

# THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 265

November 1998

## FORTHCOMING SOCIETY MEETINGS

*Friday 20 November 1998 - London*

Annual General Meeting

L.C. Evans, J.M. Ball (Presidential Address)

*Friday-Saturday 12-13 February 1999 - Leeds*

Proof and Computation

*Friday-Sunday 14-16 May 1999 - Brussels*

Joint meeting with the Belgian Mathematical Society

## THE 1999 HARDY LECTURER

Professor Dusa McDuff, of the State University of New York at Stony Brook, has accepted the Society's invitation to be the Hardy Lecturer for 1999. Dusa McDuff was born in 1945 in London and grew up in Edinburgh. She received her BSc from the University of Edinburgh in 1967 and then went to Cambridge, where she got a PhD in 1971. She held a research fellowship in Cambridge from 1970 to 1972 and then took up Lectureships at the Universities of York (till 1976) and Warwick. She moved to SUNY at Stony Brook in 1978 and has remained there ever since. She was promoted to Full Professor in 1984 and to Distinguished Professor in 1998.

Dusa McDuff's thesis was in functional analysis, but while still a graduate student she visited Moscow for 6 months and studied with I.M. Gelfand. It was under his influence that she started to work in topology, which has remained her primary interest ever since. Starting in 1972 she worked with Graeme Segal on classifying spaces for foliations, exploring ways to construct interesting spaces by pulling apart groups of diffeomorphisms. This led her to work with diffeomorphisms that preserve an additional geometric structure, such as a volume element or symplectic

form. Just as she became interested in symplectic geometry in 1983, new ideas were developed that made it possible to understand symplectic structures in a completely new way. Hence since then she has worked almost exclusively in this field.

Dusa McDuff has published some 50 research papers, including over 30 in symplectic geometry. Recently she has been working in collaboration, notably with Francois Lalonde, Leonid Polterovich and Dietmar Salamon. She has also written two monographs with Salamon on different aspects of symplectic geometry. She was awarded the first Ruth Lyttle Satter prize in 1991, and was elected a Fellow of the Royal Society in 1994 and a Fellow of the American Academy of Arts and Sciences in 1995. She was awarded an Honorary DSc from the University of Edinburgh in 1997. She is now Chair of the Board of Trustees of MSRI.

She has given many lectures on symplectic geometry, in particular an Invited Address at the Kyoto ICM (1990), a Plenary Address at the 2nd European Congress in Budapest (1996), the Noether Lecture at the AMS winter meeting (1998) and a Plenary Address at the Berlin ICM (1998).



Professor McDuff will visit the UK for about a month, divided into two periods: 13-27 May 1999 and 7-18 June 1999. She will give about a dozen lectures, including the 1999 Hardy Lecture to the Society on Friday 18 June 1999, and two lectures on the topic of 'Women in Mathematics'. A list of the topics which she has offered is given below. Institutions that wish to invite Professor McDuff to give a lecture should write to the Executive Secretary, Dr D.J.H. Garling, at De Morgan House (e-mail: [garling@lms.ac.uk](mailto:garling@lms.ac.uk)) by **11 December 1998**, giving a first and second choice of lecture topics. It is expected that more invitations will be received than can be accepted, and neighbouring institutions are therefore encouraged to submit joint invitations. The itinerary and lecture title at each venue will be decided by the Society's Programme Committee, in consultation with Professor McDuff and with the host institutions.

Lecture topics:

1. **A survey of symplectic topology**  
The most elementary lecture, and a general introduction to the field.
2. **Symplectic 4-manifolds**  
A general talk, comparing symplectic 4-manifolds with smooth and Kähler 4-manifolds. Assumes an acquaintance with topology and the theory of smooth manifolds.
3. **The topology of groups of symplectomorphisms**  
Accessible to anyone with a knowledge of differential topology.
4. **Quantum cohomology**  
This talk discusses the recently established quantum multiplication of the rational cohomology of a closed symplectic manifold, and is probably the most technical of the talks.

## 2001 HARDY LECTURER

In Spring 1999 the Society's Council proposes to appoint the 2001 Hardy Lecturer. The Lectureship is awarded to a distinguished overseas mathematician, who then comes to the United Kingdom

and Ireland for from four to six weeks, visits a number of universities and addresses the June meeting of the Society, giving in all about twelve lectures during this stay. The visit usually takes place during the months of May and June.

