# THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 290

February 2001

# FORTHCOMING SOCIETY MEETINGS 10 February 2001 - Oxford Mary Cartwright Lecture C.S. Morawetz, K.W. Morton Wednesday 28 February 2001 - Birmingham Inaugural LMS Regional Meeting (Midlands) Friday 22 June - London Hardy Lecture Friday 6 July - Manchester Northern Regional Meeting Wednesday 12 September - Bristol South Western Regional Meeting

# NEWS FROM DE MORGAN HOUSE

We welcome Frances Spoor to De Morgan House. Frances has been appointed as Secretary. Besides working for the President, Executive Secretary and Administrator, she will also be looking after the needs of the Society's Officers and helping run some of the Society's committees.

# **EXECUTIVE SECRETARY**

Following the forthcoming retirement of Dr D.J.H. Garling, the Executive Secretaryship of the LMS will become vacant in September 2002, or possibly earlier. Suggestions of names of persons to be considered for the position would be welcomed and should be sent to the President (j.stuart@ic.ac.uk, or 020 7594 8535 or Professor J.T. Stuart, Mathematics, I C S T M, London SW7 2BZ).

#### MathSciNet AT DE MORGAN HOUSE AND UCL LIBRARY

LMS members are now entitled to access MathSciNet from the Society's headquarters at De Morgan House and also UCL library. A computer is available in the Verblunsky Room (Members' Room) at De Morgan House for members to use the internet, e-mail, telnet and ftp. Register with Lee-Anne Taylor, the receptionist, on arrival. If you wish to access MathSciNet from UCL library, it is necessary to book access to the Library's computers. This procedure was outlined in the September 2000 Newsletter.

# J.A. WEIGHTMAN

Mr J.A. Weightman, who was elected a member of the London Mathematical Society on 15 December 1950, died on 15 January 2001, aged 72.

## LAST NEWSLETTER

This will be the last *Newsletter* you will receive if you have not yet paid your 2000/01 LMS subscription, which was due on 1 November 2000. If you have misplaced your renewal of subscription form, which was included with your October 2000 Newsletter, either contact the LMS Office (e-mail: membership @lms.ac.uk; tel: 020 7637 3686; fax: 020 7323 3655) or download the form from the LMS website (http://www.lms.ac. uk).

# VISIT OF PROFESSOR V. SHCHERBACOV

Professor Victor Shcherbacov of the Institute of Mathematics, Academy of Sciences of Moldova, Chisinau (Kishinev) will visit the University of Surrey for three weeks in February 2001. His visit is supported by an LMS International Short Visit Scheme 5 grant. Professor Shcherbacov is a member of the internationally renowned Department Quasigroup Theory led formerly by the late V.D. Belousov and presently by G.B. Belyavskaya. He will give talks at Royal Holloway and Bedford New College at 4.00 pm on Tuesday 13 February (about the work of himself and his Department) and at Goldsmith's College at 4.30 pm on Tuesday 20 February. For further information contact Dr A.D. Keedwell, Department of Mathematics and Statistics, University of Surrey (a.keed well @surrey.ac.uk).

## VISIT OF PROFESSOR A. MEDNYKH

Alexander Mednykh, Professor of Mathematics at Novosibirsk State Univeristy, is visiting the University of Durham from 25 January to 13 February. For further information contact Gareth Jones (g.a.jones@maths.soton.ac.uk) or John Parker (j.r.parker@durham.ac.uk). His visit is supported by an LMS International Short Visit Scheme 5 grant.

## VISIT OF PROFESSOR S. YU. SLAVYANOV

Professor S. Yu. Slavyanov from St Petersburg University, Russia, is to visit the University of Leeds for one month starting from 1 March 2001. He is supported by an LMS International Short Visit Scheme 5 grant. During this visit he will give three lectures on Heun functions and related problems of mathematical physics with the following titles:

- "Integral relations beyond hypergeometric functions", University of Leeds, 9 March
- "Schrödinger equations of Heun class and S. Kovalevskaya dynamics", University of Birmingham, 20 March
- "Asymptotics for Heun equation and double confluent Heun equation", University of Bristol, 23 March

Further details about Professor Slavyanov's visit are available from Dr V.B. Kuznetsov (v.b.kuznetsov@leeds.ac. uk).

## WALTER LEDERMANN 90TH BIRTHDAY CONFERENCE

A one-day conference to celebrate the 90th birthday of Professor W. Ledermann will be held in the School of Mathematical Sciences at the University of Sussex on Monday 19 March, beginning with refreshments in the Common Room at 11 am and lasting till 3 pm. The speakers are: P.M. Neumann (Oxford) and M.W. Liebeck (Imperial).

There will be a buffet lunch at 12.30pm at a cost of £15 including wine. Please indicate your participation to Sue Bullock (e-mail: s.bullock@susx.ac.uk, tel: 01273 678361), and send cheques for the lunch, made out to University of Sussex, to Mrs S.D. Bullock, School of Mathematical Sciences, University of Sussex, Brighton BN1 9QH. For any other enquiries, contact James Hirschfeld (e-mail: jwph@ susx.ac.uk).

