Society

We have audited the financial statements of London Mathematical Society for the year ended 31 July 2015 which comprise the Statement of Financial Activities, the Balance Sheet and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

This report is made solely to the charity's trustees, as a body, in accordance with Chapter 3 of Part 8 of the Charities Act 2011. Our audit work has been undertaken for no purpose other than to draw to the attention of the charity's trustees those matters which we are required to include in an auditor's report. To the fullest extent permitted by law, we do not accept or assume responsibility to any party other than the charity and charity's trustees as a body, for our audit work, for this report, or for the opinion we have formed.

Respective responsibilities of trustees and auditor

As explained more fully in the Trustees' Responsibilities Statement the trustees are responsible for the preparation of financial statements which give a true and fair view. We have been appointed as auditor under section 144 of the Charities Act 2011 and report to you in accordance with regulations made under that Act. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's (APB's) Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the charity's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the trustees; and the overall presentation of the financial statements. In addition we read all the financial and non-financial information in the Trustees' report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the charity's affairs as at 31 July 2015, and of its incoming resources and application of resources, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Charities Act 2011 requires us to report to you if, in our opinion:

- the information given in the Trustees' Annual Report is inconsistent in any material respect with the financial statements; or
- sufficient accounting records have not been kept; or
- the financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.



Kingston Smith LLP
Statutory auditor

Date: 5/11/2015

Devonshire House
60 Goswell Road
London EC1M 7AD

Kingston Smith LLP is eligible to act as auditor in terms of Section 1212 of the Companies Act 2006.

Annex 8 - Statement of Financial Activities

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STATEMENT OF FINANCIAL ACTIVITIES
For the year ended 31 July 2015

		Unrestricted			2015	2014
	Notes	General Funds £	Designated Funds £	Restricted Funds £	Total Funds £	Total Funds £
Incoming resources						
Incoming resources from generated funds:						
Voluntary income						
Gifts, Donations, Legacies		3,163	-	-	3,163	34,732
Activities for Generating funds						
Conference facilities		158,028	-	-	158,028	151,631
Rental income		86,976	-	-	86,976	91,289
Advertising in Newsletter		8,121	-	-	8,121	8,652
Investment income	2	399,320	158	5,368	404,846	335,208
Incoming resources from Charitable activities:						
Membership subscriptions		100,306	-	-	100,306	89,654
Publications – LMS Periodicals	6a	1,351,720	-	-	1,351,720	1,228,040
Publications – Ventures and Royalties	6c,d	308,409	402,622	-	711,031	714,186
Grants and contracts	20	71,648	-	9,677	81,325	93,692
Other incoming resources						
Sundry income		2,597	-	-	2,597	875
Total Incoming Resources		<u>2,490,288</u>	<u>402,780</u>	<u>15,045</u>	<u>2,908,113</u>	<u>2,747,959</u>
Resources expended						
Cost of generating funds:						
Costs of DMH Conference facilities	3	102,989	-	-	102,989	97,157
Services for tenants		52,878	-	-	52,878	46,007
Investment Management fees		51,717	-	-	51,717	49,559
Residential Investment Property costs		30,579	-	-	30,579	21,083
Charitable activities						
Advancing the interests of Mathematics	4	269,251	-	13,500	282,751	337,127
Enabling Mathematicians to undertake research & collaboration	5	797,900	130,027	20,000	947,927	773,413
Disseminating Mathematical knowledge						
Costs of publications	6b,c,d	397,070	294,211	-	691,281	663,908
Conference and meeting programmes	7	106,273	19,724	-	125,997	80,343
Promoting Mathematical research and its benefits	8	431,552	132,682	-	564,234	390,411
Governance	9	169,942	-	-	169,942	154,895
Total Resources Expended		<u>2,410,151</u>	<u>576,644</u>	<u>33,500</u>	<u>3,020,295</u>	<u>2,613,903</u>
Net incoming (outgoing) resources before transfers		80,137	(173,864)	(18,455)	(112,182)	134,056
Transfers between funds	18,19	87,588	(108,411)	20,823	-	-
Net incoming (outgoing) resources after transfers		167,725	(282,275)	2,368	(112,182)	134,056
Gains on investment assets	22	435,931	-	1,436	437,367	216,763
Net movement in funds		603,656	(282,275)	3,804	325,185	350,819
Fund balances at 1 st August 2014		10,185,764	4,210,551	247,617	14,643,932	14,293,113
Fund balances at 31st July 2015		<u>10,789,420</u>	<u>3,928,276</u>	<u>251,421</u>	<u>14,969,117</u>	<u>14,643,932</u>