Recent Hardy Lecturers are:

1991 H.B. Lawson, Jr  
1993 W. Feit  
1995 K.R. Parthasarathy  
1997 J.P. May  
1999 D. McDuff

The Council invites members of the Society to submit their views on possible candidates for appointment to this Lectureship, together with reasons for their choice, confidentially in writing or by e-mail to the Executive Secretary, Dr D.J.H. Garling at De Morgan House (e-mail: [garling@lms.ac.uk](mailto:garling@lms.ac.uk)) or to any member of the 1999 General Purposes Committee (Professor M.J. Taylor, Professor J.S. Pym, Professor A.O. Morris, Professor E.C. Lance, Dr N.J. Woodhouse) by **11 December 1998**.

## ANNUAL DINNER

The 1998 Annual Dinner will be held after the Annual General Meeting on Friday 20 November at 7.00 pm at The Montague Hotel, 15 Montague Street, London WC1. The cost is £30.00 per person and members may book places for guests. Members and their guests will be received in De Morgan House from 6.15 pm. The booking form, enclosed with the October *Newsletter*, should be returned together with payment to the London Mathematical Society office by **Monday 9 November**.

## ERRATUM

The Mathematical Olympiad Handbook: An introduction to problem solving based on the first 32 British Mathematical Olympiads by A. Gardiner (Oxford University Press, 1997) ISBN 0-19 850105 6, 242 pp, £14.95. We apologise to Tony Gardiner and Oxford University Press for getting the details wrong in the October *Newsletter* Book Review, page 15.

# LONDON MATHEMATICAL SOCIETY

Annual General Meeting

Friday 20 November 1998 at 3.15 pm

Professor L.C. EVANS (Berkeley)

will speak at 3.30 pm on  
Some Dynamical Mass Transfer Problems

Professor J.M. BALL, FRS (Oxford)  
will give his Presidential Address  
at 5.00 pm on

The Mystery of Quasiconvexity

All interested are very welcome  
Tea will be served at 4.30 pm

The meeting will be held in the Harrie Massey  
Lecture Theatre, University College London,  
Gower Place, London WC1

PLEASE NOTE THE EARLY START AT 3.15 pm



## JOURNAL BACKLOG 1998

	No. of Issues	No. of Pages	Backlog	Estimate (months)
Math. Proc. Camb.	6	1200	500	18
Edin. Math. Society	3	624	300	18 - 24
Glasg. Math. Journ.	3	384	180	18 - 20
LMS Bulletin	6	672	100	10 - 14
LMS Journal	6	1536	2000	24 - 30
LMS Proceedings	6	1440	400	14 - 20
Mathematika	2	440	150	15 - 27
Oxford Q J M	4	512	362	18
R S Edin. Proc. A.	6	1344	500	12 - 14

As is self-evident from the figures given above, there is a severe backlog for the *Journal* of the London Mathematical Society, which has built up over the last few years. The new Editors will rectify this over the next two years by a significant increase in the number of pages for 1999 and 2000. At least for 1999, this will not affect the price of the journal to individual subscribers and institutions.

E.C. Lance



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Further particulars may be found at the Web site: <http://www.maths.abdn.ac.uk>  
Application forms and further particulars are available from Personnel Services, University of Aberdeen, Regent Walk, Aberdeen AB24 3FX, telephone (01224) 272727 quoting reference number FMA027A. A 24-hour answering service is in operation.

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## Spitalfields Day

Friday 6 November 1998

Isaac Newton Institute for Mathematical Sciences  
Seminar Room 1, 20 Clarkson Road, Cambridge

3.00 pm W.T. Gowers (Rouse Ball Professor of  
Mathematics)  
*Fourier analysis and Szemerédi's theorem*

4.00 pm Tea

4.30 pm R.E. Borcherds (Royal Society Professor)  
*What is moonshine?*

5.30 pm Reception

Anyone interested is welcome to attend, but it would be helpful if participants from outside Cambridge could let Professor Lickorish know by e-mail ([wbrl@dpmms.cam.ac.uk](mailto:wbrl@dpmms.cam.ac.uk)) so that he can estimate numbers. There are limited funds available to assist research students to attend; please apply before the meeting to the Executive Secretary, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HP ([lms@lms.ac.uk](mailto:lms@lms.ac.uk)).