# LONDON MATHEMATICAL SOCIETY

# MARY CARTWRIGHT LECTURE

Saturday 10 February 2001

# Room L2, Mathematical Institute, 24-29 St Giles, Oxford.

- 3.30-4.30 Professor Bill Morton Evolution Operators and Numerical Modelling of Hyperbolic Equations
- 4.30-5.00 Tea
- 5.00-6.00 Professor Cathleen Synge Morawetz Mathematics and Flying Aeroplanes The Dame Mary Cartwright Lecture

A reception and dinner will be held after the meeting at St Hugh's College, Oxford. The cost of the dinner is £20 per person, inclusive of wine. Those wishing to attend should inform Susan Oakes, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS, enclosing a cheque payable to the "London Mathematical Society" to arrive no later than **Monday 5 February**. Those wishing to book accommodation should contact Susan Oakes (oakes@lms.ac.uk).

Some funds are available to contribute in part to the expenses of members of the Society or research students who wish to attend the meeting. Requests for support should be addressed to the Meetings and Membership Secretary, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS (lms@lms.ac.uk). Requests should include an estimate of expenses and a very brief *curriculum vitae*; research students should include brief letters of endorsement from their supervisors.

#### VISIT OF PROFESSOR E. HOROZOV

Professor Emil Horozov from Sofia University, Bulgaria, will visit the University of Leeds for one month starting from 17 March. He will give the following talks at the Universities of Loughborough and Leeds:

- "Orthogonal polynomials as eigenfunctions of differential operators", University of Leeds, 20 March
- "Dualities in Weyl algebras", University of Loughborough, 21 March

This visit is supported by an LMS International Short Visit Scheme 5 grant. Further details about Professor Horozov's visit are available from Dr V.B. Kuznetsov (v.b.kuznetsov@leeds.ac.uk).

# 53RD BRITISH MATHEMATICAL COLLOQUIUM

The 53rd British Mathematical Colloquium will take place at the University of Glasgow from 9 to 12 April 2001. The principal speakers will be Henri Berestycki, Michel Broué, Henri Darmon and Clifford Taubes. There will be special sessions on Partial Differential Equations and Modular Forms. For further information, consult the website at www.maths. gla.ac.uk/bmc2001, send an e-mail to bmc2001@maths.gla.ac.uk, or write to Colloquium. Mathematical British Department of Mathematics, University of Glasgow, University Gardens, Glasgow G12 8QW. The British Mathematical Colloquium is supported by the London Mathematical Society and the Glasgow Mathematical Journal Trust.



# LONDON MATHEMATICAL SOCIETY REGIONAL MEETING

# UNIVERSITY OF BIRMINGHAM SCHOOL OF MATHEMATICS & STATISTICS

# Wednesday 28 February 2001

1.45 pm	Arrival (Watson Building)	
2.00 pm	Welcome (Physics Bridge, Watson Building)	
2.30 pm	Professor Ian Stewart (Warwick) Mathematical Patterns in Animal Locomotion (Lecture Room A, Watson Building)	
3.40 pm	Dr Joe Kyle (Birmingham/LTSN) Recent Developments in Web Based Assessment. (Lecture Room A, Watson Building)	
4.40 pm	Tea (Physics Bridge, Watson Building)	
5.15 pm	Professor Michael Aschbacher (CalTech) Modern Permutation Group Theory (Lecture Room A, Watson Building)	
6.15 pm	Reception, Prize giving for the best Postgraduate Poster (Physics Bridge, Watson Building)	
7.00 pm	Dinner (University, Staff House)	

If you have not already done so, then please let Chris Parker (cwp@for.mat.bham.ac.uk) know if you will be attending the meeting. In particular, he needs to know in advance if you will be attending the dinner (between £15 and £20, not including drinks)

Also please inform Chris Parker if you would like (or if you have been told you would like) to display a poster at the meeting. See www.mat.bham.ac.uk/lms/ poster.htm for further details.

During the three days following this meeting there will be an LMS sponsored mini-conference (also at Birmingham) on Groups and Geometries.

Some funds are available to contribute in part to the expenses of members of the Society or research students who wish to attend the meeting. Requests for support should be addressed to the Meetings and Membership Secretary, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS (Ims@Ims.ac.uk). Requests should include an estimate of expenses and a very brief *curriculum vitae*; research students should include brief letters of endorsement from their supervisors.

# CECIL KING TRAVEL SCHOLARSHIP

The Cecil King Memorial Foundation has established a Cecil King Travel Scholarship in Mathematics to the value of £5000, to be awarded annually to a young mathematician of outstanding promise, to support a period of study or research abroad for a typical period of three months, to enhance his or her studies and further his or her career development. The Scholarship will normally be awarded to a UK or Irish National under the age of 25 years, either registered for or having recently completed a doctoral degree at a UK University.

The award will be competitive and based on a written proposal describing the intended programme of study or research abroad and the benefits to be gained from such a visit, a short presentation and an interview.