BALANCE SHEET
as at 31 July 2015

		2015		2014	
Notes	£	£	£	£	
Fixed Assets					
Fixed Asset Investments					
Quoted Investment	14a	10,689,668		10,012,507	
Residential Property	14b	2,312,000		2,005,000	
			13,001,668		12,017,507
Tangible Fixed Assets					
Leasehold Property	15	1,434,159		1,478,976	
Fixtures, Fittings and Equipment	15	8,320		10,482	
			1,442,479		1,489,458
			14,444,147		13,506,965
Current Assets					
Medals in stock		3,061		3,061	
Debtors	16	262,352		164,318	
Cash at bank and in hand		651,406		1,255,272	
Bank Deposits		431,077		628,336	
		1,347,896		2,050,987	
Liabilities:					
Creditors: Amounts falling due within one year					
Creditors	17	653,644		580,728	
Deferred Income	17	169,282		333,292	
		822,926		914,020	
Net current assets			524,970		1,136,967
Net Assets			14,969,117		14,643,932
Represented by :					
General Funds	19	10,789,420		10,185,764	
Designated Funds	19	3,928,276		4,210,551	
Restricted Funds	18	251,421		247,617	
			14,969,117		14,643,932

Approved on behalf of Council and authorised for issue on:

Robert G. Curtis

16/10/15

.....
Professor Robert Curtis
(Treasurer)

.....
Date

The notes on pages 56 to 72 form part of these financial statements

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

1. Accounting Policies

The accounting policies adopted by the Society are as detailed below:

a) **Accounting Convention**

The financial statements comply with the Statement of Recommended Practice (SORP) "Accounting and Reporting by Charities" published in March 2005 and the Charities Act 2011 and are prepared under the historical cost convention as modified by the revaluation of investments and in accordance with the Financial Reporting Standard for Smaller Entities (effective April 2008).

b) **Taxation**

The Society is a registered charity and no liability to taxation arises on the results of its business activities in support of its charitable purposes.

The Society has partial exempt status in respect of VAT, based on the split of its business and non-business activities. The proportion of VAT that cannot be recovered because of partial or fully exempt status of the activity is redistributed to the activities on the same basis as support costs.

c) **Investments**

The Society may invest up to 20% of its relevant assets in residential property, as valued at the time of purchase, with the remainder given over to the Society's investment managers. Investment in such residential property will be directly managed by the Society rather than by the investment managers. The percentage calculation excludes the value of De Morgan House, though this could be reviewed at any point. Also excluded are any investments made by the investment managers in the property area of asset classes.

• **Quoted investments**

All quoted investments are valued at their market value at the balance sheet date, giving rise to unrealised gains and losses which are included in the Statement of Financial Activities. The market value is determined as follows:

- i) Listed securities are valued at mid-market value ruling at the balance sheet date;
- ii) Unit trust and managed fund investments are stated at the mid-point of the latest prices quoted by the investment managers immediately prior to the balance sheet date;
- iii) Investments held in foreign currencies have been valued on the relevant basis and translated into sterling at the rate ruling at the balance sheet date.

The portfolio is invested in a range of equity, cash and fixed-interest investments in both UK and overseas markets. The key objective of the Society's portfolio is to produce a real return (capital growth) of at least 4% pa, and to provide an investment income determined by 'total return policy' of 3% pa (based on Yale model).

The Society in its total returns policy treats all cash withdrawals from the investment portfolio as investment income. This is analysed in the notes to the financial statements as investment income split between the various categories of investment based on information provided by the investment managers and the proportion of total return drawn down relating to gains. The balance of unrealised gains and losses on revaluation of investments, and realised gains and losses arising on disposal of investments are separately identified in the notes to the Financial Statements and on the SoFA.

• **Residential property investment**

As a safeguard against possible poor performance of the stock exchange, the Society expanded its investments portfolio to include residential property and owns three long lease residential properties in the Central London area, all of which are rented out. The rental derived is shown on the SoFA under '*Investment Income*'. The growth in the value of the Society's residential property investment will be shown in the SoFA as *Gains on investment assets*. The primary long-term target of the Society's residential property is to produce a yield of 4% pa and to increase in capital value by at least the rate of inflation.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

1. Accounting Policies (continued)

d) Fixed Assets

Depreciation is provided on all tangible fixed assets at rates calculated to write off, on a straight-line basis, the cost less estimated residual value over their expected useful lives as follows:

Leasehold Property	Over 50 years
Fixtures, Fittings and Office Equipment	20%
Computer equipment	33.33%

The Society operates a policy of capitalising assets whose unit cost exceeds £1,000, with expenditure below this level written off as incurred.

e) Publications

- i) Income from the Society's contracts with printers for the production, distribution and sales of its journals is determined as the best estimate for that proportion of the income (i.e. subscriptions less costs of printing, distribution, sales and commission) relating to the number of issues published before the Balance Sheet date. (*Proceedings* 7 issues out of 12, *Journal* and *Bulletin* 3 issues out of 6, *Compositio* 7 issues out of 12.) A proportionate adjustment has been made for unexpired subscriptions received direct by the Society relevant to subsequent publications. No account has been taken of costs incurred or sales proceeds received in respect of publication after the Balance Sheet date.
- ii) Publications income from LMS periodicals is recorded based on an estimated accrued basis; all other publications income is treated on a cash basis which is considered to be the most appropriate and prudent approach given the information available.
- iii) No valuation for accounting purposes is taken of any stocks of publications unsold at the Balance Sheet date.
- iv) The cost of publishing rights and subscribers' lists are written off in the year of acquisition.
- v) Royalties are taken into the Statement of Financial Activities as declared due by the relevant printers and publishers.