THE 1998 HERIOT-WATT UNIVERSITY AND  
INTERNATIONAL CENTRE FOR MATHEMATICAL  
SCIENCES LECTURE

FROM INDIVIDUAL  
TO COLLECTIVE DEMAND:  
a mathematical investigation

Professor Ivar Ekeland  
Université Paris-Dauphine

Professor Ivar Ekeland is Professor of Mathematics at the University of Paris-Dauphine and has written several books, both academic and popular, and numerous papers on mathematics and its applications.

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The standard model of economic theory states that collective demand is the sum of individual demands and that each of the latter arises from utility maximisation subject to budget constraint.

Professor Ekeland will investigate the mathematical implications of these assumptions and examine whether the model has testable consequences at the aggregate level. This leads to nonlinear systems of partial differential equations which can be solved locally by using the tools developed at the beginning of this century, particularly by Elie Cartan, for the needs of differential geometry.

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6.00 pm Friday 13 November

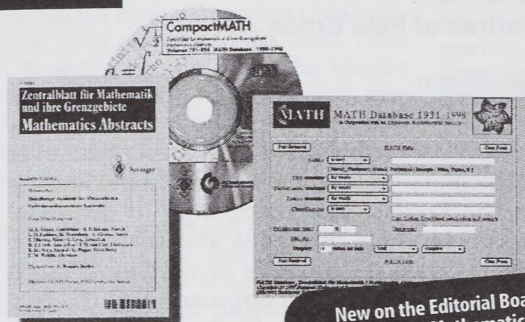
at the James Watt Centre,  
Riccarton Campus, Heriot-Watt University

Tea at 5.30pm  
Wine and nibbles after the lecture

All are welcome



# Zentralblatt MATH



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- Fachinformationszentrum Karlsruhe
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### **N is a Number: A Portrait of Paul Erdős**

*George Csicsery*

1993; documentary film; 57 min.

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Paul Erdős is one of the most prolific mathematicians who ever lived. He was also the wandering genius with no home and no job who eschewed the traditional trappings of success. Dedicating his life to posing new problems and searching for their solutions, Erdős inspired generations of mathematicians throughout the world with his insightful approach and the wry humor with which he discussed politics, death, and the cosmic struggle to uncover proofs "hidden" by the most stubborn of adversaries—God. This stunning film captures Erdős' mathematical quest in all its personal and philosophical dimensions.

### **Erdős on Graphs:**

#### **His Legacy of Unsolved Problems**

*Fan Chung and Ron Graham*

1998; 1-56881-079-2; 142 pp; \$30.00, £20.00

This book is a tribute to Paul Erdős, once described as the "prince of problem solvers and the absolute monarch of problem posers." It examines—within the context of his unique personality and lifestyle—the legacy of open problems he left to the world after his death in 1996. By cataloguing these unsolved problems in a comprehensive and well-documented volume, the authors hope to continue the work of an unusual and special man who fundamentally influenced the field of mathematics.



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## 51st BRITISH MATHEMATICAL COLLOQUIUM University of Southampton

The 51st British Mathematical Colloquium will be hosted by Southampton University between 29th March and 1st April 1999, with financial support from the London Mathematical Society. Lectures will take place from the evening of Monday 29th until midday on Thursday 1st April.

The plenary speakers are D. Vogan (MIT), A. Shalev (Jerusalem), F. Buekenhout (Brussels) and E. Ghys (Lyon). Special sessions in Geometric Group Theory (organised by D.B.A. Epstein) and in Stochastic Analysis (organised by T.J. Lyons) will take place in addition to morning lectures and afternoon splinter groups.

Part of the LMS grant is to be used to subsidize the expenses of postgraduate students who attend the Colloquium. We urge postgraduate students to take advantage of this, and ask LMS members to bring this notice to the attention of postgraduates. Further information will appear in a future *Newsletter*, together with a registration form. Information will also be made available on <http://www.maths.soton.ac.uk/bmc/>.