The award will be made by the Council of the London Mathematical Society on the nomination of the Cecil King Prize Committee, whose members will be nominated by the Society's Education Committee.

The initial application will include:

- 1. A completed application form.
- 2. A short proposal (4 pages maximum) indicating the proposed programme of study abroad, the benefit of such an opportunity in advancing the candidate's studies and an indication of the Institute that the candidate wishes to visit.
- 3. A letter of support from the Head of their Department or from their Research Supervisor.

The initial applications will then be considered by the Cecil King Prize Committee to select up to six candidates for interview. At this stage, the selected candidates will be asked to approach the intended research institution or research leader to be visited to confirm that a visit would, indeed, be welcomed if an award was made. The short-listed candidates will then be invited to make a brief presentation to the Cecil King Prize Committee on their proposed research and the benefits to be gained from the visit abroad.

Final ratification of the award will require formal confirmation from the institution/person to be visited, indicating their willingness to welcome the visit and to provide whatever supervision and research facilities might be needed. Any supervision or other fees will be paid from the Prize.

At the end of the visit, the student will be expected to write a short report to the Cecil King Memorial Foundation Trust, indicating the activities and benefits gained from the visit.

Application forms may be obtained from the Executive Secretary, The London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS (e-mail: lms@lms.ac.uk) or from the Society's website at http://www.lms. ac.uk/activities/prizes\_com/index.html. The closing date for applications is **Thursday 22 February 2001**. It is intended that the Scholarship will be awarded on 11 May 2001.

# CLASSICS IN MATHEMATICS

Classical Potential Theory and Its Probabilistic Counterpart

#### J.L. Doob

# Classical Potential Theory and Its Probabilistic Counterpart

#### From the reviews:

"In the early 1920's, Norbert Wiener wrote significant papers on the Dirichlet problem and on Brownian motion. Since then there has been enormous activity in potential theory and stochastic processes, in which both subjects have reached a high degree of polish and their close relation has been discovered. Here is a monumental work by Doob, one of the masters, in which Part 1 develops the potential theory associated with Laplace's equation and the heat equation, and Part 2 develops those parts (martingales and Prownian motion) of stochastic process theory which are closely related to Part 1."

Shart Baok Reviews, 1985

2008, Reprint of the 1st ed. 1984. XXVIII, 846 pp. Softcover \* CM 69,: £ 24,: FF 260,: Lit. 76,200 KBN 3-540-41206-9

Please order from Springer - Customer Service Haberstr. 7 69126 Heldelberg, Germany Tel: +49(0)6221 - 345 - 217/8 Fax: +49(0)6221 - 345 - 229 e-mail: orders@springer.de or through your bookseller

Recommended secul prices. Process and other default are solved to change without and in FU comprises the local VAT is effective. Days - ProcEMPTERS

Elliptic Partial Differential Equations of Second Order

#### D. Gilbarg, N.S. Trudinger

# Elliptic Partial Differential Equations of Second Order

#### From the reviews:

"This is a book of interest to any having to work with differential equations, either as a reference or as a book to learn from. The authors have taken trouble to make the treatment self-contained, It (is) suitable required reading for a PhD student, Although the material has been developed from lectures at Stanford, it has developed into an almost systematic coverage that is much longer than could be covered in a year's lectures. *Newsleter, New Zealand* 

Mathematical Society, 1983

"Primarily addressed to graduate students this elegant book is accessible and useful to a broad spectrum of applied mathematicians."

Revue Roumaine de Mathématiques Pures et Appliquées,1983

"The authors have succeeded admirably in their aims; the book is a real pleasure to read." *Mathematical Reviews*,1086

2000, Reprint of the 2nd ed., rev. 3rd printing 1998, XVI, 518 pp. Softcover \* DM 69, 7 £ 24, 7 FF 260, 7 Ut. 76, 200 ISBN 3-540-41160-7

## R.C. Lyndon, P.E. Schupp Combinatorial Group Theory

Combinatorial Group Theory

From the reviews: "This book (....) defines the boundaries of the subject now called combinatorial group theory. (...)it is a considerable achievement to have concentrated a survey of the subject into 339 pages. This includes æ substantial and useful bibliography; (over noo [items]). ... the book is a valuable and welcome addition to the literature, containing many results not previously available in a book. It will undoubtedly become a standard reference."

Mathematical Reviews, AMS, 1979

2000. Beprint of the 1st ed. 1977. XVI. 340 pp. 18 Bgs. Softcover \* DM 69-4 & 24-5F 260-(18, 76,200 ISBN 3-540-41159-5

You are not club easy You or each of each part in formation Come and actually to our fee adopting service for one books

http://www.springer.de/math/



#### SPITALFIELDS DAYS

In 1987, the London Mathematical Society instituted a series of occasional meetings called 'Spitalfields Days'. The name honours our predecessor, the Spitalfields Mathematical Society, which flourished from 1717 to 1845.