f) General Fund

The Unrestricted reserves are analysed between the General Fund and other Designated Funds. The General Fund, detailed in note 19 to the financial statements, is to provide for the general operation of the Society including its charitable activities not funded from Designated or Restricted Funds. Within the Society's reserves the General Fund is deemed an expendable reserve to be used in pursuit of the Society's objectives as Council may from time to time determine. At present it is managed to provide the income to be used to ensure the availability of resources for its grant schemes and other continuing charitable activities in future years.

g) Designated Funds

The Unrestricted reserves are analysed between general and designated funds. The Trustees have created the following designated funds:

- (i) **Building & Development Reserve Fund**
This reserve is to meet the costs of (a) consequences of the temporary loss of De Morgan House, (b) periodic internal and external decoration and maintenance, (c) major modifications, developments or repairs. The value of these reserves is recalculated annually to allow for increase in the costs of covering the relevant risks.
- (ii) **Printing & Publication Reserve Fund**
This reserve is to meet the costs of (a) consequential costs were the Society to cease publishing, (b) unpredictable annual fluctuations in the surplus, (c) costs of breaches of copyright or libel actions against the Society, (d) exploration and start-up costs of new ventures. The value of these reserves is recalculated annually to allow for increase in the costs of covering the relevant risks.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

1. Accounting Policies (continued)

- (iii) **Grants Payable Reserve Fund**
This fund has been established to cover grants awarded and approved by Council to be paid in future accounting periods, subject to available finance and satisfactory report.
- (iv) **Special Activities Reserve Fund**
This fund contains gifts and bequests received by the Society to be used for diverse activities in support of the Society's objectives.
- (v) **LMS 150 Anniversary Fund**
This fund is set aside for LMS 150th Anniversary celebration activities, which span 2-3 years. The fund is for special projects, including employment costs for the project administrator, but not for those enhancement costs which are under the remit of individual Committee budgets.
- (vi) **Compositio Fund**
This fund holds the transaction relating to, and any year-end excess of income over expenditure, relating to the Society's joint venture with the Foundation Compositio to produce the journal Compositio.

h) Restricted Funds

The income of these restricted funds is to be used for the following purposes:

- (i) **A. J. Cunningham Research Fund**
To support the cost of publication of work on the factorisation of large numbers.
- (ii) **The J. H. C. Whitehead Prize Fund**
To support the cost of the Annual prizes awarded for lecturing and mathematical work.
- (iii) **Lord Rayleigh's Fund**
To support the general activities of the Society.
- (iv) **The Berwick Prize Fund**
To support the Annual prize for mathematical work published by the Society.
- (v) **De Morgan Medal Fund augmented by the Sir Joseph Larmor Prize Fund**
To support the award of the De Morgan Medal and the Larmor Prize, awarded every three years.
- (vi) **Fröhlich**
To support the cost of the Annual prizes awarded for lecturing and mathematical work.
- (vii) **Shephard Prize Fund**
To support mathematics with a strong intuitive component which can be explained to those who have little or no knowledge of university mathematics.

i) Grants and Contracts

The Society has been awarded contracts and grants for some of its activities. These comprise: a contribution from IMU to support mentoring activities for mathematicians in Africa; shared costs of some activities with sister societies. The income and expenditure relating these are handled through this Fund.

j) Joint Ventures

The results of joint ventures are included in the accounts up to the year- end indicated.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

1. Accounting Policies (continued)

- k) **Members' Subscriptions**
Subscription income from members is recognised in the year to which it relates. No account is taken of members' subscriptions in arrears at the balance sheet date. No time apportionment of subscriptions is calculated as members who join or leave during the year are not entitled to partial payments or refunds.
- l) **Donations**
Cash donations are credited to the General Fund in the year of receipt but donations in kind are not recognised in these financial statements.
- m) **Recognition of grant liabilities**
Where the Society has contractual or constructive obligations to make grant payments these amounts are accrued in the accounts in accordance with the requirements of the SORP. The liability will be recognised within the year the grant is awarded. The unpaid grant commitments should normally be claimed by the end of the following financial year. However, the claim period may need to be extended for a further year (award year + 2) if the grant cannot be claimed by the end of the year following the award due to constraints on the start or end date of a grant, or due to other circumstances outside the control of the Society.
- The Society also awards some grants with conditions for payment being a specific level of service or specific output to be delivered. Such grant awards (commitments) will be reserved in the Designated funds, and the grants are only recognised in the SoFA once the recipient of the grant has provided evidence of the specific service or output. Such grants are therefore reviewed annually and the grant payments subject to the condition of a progress report with satisfactory performance. If the project spans a number of years and satisfactory progress reports are received after year one, the first stage of the grant will be released from the Designated fund and that part of the grant expenditure will be recognised in the SoFA at that point.
- Grants unclaimed by the end of award year +2 will be released back to the Society's general funds.
- n) **Grants payable**
Grants payable out of existing revenues are provided for in full in the accounts. Those payable out of future resources are held in the Grant payable Reserve Fund (see also note 1(g) (iii)).
- o) **Foreign currencies**
Monetary assets and liabilities denominated in foreign currencies are translated at the rate of exchange ruling at the Balance Sheet date. Transactions in foreign currencies are recorded at the rate ruling at the date of the transaction. All differences are taken to the Statement of Financial Activities.
- p) **Support costs**
Expenses not separately shown under direct charitable expenditure in the Statement of Financial Activities represent costs associated with the promotion of the main objects of the Society including collection of subscriptions, the making of grants and maintenance of the library. These have been apportioned to the various charitable activities on the basis set out in note 11. They include irrecoverable VAT which has been apportioned to activities on the basis set out in note 12.
- q) **Pension costs**
The pension costs charged in the financial statements represent the contributions payable by the Society for the defined contribution personal pension plan during the year in accordance with FRS17.