## GEOMETRISCHE STRUKTUREN IN DER MATHEMATIK Westfälische Wilhelms-Universität Münster

At the beginning of this year the new Sonderforschungsbereich Geometrische Strukturen in der Mathematik took up its work in Münster, Germany. It covers Arithmetic, Rigid, Analytic, Differential and Noncommutative Geometry and Algebraic Topology with a particular emphasis on interactions. Every two years it will host a 'Symposion' reporting on new developments in these geometric theories.

The first Symposion will take place from 14 - 18 December 1998. The following speakers have agreed to give one-hour lectures: A.A. Beilinson, V. Berkovich, U. Bunke, P. Colmez, I. Itenberg, M.

Kapranov, M. Kreck, E. Kirchberg, Q. Liu, M. Rapoport, W. Soergel, C. Soulé, E. Vogt. If you wish to participate in the symposium please contact the secretary of the SFB: Mrs. Nicole Fertmann, Hittorfstr. 27, 48149 Münster (tel: +49 251 8332770, fax: +49 251 8332774, e-mail: [nfertma@math.uni-muenster.de](mailto:nfertma@math.uni-muenster.de)).

## INFINITE DIMENSIONAL ANALYSIS AND GEOMETRY UK - Japan Joint Research Project Supported by The Royal Society

The Royal Society has agreed to an extension of the scheme administered by the Isaac Newton Institute for Mathematical Sciences, Cambridge University. The objective is to advance recent developments in analysis and geometry and their applications, with special emphasis on problems of infinite degrees of freedom, through collaboration with colleagues in Japan.

Under this scheme, UK-based mathematical scientists are selected to visit a Japanese institution for up to six months to take part in relevant research projects. Similarly, Japanese mathematical scientists will be selected to participate in research in UK institutions. Air fares for UK scientists visiting Japan will be funded from the Royal Society Scheme. Japanese scientists visiting the UK will have their subsistence paid by the scheme.

UK mathematical scientists visiting Japan in this co-operation will collaborate with Japanese mathematical scientists working on the following aspects of Infinite Analysis and Geometry, although applicants with research interests in other related fields will also be considered:

- Algebraic geometry and global complex analysis
- Low-dimensional topology by infinite dimensional methods
- Operator algebras and their applications
- Integrable models in quantum field theory and statistical mechanics
- Algebraic analysis of singular perturbations

Applications are sought from UK based



postdoctoral mathematical scientists to take part in this project. Any person selected will be expected to provide a brief report on their visit within one month of returning to the UK.

In the first instance, applicants should provide the following information:

- Name(s) of Professors or research scientists in Japan with whom they wish to collaborate, and name of institution if known (if either of these are not known, arrangements may be made based on the applicant's research interests).
- Area of research interest.
- Representative list of applicant's published papers.
- Approximate dates of proposed visits (the minimum period is one month although some variation is allowed).
- Applicant's contact details, ideally a fax number or e-mail address to enable fast communication.

To apply, please contact: Ann Cartwright, The Administrator, Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge CB3 0EH (fax: 01223 330508, e-mail: a.cartwright@newton.cam.ac.uk).

## FUNCTIONAL ANALYSIS VALENCIA 2000

Functional Analysis Valencia 2000, an international functional analysis meeting on the occasion of the 70th birthday of Professor Manuel Valdivia, will be held at the Technical University of Valencia, Spain, 3-7 July 2000. It is a satellite conference to the Third European Congress of Mathematics in Barcelona (10-14 July), and it is sponsored by the Technical University of Valencia (UPV) and the University of Valencia (UV). There will be about 15 invited plenary lectures on various topics of functional analysis. Participants will have the opportunity to submit abstracts for lectures of 25 minutes in parallel sessions; details of this and the conference fee will be announced later on. The Proceedings will be published in the series North-Holland Math. Studies.

The following mathematicians have already accepted to give invited talks: G. Dales (Leeds, UK), T.W. Gamelin (UCLA, USA), G. Godefroy (Paris VI, France), J. Lindenstrauss (Jerusalem, Israel), N. Kalton (Columbia, MO, USA), R. Meise (Düsseldorf, Germany), A. Pelczynski (Warsaw, Poland), G. Pisier (Paris VI, France and Texas A & M, USA), D. Vogt (Wuppertal, Germany), P. Wojtaszczyk (Warsaw, Poland).