A Spitalfields Day is usually associated with a long-term symposium on some specialist topic at a UK university. One of the symposium organizers is asked to arrange a one-day meeting at which selected participants, often distinguished experts from overseas, will give survey lectures on topics in the field of the symposium or other types of lecture accessible to a general mathematical audience. These meetings are publicized in the *Newsletter* and all members are invited to attend. The Society offers a modest grant for the organization to cover administrative and other expenses, with the balance to be used at the discretion for purposes associated with the meeting (for example, a subsidized lunch). Funds are also made available to help research students attend the meeting.

Anyone involved in running a symposium who would be interested in organizing a Spitalfields Day is invited to write to Dr N.M.J. Woodhouse, Meetings & Membership Secretary, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS (grants@lms.ac.uk). The format need not be precisely as described, but should be in a similar spirit.



To Order: Plymbridge Distributors Ltd. Estover Road, Plymouth PL6 7PZ, United Kingdom Tel: +44-1752-202301 Fax: +44-1752-202331 www.plymbridge.com

#### Or Contact:

A K Peters, Ltd. 63 South Ave, Natick, MA 01760 USA Tel: (508)655-9933 Fax: (508)655-5847 www.akpeters.com service@akpeters.com

Publishers of the journal Experimental Mathematics **Tools for Teaching** (You will like the books. Your students will love the prices.)

A comprehensive text that you'll keep as a reference:

Discrete Algorithmic Mathematics, 2<sup>nd</sup> Edition Stephen B. Maurer and Anthony Ralston Hardcover; 910 pages; £44.00

Two texts stressing concepts over computation:

Calculus Lite, 2<sup>nd</sup> Edition Frank Morgan Paperback; 320 pages; £20.00 Riemannian Geometry: A Beginner's Guide, 2<sup>nd</sup> Edition Frank Morgan Hardcover, 160 pages; £24.00

# LONDON MATHEMATICAL SOCIETY

# Spitalfields Day

Mathematics Research Centre University of Warwick

Monday 26 March 2001

# RANDOM PARTIAL DIFFERENTIAL EQUATIONS

Organiser: Andrew Stuart (Warwick)

All talks will be held in the Mathematics Institute

# Programme

9.30 -10.30	Professor Alexandre Chorin (Mathematics, Berkeley) Prediction, irreversibility and computability		
10.30-11.15	Coffee		
11.15-12.15	Professor Jerzy Zabczyk (Polish Academy of Sciences, Warsaw) An introduction to stochastic evolution equations		
12.15-1.45	Lunch		
1.45-2.45	Professor Arnaud Debussche (ENS Cachan-Bretagne) Nonlinear dispersive waves perturbed by noise		
2.45-3.45	Professor Boris Rozovskii (University of Southern California) <i>Wiener chaos and stochastic numerics</i>		
3.45-4.30	Теа		
4.30-5.30	Professor Andrew Majda (Courant Institute, NYU) Mathematical strategies for stochastic modelling in climate and other disciplines		
5.30-6.30	Wine and snacks		
This is part of the EPSRC funded meeting on Computational Stochastic Differential Equations, 26 - 31 March 2001			
For further information contact: Peta McAllister			

Mathematics Research Centre, University of Warwick, Coventry CV4 7AL (e-mail: peta@maths.warwick.ac.uk; tel: 024 7652 4403; fax: 024 7652 3548).

# OUP & AMS

## The Fermat Diary C. J. Mozzochi

This book concentrates on the final chapter of the story of perhaps the most famous mathematics problem of our time: Fermat's Last Theorem. This eyewitness account and wonderful collection of photographs capture the marvel and unfolding drama of this great mathematical and human story.

2000, 200 pages, 0-8218-2670-0, Hardback, £17.75

# Analytic K-Homology Nigel Higson and John Roe

LMS Members are entitled to a 10% discount on all of these titles.

the Cornel Chart

This book acquaints the reader with the essential ideas of analytic K-homology and develops some of its applications. It includes a detailed introduction to the necessary functional analysis, followed by an exploration of the connections between K-homology and operator theory, coarse geometry, index theory, and assembly maps, including a detailed treatment of the Atiyah-Singer Index Theorem.

Oxford Mathematical Monographs 2000, 320 pages, 0-19-851176-0, Hardback, £65.00

# Exploring the Number Jungle A Journey Into Diophantine Analysis Edward B. Burger



This highly readable book brings to life the fundamental ideas and theorems from diophantine approximation, geometry of numbers, diophantine geometry and \$p\$-adic analysis. Many hints and remarks are provided to be freely used and enjoyed.

Student Mathematical Library No. 8 2000, 144 pages, 0-8218-2640-9, Paperback, £12.50

# ICIAM 99

Proceedings of the Fourth International Congress on Industrial & Applied Mathematics, Edinburgh Edited by J.M. Ball and J.C.R. Hunt

The book contains the texts of plenary lectures at ICIAM 99. It also contains details of the opening ceremony, prizes awarded, organization, list of mini synopsia, list of participants, together with various photos.