The USS is a multi-employer scheme where the share of assets and liabilities applicable to each employer is not identified. The Society therefore accounts for the costs on a defined contribution basis as permitted by FRS17.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

2. Investment Income

	Unrestricted	Designated	Restricted	2015	2014
	£	£	£	£	£
a) Investment income receivable:					
Total returns/ Unit Trust Distribution (Bond interest, Equities dividends, etc.)	386,750	-	5,061	391,811	342,467
Re-invested total returns	(70,351)	-	-	(70,351)	(46,751)
Net investment income receivable	316,399	-	5,061	321,460	295,716
b) Residential property rental income	79,773	-	-	79,773	31,021
c) Interest receivable:					
Treasury Reserve deposits	2,308	158	307	2,773	7,582
Other deposits	840	-	-	840	889
Total interest receivable	3,148	158	307	3,613	8,471
Total investment income	399,320	158	5,368	404,846	335,208

3. Costs of DMH conference facilities

	2015		2014	
	£	£	£	£
General expenditure	19,452		14,793	
Apportioned support costs & irrecoverable VAT	83,537		82,364	
Total		102,989		97,157

4. Charitable activities: Advancing the interests of Mathematics

	2015		2014	
	£	£	£	£
Members' services:				
<i>LMS Newsletter</i>	28,215		25,785	
Other costs	6,444		12,391	
Unrecoverable subscriptions	1,274		1,395	
		35,933		39,571
Activities to support Women in Mathematics		9,111		6,196
Activities to support Maths-Computer Sciences		2,492		4,499
Library, binding and archives		9,104		8,069
EMS, IMU, ICIAM subscriptions & ICM costs		16,386		58,795
Prizes		25,262		14,059
Non-governance Committee costs (travel, etc.)		4,455		4,837
Apportioned support costs & irrecoverable VAT		180,008		201,101
Total		282,751		337,127

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

5. Charitable activities: Enabling Mathematicians to undertake research and collaboration

	2015		2014	
	£	£	£	£
Awarded (committed) Grants				
Scheme 1 – 5, 8 and Prospects in Mathematics	388,395		391,503	
Young British and Russian Mathematicians	3,000		2,530	
Support for Mathematics in Africa	17,836		5,998	
Computer Science Grants	6,524		6,709	
Small Educational Grants	9,403		8,720	
Summer School Grants	33,500		-	
Teachers CPD Grants	8,796		-	
LMS Workshops – Symposia and Postgrad Grants	11,114		33,773	
Postgraduate Mobility Grants	96,700		-	
Undergraduate Bursaries	29,340		27,860	
Other Research Support	1,350		-	
Child care and related Grants	3,773		5,443	
	<u>609,731</u>		<u>482,536</u>	
Less: cancellation and refunds	(59,576)		(47,749)	
		550,155		434,787
Mentoring African Research in Mathematics (MARM)				
Awarded (committed) grants (Restricted)		20,000		20,000
INI/ICMS/ACME Grants (Designated)		58,000		51,000
150 Anniversary Mathematical Events (Designated)		72,027		-
Other (non-committed) Grants				
Charitable giving of LMS rooms	41,004		36,744	
Other grants (UK & international)	8,935		19,792	
		<u>49,939</u>		<u>56,536</u>
Training				
Short courses (Restricted)	-		14,435	
Research School	22,043		23,609	
		<u>22,043</u>		<u>38,044</u>
Non-governance Committee costs (travel, etc.)		4,455		4,837
Apportioned support costs & irrecoverable VAT		171,308		168,209
Total		<u><u>947,927</u></u>		<u><u>773,413</u></u>
Movement in obligation grant commitments during the year				£
Grant commitments recognised at the start of the year				213,699
New grants commitments charged to the SoFA in year (Awarded (committed) grants including MARM)				629,731
Grants paid during the year				(580,924)
Grants not taken up ('out of date')				(20,456)
Amount of grant commitments recognised as at 31 July 2015				<u><u>242,050</u></u>