The Scientific Organizing and Programme Committee consists of R.M. Aron (Kent State, USA), K.D. Bierstedt (Paderborn, Germany), J. Bonet (Valencia), J. Cerdà (Barcelona), H. Jarchow (Zürich, Switzerland), M. Maestre (Valencia), J. Schmets (Liège, Belgium) and the Local Organizing Committee consists of the following mathematicians from UPV and UV: C. Fernández, A. Galbis, P. Galindo, D. Garcia, M. López Pellicer, V. Montesinos, A. Peris.

To pre-register for the meeting, e-mail [VLC2000@uni-paderborn.de](mailto:VLC2000@uni-paderborn.de) or write by regular mail to K.D. Bierstedt, University Paderborn, FB 17, Math., D-33095 Paderborn, Germany or J. Bonet, Universidad Politecnica de Valencia, Departamento de Matematica Aplicada, E-46071 Valencia, Spain. The homepage of the meeting can be found at the web sites (<http://math-www.uni-paderborn.de/VLC2000/> and <http://www.upv.es/VLC2000/>).

## ERIC PRIMROSE

The death is announced of Eric Primrose on 25 September 1998. He was a translator for Russian Mathematical Surveys (RMS) for many years, before becoming Deputy Editor of the RMS to the late Professor Kurt Hirsch in the 1980's. He became RMS Editor in 1986, when Hirsch died, and lead RMS through the very considerable changes. Eric will be sorely missed by his colleagues at Leicester University and by those in the LMS and the Russian Academy of Sciences who were privileged to work with him.



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Salary will be in the range £ 30,496- £ 34,464 per annum, according to age, qualifications and experience. The post is tenable from 1 September 1999. Informal enquiries are welcome and may be made to Professor T J Bridges (01483-259642, email: [t.bridges@mcs.surrey.ac.uk](mailto:t.bridges@mcs.surrey.ac.uk)).

Application forms and further particulars can be obtained by contacting the Personnel Office or the office of the School of Electronic Engineering, Information Technology and Mathematics. The closing date for applications is 4th December 1998.



## EUROPEAN MATHEMATICAL SOCIETY

### Origins

The history of the European Mathematical Society (herein denoted by EMS and not to be confused with an older society in Edinburgh) began in 1976 when the European Science Foundation initiated discussions on the possibilities of European co-operation in mathematics. These discussions led to the creation of a European Mathematical Council, which was established in 1978 at Helsinki on the occasion of the International Congress of Mathematicians. The presidency of this Council was filled by Sir Michael Atiyah.

The task of the Council was mainly to write the statutes of the future EMS. In spite of the political difficulties linked to the ICM at Warsaw in 1982, which slowed down the development, the Council evolved into a biennial forum having delegates from both Eastern and Western Europe. The discussions on the legal form and the aims of the future EMS continued in Prague (1986) and Oberwolfach (1988). Eventually, in 1990, unanimous agreement was reached at a meeting held, under the auspices of the Polish Academy of Sciences, at the small town of Madralin some 20 kilometres from Warsaw. The first President (Autumn 1990-1994) was F. Hirzebruch (Bonn). The current President (1995-98) is J.-P. Bourguignon (IHES).

### Constitution and Aims

The EMS was constitutionally established under Finnish law with its legal seat in Helsinki. The membership of the EMS consists of the mathematical societies in Europe and comprises 1700 individual members who have joined through their national societies. (There are also institutional members but their number is not significant). The governing body of the EMS is its Council, which meets once every two years. The Council, formed from delegates representing the societies and individual members, elects an Executive Committee (EC) of 10 members: a President (who must be a delegate and may only serve for four years), two Vice-Presidents, Secretary, Treasurer, and 5

ordinary members.

The main purpose of the EMS is to encourage the development of all mathematical activities in European countries with particular attention being paid to those activities that promote a European dimension. The EMS seeks to establish a sense of identity amongst European mathematicians. It aims to promote research in mathematics and in its applications; it will assist and advise on problems on mathematical education and on the presentation of mathematics to the general public. The work of the EMS is done by the EC and by various sub-committees which the EC has created.