2000, 352 pages, 0-19-850514-0, Hardback, £65.00

www.oup.co.atk

OXFORI

@\\\(

To order direct by credit card, call either of the numbers below and have your details with you when you dial. Tel: +44 (0) 1536 454534 or Fax: +44 (0) 1536 454418

# DOCTORAL TRAINING ACCOUNTS

Heads of Department of Mathematics have received a letter from Dr Alastair Rose, the EPSRC Mathematics Programme Manager, explaining how funds from the Mathematics Programme will be allocated to Doctoral Training Accounts (DTAs).

For 2001 and 2002 studentship starts, the distribution of funds will be carried out according to the following guidelines:

- the value of the Doctoral Training Grant (DTG) awarded to an individual department will be determined by the number of Mathematics Programme "pool" research studentships that were awarded to that department, averaged over the last three years (1998-2000 starts) or five years (1996-2000 starts), whichever produces the higher number. (Studentships will count irrespective of whether filled or not: those from the former "earmarked" pool are included. Each overseas EU studentship will count as the equivalent of a UK studentship. Mathematics CASE project studentships will not be included in this calculation since the special arrangements for them will continue to apply at the present time (see the EPSRC web for details).)
- Penalties (in the shape of reduced grants) will apply where a filled studentship has not resulted in submission of a PhD thesis within 4 years.
- Departments whose average as calculated under the above algorithm is less than 0.5 will not receive a financial allocation from the doctoral training budget of the Mathematics Programme. However those departments may apply separately to EPSRC for funds at the average studentship rate (see below), by nominating an individual student of high mathematical calibre (first class honours or equivalent) for training in the remit of the Mathematics Programme. A deci-

sion will be made within two weeks of the nomination on a first-submittedfirst-awarded basis. Those departments concerned will have been notified of this by EPSRC in December and will have received guidance on the nomination arrangements.

• The current average unit cost of a studentship (£38K) will be used to calculate each department's share of the available Mathematics Programme budget for doctoral training, adjusted for resourcing CASE studentships (of which there will be 25 starting in 2001) and for supporting student nominations from notified departments, as per the previous bullet point.

DTGs will be awarded to institutions, but funds will be attributed to individual departments. Some mathematics departments may receive doctoral funding from EPSRC programmes other than the Mathematics Programme; such additional funds will have been calculated according to research grant earnings in these other programmes. Accounts cannot be used to meet the cost of stipends in respect of overseas EU students, but departments can retain unused funds in the account to support other eligible students.

From 2003 onwards, in order to allow change in the levels of DTAs awarded to departments, EPSRC plans to adjust the figures stemming from the above algorithm using advice from peer review panels. These will employ similar principles to those used by EPSRC mathematics studentship 'pool' panels in the past. It is expected that the data used will include:

- (i) student and supervisor quality,
- (ii) use of DTAs to lever support from other sources of funding,
- (iii) EPSRC volume of research activity data - that is, the number of EPSRC Mathematics Programme grants

awarded to (members of) the department.

Heads of Departments are being asked to comment on this review process, particularly about the data to be used.

The London Mathematical Society will also send its comments, and so would welcome input from members. If you have views on this matter, would you please send them to Professor K.A. Brown, Department of Mathematics, Glasgow University, 15 University Gardens, Glasgow G12 8QW (e-mail: kab@maths.gla.ac.uk), to reach him by the end of March.

## 2000 LMS POPULAR LECTURE VIDEOS

The videos of the 2000 LMS Popular Lectures are now available. Once again we have recorded the actual lectures given in London, not studio versions. They can be purchased from Lee-Anne Taylor (taylor@lms.ac.uk), the Receptionist at the LMS, at a cost £10 for one or £7.50 each for two or more videos (including postage and packing). Further information and an order form are on the LMS website (http://www.lms.ac.uk/).

#### 2000

#### Simplicity and Complexity (John Barrow)

Physicists say that the world is simple, but biologists disagree. Superstrings, chaos and the theory of complexity all help to resolve this contradiction.

#### Fractals - the New Geometry (Kenneth Falconer)

How can mathematics model highly irregular phenomena such as trees, mountain skylines and stock market prices? Fractal geometry provides an answer!

#### 1999

#### Floating, Spinning, Tumbling (Frank Berkshire)

How do objects like to float, tennis racquets spin and polyhedral dice come to rest? Order and chaos in action!

#### Tangent Circles Patterns & Packings (Caroline Series)

Patterns of tangent circles have led to geometrical problems from ancient Greece to old Japan. Classical geometry has much to say about this, but the full solution is a wonderful 20th century idea.

#### 1998

#### Marrying, Voting, Choosing (Tom Körner)

Mathematics cannot tell us how to marry, vote or choose, but it can cast an interesting light on these problems.

#### Giraffe Blood Flow and Pattern-forming Bacteria (Tim Pedley)

Why is a giraffe's heart so huge, and why do swimming bacteria form patterns? Biological fluid dynamics has the answers.