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

6. Charitable activities: Disseminating Mathematical Knowledge - Publications

	2015		2014	
	£	£	£	£
a) Net Income from LMS periodicals		1,351,720		1,228,040
b) Payments for LMS periodicals				
Other Costs	(10,507)		(11,794)	
<i>Journal of Computation and Mathematics</i>	(15,275)		(7,224)	
		(25,782)		(19,018)
Net LMS periodicals surplus before Support and non-governance committee costs		1,325,938		1,209,022
Non-governance Committee costs (travel, etc.)		(5,324)		(10,788)
Apportioned support costs & irrecoverable VAT		(360,168)		(338,310)
Net LMS periodicals surplus after Support and non-governance committee costs		960,446		859,924
c) Ventures & Royalties (net income)				
<i>Nonlinearity</i>	141,352		144,889	
Russian journals (Turpion/RAS/LMS joint venture)	104,255		102,599	
TMMS (AMS/LMS joint venture)	17,176		15,757	
LMS Books and Royalties	10,361		21,841	
		273,144		285,086
<i>Compositio</i>				
Profit share & Management fee (see 6d)	108,411		106,258	
Costs of <i>Compositio</i> (LMS - only)	(10)		(549)	
		108,401		105,709
<i>Mathematika</i>		29,479		27,599
NET PUBLICATIONS SURPLUS		1,371,470		1,278,318

The Society was involved in the following publishing ventures in the year:

- (I) *Nonlinearity* – the journal co-owned with the Institute of Physics and is produced at the Institute of Physics Publishing Ltd, Temple Circus, Temple Way, Bristol BS1 6HG
- (II) The three translation journals *Russian Mathematical Surveys*, *Sbornik: Mathematics and Izvestiya: Mathematics* are owned and managed jointly by the Department of Mathematics, Russian Academy of Sciences, Turpion Ltd and the LMS. The main business address is Pion Ltd, 207 Brondesbury Park, London NW2 5JN.
- (III) The journal *Transactions of the Moscow Mathematical Society (TMMS)* is managed on a day-to-day basis at the American Mathematical Society, 201 Charles Street, Providence, RI 02904 - 2294, USA.
- (IV) *Compositio Mathematica* – the journal is wholly owned by Foundation Compositio Mathematica and managed by the LMS.
- (V) *Mathematika* – the journal is wholly owned by UCL and managed by the LMS.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

6. Charitable activities: Disseminating Mathematical Knowledge – Publications (continued)

d) *Compositio* management account

	2015	2014
	£	£
<i>Income</i>	402,622	395,672
<i>Expenditure</i>		
Direct costs	(132,251)	(132,478)
Profit share to <i>Compositio</i> Foundation	(161,960)	(156,936)
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
	(294,211)	(289,414)
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
Net <i>Compositio</i> surplus before LMS fees and Profit share	108,411	106,258
Management fee to LMS	(39,000)	(39,000)
Profit share to LMS	(69,411)	(67,258)
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
Balance C/fwd on <i>Compositio</i> Fund	-	-
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

7. Charitable activities: Disseminating Mathematical knowledge – conference and meeting programmes

	2015		2014	
	£	£	£	£
Society meetings and regional workshops	42,900		20,204	
Spitalfields Days	-		1,000	
Hardy Lecturer	7,255		6,963	
Mary Cartwright Lecture	2,212		2,189	
Forder Lecturer	-		3,695	
Invited Lectures	7,060		5,762	
150 Anniversary meetings and lectures	19,724		-	
	<hr/>		<hr/>	
		79,151		39,813
Non-governance Committee costs (travel, etc.)		4,455		4,837
Apportioned support costs & irrecoverable VAT		42,391		35,693
		<hr/>		<hr/>
Total		125,997		80,343
		<hr/> <hr/>		<hr/> <hr/>

8. Charitable activities: Promoting Mathematical research & its benefits

	2015		2014	
	£	£	£	£
Policy				
CMS	26,170		29,919	
Communication and External Relations	143,384		56,294	
Annual dinner	3,001		5,471	
Subscriptions to UK organisations	3,263		3,503	
Research Policy Activities	20,000		14,000	
	<hr/>		<hr/>	
		195,818		109,187
Education and young people, public engagement				
Holgate Lecturers	-		900	
Popular Lectures	17,297		11,145	
Other educational activities	2,709		1,293	
Knowledge Transfer	-		3,062	
	<hr/>		<hr/>	
		20,006		16,400
Promoting Women in Mathematics activities		344		22
Non-governance Committee costs (travel, etc.)		4,455		4,837
Apportioned support costs & irrecoverable VAT		343,611		259,965
		<hr/>		<hr/>
Total		564,234		390,411
		<hr/> <hr/>		<hr/> <hr/>