### Present Activities

After 8 years of existence, it is perhaps fitting that one should review the developments of the EMS, many pertinent aspects of which were discussed at the last Council meeting (28-29 August 1998) in the Senate room of the historic Humboldt University (Berlin).

The EMS has achieved a privileged and responsible position in regard to relations between mathematicians and the European Science Foundation and between mathematicians and the appropriate directorates of the European Union. Direct access has been gained to the highest officials and commissioners of these directorates with the result that the EMS has been able to exert influence in matters of policy which affect mathematics in Europe.

An important task for the EC has been the consideration of the arrangements for the European Congresses of Mathematics, the first and the second of which were held in Paris (1992) and Budapest (1996) respectively. The third Congress will be held in Barcelona (10-14 July 2000) under the engaging slogan "Shaping the 21st Century". The aims of any Congress are threefold:

- To present to European mathematicians the state of the art in the study of problems in mathematics and its applications.



- To promote relations between mathematicians and society in Europe.
- To stimulate cooperation between European mathematicians at personal and constitutional level.

The 'classical' part of the Congress consists of plenary talks, parallel conferences and poster sessions. The 'non-classical' part consists of 'round tables' which give an opportunity for the exchange of ideas concerning the relations between mathematics and other sciences, mathematics and education, mathematics and society, etc. To encourage new talent, 10 prizes are awarded at the Opening Ceremony of a Congress to European mathematicians of at most 32 years of age.

The EMS has always been keen to raise the appreciation, by the general public, of the contribution of mathematics to our modern scientific culture. With this objective the EMS has launched a series of conferences under the title of 'Diderot Mathematical Forum'. Each conference lasts for two days and the three component parts take place simultaneously in three European cities, exchanging information by telecommunications and addressing in their programmes aspects of mathematics, its applications and its relations with society at large. The attendance at the conference is widely drawn from philosophers to journalists. Three forums have taken place so far, namely, 'Mathematics and Finance' (London, Moscow, Zurich, 24-25 September 1996), 'Mathematics and Environment' (Amsterdam, Madrid, Venice, 19-20 December 1997), and 'Mathematics as a Force of Cultural Evolution' (Berlin, Cracow, Florence, 5-6 June 1998). The next forum is 'Mathematics and Music' (Lisbon, Paris, Vienna, 3-4 December 1999) and others are under consideration.

An EMS Lectureship has been inaugurated with the intention that in each odd-numbered year a distinguished mathematician should visit an institution or institutions to give some lectures of an advanced expository nature on a topic of current research interest. In 1995, H.W.

Lenstra Jr lectured on 'Algorithms in the Algebraic Theory of Numbers' (Besançon). In 1997, N. Cutland lectured on 'Loeb Measures' in Helsinki. In 1999, M. Lyubich will lecture on 'Real and Complex Dynamics' (Barcelona, St. Petersburg and Copenhagen).

In order to promote interaction amongst young mathematicians, two series of summer schools each year, one in mathematics and one in the applications of mathematics, have been arranged. About 100 postgraduates have attended each summer school. In 1996, summer schools were in 'Algebraic Geometry' (Eger) and 'Analysis and Systems of Nonlinear Oscillating Systems' (Zelegonorsk). In 1997 summer schools were in 'Non-commutative Geometry and Applications' (Monsaraz, Lisbon) and 'Space Optimisation' (Orsay). In 1998 summer schools were in 'Spaces with Singularities and Monopoles' (Cluj-Napoca) and 'Wavelet Methods in Analysis and Simulation' (Orsay).

A major innovation, and still in an evolving phase, has been the European Mathematical Information Service (EMIS), which since June 1996 has been run in collaboration with FIZ-Karlsruhe. Its address is <http://www.emis.de>. Its ftp anonymous access is <ftp://ftp.emis.de>. The server contains the Electronic Library, general information on the EMS, information on mathematical activities and institutions, lists of conferences, the text of the Newsletter, etc. Free electronic access is currently available to 31 journals; other journals, including for example, the *Annals of Mathematics*, will become available in the future. The master server of EMIS has 20 mirrors in Europe and 13 mirrors in other continents.