# VISIT OF DR M. OLIVER

Dr Marcel Oliver (Mathematisches Institut, Universität Tübingen, Germany) will be visiting the UK in February. He will be giving three separate talks on "Lagrangian Averaged Dynamics" as follows:

- 21 February at 2 pm: Department of Mathematics and Statistics, University of Surrey, in the Nonlinear Mathematics Seminar Series organised by David Schley.
- 23 February at 4 pm: Mathematics Department, Imperial College, London.
- 27 February at 4:15 pm: Room M320, Mathematics Department, Heriot-Watt University, Edinburgh in the Turbulence Seminar Series organised by Professor Sergei Kuksin.

For further information contact Dr Simon Malham, Mathematics Department, Heriot-Watt University, Edinburgh EH14 4AS (e-mail: s.j.malham@ma.hw.ac.uk, tel: 0131 451 3200). His visit is supported by an LMS Scheme 2 visitors grant.

## MathGate http://www.mathgate.ac.uk

Locating mathematics resources on the Internet can be difficult and time consuming. MathGate is trying to make the process simpler by creating an Internet resource catalogue for mathematics.

Using section editors MathGate discovers, evaluates and describes electronic mathematics resources that are available over the web. These resources are classiaccording MSC2000 fied to (Mathematical Classification System), which is a revision by Mathematical Reviews and Zentralblatt MATH of MSC1991 which was originally developed by Chris Eilbeck of Heriot Watt. This allows users of MathGate to search the catalogue using mathematical terms as well as being able to browse on mathematical subject fields in order to find the resources that they require. The types of resources that MathGate includes in its catalogue are online documents, electronic journals, email lists, newsgroups, software, Web sites of professional societies, research groups and departments.

MathGate has also been collaborating with Math-Net to support the Secondary Homepages Project in the UK. Because of the different structure of departmental homepages, Math-Net have devised a concept for a standardised "secondary" homepage for mathematics departments. This page is not designed to replace departmental homepages and should contain a prominent link to the homepage. So far nine institutions in the UK -Birmingham, Brighton, Ulster, Liverpool, Kings College, Manchester, Oxford Brookes, Sheffield Hallam and Keele have a secondary homepage. The secondary homepages project is supported by the International Mathematical Union (IMU).

MathGate is also the UK contact for the Agenda des Conférences en Mathématiques (ACM), a searchable database of mathematical talks, seminars and colloquia. The quick search options include location and subject. If you are organizing a mathematical seminar or colloquium in your department and its schedule is published on its own web page, you might like to include this information in the ACM database. To do this you will have to use some customized ACM tags in your HTML files. For more information please contact MathGate.

Other projects that MathGate is involved in include the Internet Mathematician and the development of a mathematics portal. The Internet Mathematician is a free "teach yourself" tutorial delivered over the Web for students, lecturers and researchers who want to learn what the Internet can offer in the field of mathematics. It forms part of the Virtual Training Suite and will be available in May 2001. The mathematics portal is to begin development in August 2001 and will be based on the portals currently being developed in medicine, social sciences and engineering.

MathGate also works closely with the Learning and Teaching Support Network for Mathematics, Statistics and OR.

MathGate is a JISC (Joint Information Systems Committee) funded project and forms part of the Resource Discovery Network (RDN). There is no charge for using MathGate.

For more information please contact: Greig Fratus, MathGate Manager, G9, Main Library, University of Birmingham, Edgbaston, Birmingham B15 2TT (tel: 0121 414 2758, fax: 0121 471 4691, email: G.J.Fratus@bham.ac.uk).

- URLs: • MathGate -
- http://www.mathgate.ac.uk/
- MSC2000 http://www.ams.org/msc/
- Mathematical Reviews http://www.ams.org/mrlookup/
- Zentralblatt MATH http://www.emis.de/ZMATH/
- MSC1991 http://www.ma.hw.ac.uk/ ~chris/MR/MR.html

- Math-Net http://www.mathnet.org/
- MathGate Secondary Homepage Project - http://www.mathgate.ac.uk/ secondary/about.html
- International Mathematical Union http://www.mathunion.org/ or the UK mirror http://www.maths.soton. ac.uk/EMIS/mirror/IMU/
- Agenda des Conférences en Mathématiques http://acm.emath.fr/index-us.html
- Virtual Training Suite http://www.vts.rdn.ac.uk/
- Learning and Teaching Support Network for Mathematics, Statistics and OR - http://ltsn.mathstore.ac.uk/
- JISC http://www.jisc.ac.uk/
- RDN http://www.rdn.ac.uk/

## DOROTHY HODGKIN FELLOWSHIPS

The Royal Society Dorothy Hodgkin Fellowship is designed to offer the kind of support and flexibility which are particularly beneficial for female scientists. Each fellowship offers four years' guaranteed tenure and annual research expenses as well as access to a mentor scheme and networking with other fellows. Appointments can be held on a part-time or full-time basis to help match family commitments. and work Approximately 15 fellowships will be available from 1 October 2001. For application forms and further information visit the Royal Society's website (www.royalsoc.ac.uk) or contact the Research Appointments Department at the Royal Society (tel: 020 7451 2547 or e-mail: ukresearch .appointments@royalsoc.ac.uk). Deadline for receipt of applications is 9 February 2001. Amongst those awarded fellowships in 2000 were: Dr Francesca Mezzadri and Dr Nina C. Snaith, both to work in the School of Mathematics, University of Bristol, and Dr Linda J. Cummings, to work in the School of Mathematics, University of Nottingham.