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

9. Governance

	2015		2014	
	£	£	£	£
Professional services				
Solicitors fees	4,076		6,899	
Audit and accountancy fees	11,500		11,800	
Audit and accountancy over-accrual	(555)		-	
Other professional fees	35		1,310	
	<hr/>		<hr/>	
		15,056		20,009
Catering, Accommodation, Travel and Subsistence				
Internal meetings (Council/F&GPC/Nomination, etc.)	25,278		20,267	
Retreat	7,515		-	
	<hr/>		<hr/>	
		32,793		20,267
Election of Trustees		4,839		7,317
Apportioned support costs & irrecoverable VAT		117,254		107,302
		<hr/>		<hr/>
Total		169,942		154,895
		<hr/> <hr/>		<hr/> <hr/>

10. Non-governance Committees

	2015	2014
	£	£
Total Catering, Accommodation, Travel and Subsistence costs	<u>23,144</u>	<u>30,135</u>
<i>As per charitable objectives:</i>		
Advancing the interest of Mathematics	4,455	4,837
Enabling Mathematicians to undertake research and collaboration	4,455	4,837
Disseminating Mathematical Knowledge – Publications	5,324	10,788
Disseminating Mathematical Knowledge – Conference & meetings prog.	4,455	4,837
Promoting Mathematics research and its benefits	4,455	4,837
	<hr/>	<hr/>
	23,144	30,135
	<hr/> <hr/>	<hr/> <hr/>

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

11. Support costs allocation by activity

	Direct staff Costs	Premises & Office costs	Informa- tion Tech- nology	General Manage- ment & Finance	Total 2015	Total 2014
	£	£	£	£	£	£
DMH conference facilities	39,133	33,576	4,955	5,544	83,208	82,022
Services for tenants (DMH)	7,235	43,167	853	1,541	52,796	45,899
Managing Residential Property	5,094	556	525	913	7,088	8,605
Advancing the interest of Mathematics	81,835	33,143	9,942	52,015	176,935	194,155
Enabling Mathematicians to undertake research and collaboration	84,837	27,272	12,010	44,800	168,919	164,615
Disseminating Mathematical Knowledge – Publications	219,105	59,228	32,689	45,965	356,987	335,639
Disseminating Mathematical Knowledge – Conference and meeting programmes	9,888	12,666	1,181	17,646	41,381	35,109
Promoting Mathematics research and its benefits	200,665	46,810	28,679	60,071	336,225	253,526
Governance	28,661	25,267	3,872	56,671	114,471	105,479
Total 2015	676,453	281,685	94,706	285,166	1,338,010	1,225,049
Total 2014	608,177	239,350	69,333	308,189		

Basis of apportionment

Support costs include (a) Direct staff costs (salaries, benefits, training, H&S, recruitment, etc.), (b) Office and Building Costs (rent, rates, services, cleaning, maintenance, telephones, postage, equipment, stationery, etc.) and (c) IT (computer hardware and software, network, internet access, websites, maintenance, software development, etc.). The costs of these are attributed to all the activities of the Society in proportion to (a) salary or f.t.e., (b) space occupied in De Morgan House, and (c) f.t.e. respectively, based on a time analysis undertaken by all staff.

The costs of services that cannot be directly attributed to an activity – such as general accounting and financial controls, HR and Executive Secretary's general management, etc. – comprise the category 'General Management and Finance' and are attributed to each area of activity on the same basis as the original elements (a)–(c).

Support costs for each area of the above activities can be higher or lower than last year due to staff time allocation. This changes from year to year and will have an effect on direct staff costs, office/premise use, IT use and general management costs.

12. Irrecoverable VAT allocation by activity

	2015	2014
	£	£
DMH conference facilities	329	342
Services for tenants (DMH)	82	108
Managing Residential Property	49	48
Advancing the interest of Mathematics	3,073	6,946
Enabling Mathematicians to undertake research and collaboration	2,389	3,594
Disseminating Mathematical Knowledge - Publications	3,181	2,671
Disseminating Mathematical Knowledge - Conference and meeting programmes	1,010	584
Promoting Mathematics research and its benefits	7,386	6,439
Governance	2,784	1,823
Total	20,283	22,555

The Society has partial exempt status in respect of VAT, based on the split of its business and non-business activities. The proportion of VAT that cannot be recovered because of partial or fully exempt status of the activity is redistributed to the activities on the same basis as support costs.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

13. Employment Costs

	2015	2014
	£	£
Total employment costs of all staff including taxable benefits for the year comprise:		
Salaries and Wages	811,639	729,952
Employer's National Insurance Contributions	72,368	64,403
Employer's Pension Contributions	118,629	112,282
	1,002,636	906,637
Total	1,002,636	906,637

The number of employees earning £60,000 per annum or more was:

	2015	2014
	No.	No.
£60,000 - £70,000	1	-
£80,000 - £90,000	1	1
£100,000 - £110,000	-	1
£110,000 - £120,000	1	-

The pension payments for the above members of staff amounted to £41,085 (2014: £30,974). These contributions were paid into a defined benefits pension scheme.