The EMS is trying to improve its visibility through publishing ventures. The Newsletter has recently undergone an improvement in appearance and content. The EMS has become involved as a partner in the *Zentralblatt für Mathematik* and in the database *Zentralblatt-MATH* along with Springer-Verlag, FIZ-Karlsruhe and the Heidelberg Academy. A new research



journal, the *Journal of the European Mathematical Society* (JEMS) is to appear early in 1999. Further publications are presently being considered.

In 1992 in Rio de Janeiro, the year 2000 was declared "World Mathematical Year" by J.-L. Lions who was then the President of the International Mathematical Union (IMU); this declaration has the financial sponsorship of UNESCO. WMY2000 has as its themes, the great challenges of the XXIst century, the image of mathematics and the extent to which mathematics is a key for development. The guiding spirit of the declaration is an emphasis on the international dimension of mathematics and its place and role in the culture of the XXIst century. The EMS is working closely with the IMU to promote appropriate activities in European countries for WMY2000; these activities range from the issuance of special postage stamps to the organisation of mathematical exhibitions and lectures.

An important action of the recent Council meeting was the appointment of the new members of the EC. From 1 January 1999, the EC will have the following membership:

President R. Jeltsch (Switzerland)  
 Vice-President A. Pelczar (Poland)  
 Vice-President L. Lemaire (Belgium)  
 Secretary D.A. Brannan (United Kingdom)  
 Treasurer O. Martio (Finland)  
 Ordinary Members:

B. Branner (Denmark),  
 D. Cioranescu (France),  
 R. Piccinini (Italy),  
 M. Sanz-Solé (Spain),  
 A. Vershik (Russia).

### Concluding Remarks

This article has attempted to give a representative selection of the activities in which the EMS is involved; inevitably in an outline account much has to be omitted. The new EC will soon be formulating plans for action into the forthcoming Millennium. The simplest and best way to learn of, and to make suggestions for, such plans is to become a

member of the EMS. Indeed, the EMS needs as many members as possible to strengthen its position in discussions with governmental organisations, publishers and so on. The annual subscription is comparatively modest - do join!

D.A.R. Wallace

### BELFAST FUNCTIONAL ANALYSIS DAY

The Department of Pure Mathematics at Queen's University Belfast will host a one-day meeting on functional analysis on Saturday 21 November 1998. This conference is organised by Dr Martin Mathieu and Professor Anthony W. Wickstead and will focus on general aspects of functional analysis. The scientific programme consists in two one-hour lectures given by Professor Bernard Chevreau, Bordeaux, France, entitled "The Invariant Subspace Problem", as well as contributed 30 minute talks by the participants. Further information can be obtained via e-mail (m.m@qub.ac.uk).

### GRESHAM COLLEGE GEOMETRY

During the 1998 Autumn Semester three Public Lectures in Geometry will be given by Professor Sir Roger Penrose, (Gresham Professor of Geometry) 'Mathematics: Truth, Beauty and Depth', on Thursday 5 November at 5.30 pm, 'Mathematics in the Arts' on Tuesday 17th November at 5.30 pm, and 'Mathematics in the Natural World' on Tuesday 8 December at 5.30 pm. Admission to the lectures is free and without tickets and all will be delivered at Gresham College, Barnard's Inn Hall, Holborn, London EC1N 2HH from where further details can be obtained (tel: 0171-831 0575; fax: 0171-831 5208; e-mail: enquiries@gresham.ac.uk; web site: <http://www.gresham.ac.uk>).



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Please send detailed applications (three copies) as soon as possible to The Assistant Registrar (Centre), Office of Administration, UWI, Mona, Kingston 7, Jamaica (Fax: (1 876) 977 1422), from whom application forms and further particulars of the post, including salary, are available. Further particulars of the post are also available from the Association of Commonwealth Universities (46945), 36 Gordon Square, London WC1H 0PF (tel: 0171 387 8572 Ext. 206; fax: 0171 383 0368; email: [appts@acu.ac.uk](mailto:appts@acu.ac.uk)).

Additional information about the position can also be obtained from the Head of Department, Professor Han Reichgelt tel: (1 876) 927 2464 or (1 876) 977 1810; email: [han@uwimona.edu.jm](mailto:han@uwimona.edu.jm); or Professor David Johnson, Professor of Pure Mathematics, email: [dlj@uwimona.edu.jm](mailto:dlj@uwimona.edu.jm). Interested candidates are invited to contact Professor Reichgelt or Professor Johnson, preferably by email.