UK Secondary Homepages:

- Birmingham http://www.mat.bham. ac.uk/mathnet/
- Brighton http://www.it.bton.ac.uk/ cms/mathnet/
- Ulster http://www.infc.ulst.ac.uk/ mathnet/ulster.htm
- Liverpool http://www.liv.ac.uk/ maths/math-net/
- Kings College http://www.mth.kcl. ac.uk/Math-Net/
- Manchester http://www.ma.man. ac.uk/Math-Net/
- Oxford Brookes http://www.cms. brookes.ac.uk/math-net/
- Sheffield Hallam http://www.shu.ac. uk/maths/mathnet/
- Keele http://www.keele.ac.uk/ depts/ma/mathnet

## GRESHAM COLLEGE GEOMETRY

During the Spring Semester, three Public Lectures in Geometry will be given by Professor Sir Roger Penrose, FRS (Gresham Professor of Geometry).

- Wednesday 14 February at 1.00 pm *Knot or Not?*
- Wednesday 21 February at 1.00 pm Topology, and What It Can Be Used For
- Wednesday 28 February at 1.00 pm Probability, Power and Paradox

All the lectures will be delivered at Gresham College, Barnard's Inn Hall, Holborn, London EC1N 2HH. Admission to the lectures is free and without tickets. Further details can be obtained from Gresham College (tel: 020 7831 0575; fax: 020 7831 5208; e-mail: enquiries@ gresham.ac.uk; web site: http://www. gresham.ac.uk).

# CONGRATULATIONS

Congratulations to Alasdair Rose, EPSRC Programme Manager for Mathematics, who received an MBE in the New Year's Honours List.



# GRESHAM COLLEGE

Founded 1597

# APPOINTMENT OF GRESHAM PROFESSOR of GEOMETRY

Gresham College was established in 1597 under the will of Sir Thomas Gresham as an independent educational institution. It supports programmes of free public lectures and interprets the 'new learning' of Gresham's day in contemporary terms. It involves those who live and work in the City of London in intellectual debate, and is particularly interested in candidates who can address and stimulate general audiences. Applications or nominations for appointment in the above discipline are invited. The appointment is part-time from September 2001 for three years. Past Gresham Professors include Sir Christopher Wren and Robert Hooke; recent Professors include Professor Sir Christopher Zeeman FRS and Professor Ian Stewart. The retiring Professor is Sir Roger Penrose FRS.

The Chair of Geometry can address any branch of mathematics, geometry or computer science. Candidates with an interest in computational modelling would be especially welcome.

All Professors must offer six lectures each year. Opportunities also exist for support for their research. Candidates must have an interest in reaching an international audience via information and communications technology. An annual fee of £4,500 is payable.

Please request further particulars from The Provost (Dept LMS), Gresham College, Barnard's Inn Hall, Holborn, London EC1N 2HH Tel: 020 7831 0575. Fax: 020 7831 5208 e-mail: enquiries@gresham.ac.uk www.gresham.ac.uk

Closing date for applications is mid-day Friday 23 February

Gresham College Trust is a company limited by guarantee registered in England and Wales. Registered Charity No: 1039962

# Isaac Newton Institute for Mathematical Sciences

# THE HERITAGE OF I. SCHUR'S 1901 DISSERTATION

# A Satellite Meeting to the INI programme on

Symmetric Functions and Macdonald Polynomials

# Gregynog Hall, Newtown, Powys

# Saturday 2 - Tuesday 5 June 2001

**Organisers:** A.O. Morris (Aberystwyth), C. Bessenrodt (Magdeburg), S. Donkin (Queen Mary and Westfield), G.D. James (Imperial), A. Kerber (Bayreuth), J.B. Olsson (Copenhagen).

**Theme:** The meeting will celebrate the centenary of I. Schur's 1901 Dissertation which has been so influential in the development of representation theory. Also, it was in this work that Schur functions first appeared, especially in their relationship to the representations of general linear groups and symmetric groups. Macdonald polynomials are generalisations of Schur functions and their relevance to a broad area within mathematics and physics is becoming increasingly apparent. An equally significant contribution has been made by J.A. (Sandy) Green, in particular in his influential Springer Lecture Notes where Schur's work was presented in modern terminology. This has led to even more contemporary developments in quantum groups and Hecke algebras. Thus, this meeting will simultaneously celebrate Sandy Green's 75th Birthday and will mark his striking contribution to this subject. These celebrations will be held on Sunday 3rd June culminating in a Dinner.

**Expected Speakers:** C. Bessenrodt (Magdeburg), A. Cox (City), R. Dipper (Stuttgart), K. Erdmann (Oxford), R.M. Green (Lancaster), M. Haiman (San Diego), A. Henke (Kassel/Weitzmann Institute), A. Kleshchev (Oregon), G.I. Lehrer (Sydney), I.G. Macdonald (Queen Mary and Westfield), P. Pragacz (Warsaw), A. Ram (Wisconsin), B. Srinivasan (Chicago), J-Y. Shi (Shanghai), J-Y. Thibon (Marne-la-Vallée).