The average number of employees over the year (and full time equivalent) was:

	2014/2015		2013/2014	
	Total	FTE	Total	FTE
Management and administration	16.9	14.5	16.1	13.3
Publishing and editorial	4.0	3.8	4.0	3.7
	20.9	18.3	20.1	17
Total	20.9	18.3	20.1	17

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

14. Fixed Asset Investments

	2015		2014
	£	£	£
a) Quoted investments			
	<i>Investment assets in the UK</i>	<i>Investment assets outside the UK</i>	<i>Total</i>
			<i>Total</i>
Total Market value at 31st July 2015	7,147,030	3,542,638	10,689,668

Reconciliation of opening and closing market values:

Market value at 1 st August 2014	10,012,507	9,859,212
Additions at cost	604,998	76,491
Disposals proceeds	-	-
Realised & Unrealised gains/ (losses) (note 22a)	130,367	216,763
Movement in cash	(58,204)	(139,959)

Total Market value at 31st July 2015

10,689,668

10,012,507

Analysis by Fund:

Restricted Funds	189,737	186,240
Unrestricted Funds	10,499,931	9,826,267

% value of portfolio

Details of material investments are as follows:

Majedie UK Equity Fund	7.5%
Old Mutual UK Alpha Fund	7.3%
Aberdeen Foundation Growth Fund	6.3%
Artemis UK Special Situations Fund	5.6%
Troy Trojan Income Fund	5.4%
Schroder Charity Equity Fund	5.2%
Ruffer Total Return Fund	5.1%

b) Residential Property

	2015	2014
	£	£
Market value at 31st July 2015	2,312,000	2,005,000

Reconciliation of opening and closing market values:

Market value at 1st August 2014	2,005,000	-
Additions at cost	-	2,005,000
Unrealised gains (note 22b)	307,000	-

Total Market value at 31st July 2015

2,312,000

2,005,000

Represents purchase of property for residential letting purposes to diversify the Society's investment portfolio. The rental derived is shown on the SOFA under 'Investment Income'.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

15. Tangible Fixed Assets	Leasehold Property	Fixtures Fittings and Equipment	Total
	£	£	£
Cost			
Brought forward at 1st August 2014	2,175,353	124,777	2,300,130
Additions	-	3,885	3,885
	<hr/>	<hr/>	<hr/>
Carried forward at 31 st July 2015	2,175,353	128,662	2,304,015
	<hr/>	<hr/>	<hr/>
Depreciation			
Brought forward at 1 st August 2014	696,377	114,295	810,672
Charge for the year	44,817	6,047	50,864
	<hr/>	<hr/>	<hr/>
Carried forward at 31 st July 2015	741,194	120,342	861,536
	<hr/>	<hr/>	<hr/>
Net book value			
At 31 st July 2015	1,434,159	8,320	1,442,479
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>
At 31 st July 2014	1,478,976	10,482	1,489,458
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

- Part of the leasehold property is let out and the rental derived is shown on the SOFA under 'Activities for Generating Funds'.

16. Debtors	2015	2014
	£	£
Publications	157,234	58,811
Conference facilities	15,771	28,540
Other debtors	66,668	59,333
Income tax/VAT recoverable	551	813
Prepayments and accrued interest	22,128	16,821
	<hr/>	<hr/>
	262,352	164,318
	<hr/> <hr/>	<hr/> <hr/>

17. Creditors and Deferred Income	2015	2014
	£	£
Creditors: amounts falling due within one year		
Accruals	108,784	93,288
Grant creditors	242,050	213,699
Other creditors	302,810	273,741
	<hr/>	<hr/>
	653,644	580,728
	<hr/> <hr/>	<hr/> <hr/>
Deferred income:		
Unexpired publications' subscriptions:		
Balance brought forward	333,292	170,020
Amount released in year	(333,292)	(170,020)
Income deferred to future years	169,282	333,292
	<hr/>	<hr/>
Balance carried forward	169,282	333,292
	<hr/> <hr/>	<hr/> <hr/>

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

18. Restricted Funds

	<i>Balance at 1.08.14</i>	<i>Other & Investment Income</i>	<i>Expenditure</i>	<i>Investment gain</i>	<i>Transfers</i>	<i>Balance at 31.07.15</i>
	£	£	£	£	£	£
<u>Prize (Capital) funds</u>						
Berwick Fund	31,590	158	-	-	-	31,748
De Morgan Medal & Larmor Fund	29,787	149	-	-	-	29,936
<u>Prize (Income) funds</u>						
Berwick Fund	21,808	594	(1,500)	168	-	21,070
De Morgan Medal & Larmor Fund	38,025	1,033	-	293	-	39,351
Lord Rayleigh's Fund	14,102	383	-	109	-	14,594
J.H.C. Whitehead Fund	-	-	(10,500)	-	10,500	-
Fröhlich Fund	14,261	387	-	110	-	14,758
Shephards Fund	30,000	815	(1,500)	231	-	29,546
<u>Other funds</u>						
A.J. Cunningham Research Fund	68,044	1,849	-	525	-	70,418
Grants and Contracts	-	9,677	(20,000)	-	10,323	-
Total Funds	247,617	15,045	(33,500)	1,436	20,823	251,421

- The transfer of £10,500 from the General Fund to Restricted Funds is to cover a shortfall in income for the Whitehead prizes.
- The transfer of £10,323 from the General Fund to the Grants and Contracts represents LMS's contribution for MARM grant. (See note 20).