The successful candidate is expected to take up duties by January 1999 or earlier if possible. In order to expedite the appointment procedure, applicants are advised to ask their referees to send confidential reports directly to the University without waiting to be contacted.

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Edinburgh, 6 - 15 April 1999

**Organizing committee**

- Jean-Philippe Anker (Université Henri Poincaré - Nancy 1, France)
- Anthony Carbery (University of Edinburgh, UK)
- Peter Sjögren (Göteborg University & Chalmers University of Technology, Sweden)

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The conference will be devoted to the analytic aspects of Lie Group Theory, in connection with PDEs. It will serve as an introduction to this active field of mathematics for junior scientists (advanced graduate students or postdocs), as well as an exchange opportunity for specialists. There will be six series of 4 hour-long survey lectures, complemented by about 15 specialized talks. Speakers will include:

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William Beckner (University of Texas, Austin, USA)  
Alexander Bendikov (Universität Erlangen-Nürnberg, Germany)  
Thomas P. Branson (University of Iowa, USA)  
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EPSRC (Engineering and Physical Sciences Research Council of the UK)  
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For more information, please contact:

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**H. CARTAN**  
**Honorary Member 1959**



## DIARY

The diary lists Society meetings and other events publicized in the Newsletter. For further information, refer to the figure in brackets, which is a cross reference to the LMS Newsletter number.

### NOVEMBER 1998

- 5 Schrödinger Lecture: J.B. Hartle, Imperial College, London (264)  
6 Spitalfields Day, Isaac Newton Institute, Cambridge (265)  
16 History of Mathematics Seminar, Oxford (264)  
20 London Mathematical Society Meeting, Annual General Meeting  
20 Edinburgh Mathematical Society Meeting, Strathclyde (263)

### DECEMBER 1998

- 5 SECANTS, Oxford (264)  
11 Edinburgh Mathematical Society Meeting, Napier (263)  
16-22 Symmetry and Perturbation Theory Workshop, Rome, Italy (258)

### JANUARY 1999

- 15 Edinburgh Mathematical Society Meeting, Edinburgh (263)  
25-27 Phase-Transition Phenomena in Combinatorial Problems EPSRC/LMS MathFit Workshop, Liverpool (261)

### FEBRUARY 1999

- 10-14 European Congress of Mathematics, Barcelona, Spain  
12 Edinburgh Mathematical Society Meeting, Edinburgh (263)  
12-13 Two-day LMS Meeting, Proof and Computation, University of Leeds

### MARCH 1999

- 12 Edinburgh Mathematical Society Meeting, Abertay (263)  
29 - 1 Apr British Mathematical Colloquium, Southampton University

### APRIL 1999

- 6-9 LMS Invited Lectures - Professor A. Mielke, University of Bath (262)

### MAY 1999

- 7 Edinburgh Mathematical Society Meeting, Stirling (263)  
14-16 Belgian Mathematical Society and London Mathematical Society Joint Meeting, Université de Bruxelles (260)(261)

### JUNE 1999

- 4 Edinburgh Mathematical Society Meeting, Aberdeen (263)  
18 LMS Meeting, Hardy Lecture, London

### JULY 1999

- 5-9 International Congress of Industrial and Applied Mathematics (ICIAM 99), Edinburgh University (252)  
12-16 British Combinatorial Conference, Kent University (254)  
12-16 American Mathematical Society and Australian Mathematical Society Joint Meeting, University of Melbourne (260)

### AUGUST 1999

- 22-29 Hall Algebras Summer School, Hesselberg, Germany (263)

### APRIL 2000

- 17-20 British Mathematical Colloquium, Leeds University

### JULY 2000

- 17-22 International Congress of Mathematical Physics, Imperial College, London (257)

### APRIL 2001

- 9-12 British Mathematical Colloquium, Glasgow University

The Newsletter is published monthly except in August. Items and advertisements for inclusion in the Newsletter should be sent to the Editor, Susan Oakes, by e-mail, fax or post to the LMS office (addresses below), to arrive before the first day of the month prior to publication.

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