19. Unrestricted Funds

	<i>Balance at 01.08.14</i>	<i>Income</i>	<i>Expenditure</i>	<i>Gain/(loss) on investments</i>	<i>Transfer</i>	<i>Balance at 31.07.15</i>
	£	£	£	£	£	£
General Fund: (see note 1(f))	10,185,764	2,490,288	(2,410,151)	435,931	87,588	10,789,420
Designated Funds:						
a) Building & Development Reserve Fund	600,000	-	-	-	-	600,000
b) Printing & Publication Reserve Fund	3,000,000	-	-	-	-	3,000,000
c) Grants Payable Reserve Fund	239,000	-	(58,000)	-	-	181,000
d) Special Activities Reserve Fund	31,722	158	-	-	-	31,880
e) 150 Anniversary Fund	339,829	-	(224,433)	-	-	115,396
f) Compositio Fund	-	402,622	(294,211)	-	(108,411)	-
	4,210,551	402,780	(576,644)	-	(108,411)	3,928,276
	14,396,315	2,893,068	(2,986,795)	435,931	(20,823)	14,717,696

- f) The transfer of £108,411 from the Compositio Fund to General Fund represents the management fee and the LMS's profit share relating to the journal.

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

20. Grants and Contracts Management account

	2015		2014	
	£	£	£	£
a) EPSRC short course contracts				
Income				
Short course actual income from EPSRC	-		37,303	
Short course b/f estimated income due	-		(24,665)	
Short course c/f estimated income due	-		-	
Income for Facilitator & Admin from EPSRC	-		4,477	
	-----		-----	
		-		17,115
Expenditure				
Short course actual expenditures	-		(24,487)	
Student fees	-		10,052	
Short course b/f estimated expenditures	-		-	
Short course c/f estimated expenditures	-		-	
Facilitator's and Admin costs	-		(5,596)	
	-----		-----	
		-		(20,031)
LMS's Contribution to Short Courses		-----		-----
		-		(2,916)
b) IMU grant to the MARM				
Income	9,677		9,836	
Expenditure	(20,000)		(20,000)	
	-----		-----	
LMS's Contribution to the MARM		(10,323)		(10,164)
c) IMA, RSS & EdMS contributions to the CMS				
Income	46,648		41,741	
Expenditure (including support costs)	(80,581)		(77,763)	
	-----		-----	
LMS's Contribution to the CMS		(33,933)		(36,022)
d) IMA contribution to the JPM				
Income	5,000		5,000	
Expenditure (including support costs)	(13,738)		(16,818)	
	-----		-----	
LMS's Contribution to the JPM		(8,738)		(11,818)

NOTES TO THE FINANCIAL STATEMENTS
For the year ended 31 July 2015

21. Analysis of net assets between funds

	Unrestricted funds		Restricted	Total	Total
	General	Designated	Funds	Funds	Funds
				2015	2014
	£	£	£	£	£
Fund balances are represented by					
Tangible fixed assets	1,442,479	-	-	1,442,479	1,489,458
Investments	8,915,455	3,896,476	189,737	13,001,668	12,017,507
Current assets	1,254,412	31,800	61,684	1,347,896	2,050,987
Current liabilities	(822,926)	-	-	(822,926)	(914,020)
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Total net assets	10,789,420	3,928,276	251,421	14,969,117	14,643,932
	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

22. Gains and losses on investment assets

	Unrestricted	Restricted	2015	2014
	funds	funds		
	£	£	£	£
a) Quoted investments				
Realised gain on sale of investments	119,253	1,328	120,581	104,406
Unrealised gain in market value of investments	9,678	108	9,786	112,357
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Realised and Unrealised gain (Fixed Asset Investments: Note 14)	128,931	1,436	130,367	216,763
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Re-invested total return (investment income: Note 2)	(70,031)	-	(70,031)	(46,751)
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	<u>58,900</u>	<u>1,436</u>	<u>60,336</u>	<u>170,012</u>
b) Residential property investment				
Realised gain on sale of investments	-	-	-	-
Unrealised gain in market value of the Properties	307,000	-	307,000	-
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Realised and Unrealised gain (Fixed Asset Investments: Note 14)	307,000	-	307,000	-
	<u> </u>	<u> </u>	<u> </u>	<u> </u>

23. Transactions with Trustees and connected persons

Trustees receive reimbursement only for expenses actually incurred in attending meetings. No remuneration is paid to trustees. The gross amount that has been reimbursed in respect of attendance of meetings in the period amounted to £22,017 (2014: £25,365) for 16 Trustees (2014:18).

As disclosed in the Trustees' Report, where grants are awarded to Trustees the payment is always made to the relevant institution.