**Participation and Costs**: The total cost is expected to be in the region of £170. The meeting is funded by generous grants from the London Mathematical Society and the Isaac Newton Institute. Limited financial support may be available for participants from the UK, especially postgraduate students, and LMS Scheme 5 countries. If you are interested in possible participation in this meeting, please contact Alun Morris (aom25@newton.cam.ac.uk) or Tracey Andrew (t.andrew@newton. cam.ac.uk) or one of the organisers.

Further information is available at http://www.newton.cam.ac.uk/sfmw04.html

## MATHEMATICS POSTGRADUTE OPEN DAY AT KING'S COLLEGE LONDON

A Mathematics Postgraduate Open Day will be held at King's College London on 23 February. The provisional programme is:

- Talks on Geometry and Topology, Analysis and Partial Differential Operators, Number Theory and Theoretical Physics
- Panel discussion on Doing an MSc, MPhil or PhD at King's
- Presentation of MSc and PhD programmes in Financial Mathematics and in Information Processing, Neural Networks and Disordered Systems

A registration form, an information booklet 'Postgraduate Mathematics at King's' and further information may be obtained from: Miss Sam Glass, Postgraduate Secretary, Mathematics Department, King's College London, Strand, London WC2R 2LS (tel: 020 7848 2107, e-mail: pgopenday.maths@ kcl.ac.uk).

## THE ROYAL SOCIETY BAKERIAN LECTURE

The Royal Society Bakerian Lecture, given annually, is the Society's premier lecture in the physical sciences. In 2001 it is being given by Professor David Sherrington FRS on Magnets, microchips, memories and markets: statistical physics of complex systems. The Lecture will take place on Wednesday 7 February at 5.30 pm, at the Blackett Laboratory, Imperial College, London.

Disorder and frustration in the interactions between even quite simple microscopic entities can lead to complex macroscopic co-operative behaviour, whose understanding has required the development of novel concepts and techniques and continues to pose challenges. In this talk an overview will be given of the origin and character of such complexity and its conceptual understanding. It will be shown how resultant concepts can be fruitfully and symbolically transferred between systems of physically quite different appearance.

All are welcome to attend. Tickets will not be issued and seats cannot be guaranteed. Parties of 6 or more are asked to inform the Society beforehand. The Society reserves the right to refuse admission. For further information contact: Froniga Lambert (tel: 020 7451 2574, e-mail: froni ga.lambert@royalsoc.ac.uk, web: http:// www.royalsoc.ac.uk/events).

# LMS WORKSHOP-SYMPOSIA

The Society funds a number of workshops and small symposia. The format is very flexible and they can be held anywhere in the UK. The topic can vary from being quite specialised and suitable for an intensive period of work to one that needs to be exposed to the UK community. When assessing a proposal the LMS Research Meetings Committee will seek expert advice, make suggestions and before offering support it will need to be convinced that the benefits to UK mathematics are likely to be significant.

Applications for a total expenditure in the range £4K to £10K will be entertained. Exceptionally, the Committee will consider proposals for which there is other major support. Applications for smaller amounts can be made for LMS Conference Grants, which are handled by the LMS Programme Committee.

Detailed applications should be made to Professor E.G. Rees (elmer@maths.ed. ac.uk) as soon as possible and in any case at least 12 months prior to the meeting. The application should include the scientific case, names of likely participants (including the likely number of post-graduates), the proposed venue arrangements and detailed costs. Applicants are advised to consult Professor Rees about their proposed programme before making a formal application.

Organisers of workshops and small symposia are required to make both an academic report and a financial report, after the meeting has taken place. Isaac Newton Institute for Mathematical Sciences

# Workshop VARIATIONAL PROBLEMS WITH SINGULARITIES

# 25 June - 29 June 2001

Organisers: Professor F. Bethuel and Professor H. Brezis.

**Themes:** Problems occurring in physics (liquid crystals, superfluids, superconductors), as well as in emerging fields such as image processing, lead to solutions of variational problems with singularities - points, lines or surfaces. The aim is to bring together people with various backgrounds: physicists, material scientists, and mathematicians from the fields of nonlinear PDEs, geometry, geometric measure theory, calculus of variations and applied mathematics.

# Specific topics to be addressed include:

- Mathematical problems occurring in the physics of superconductors or superfluids
- Mathematical problems in liquid crystals
- Variational problems occurring in image segmentation and discontinuous structures
- Connections with geometric measure theory, harmonic maps and Cartesian currents
- Sobolev spaces with values into manifolds
- Vortices and renormalized energies
- Stability and symmetry in the Ginzburg-Landau system
- Topology of vortices and connections with fluid mechanics and chemistry

Participants (provisional): A. Aftalion, S. Alama, G. Alberti, L. Almeida, L. Ambrosio, F. Bethuel, H. Brezis, L. Bronsard, A. Chang, K.C. Chang, M. Comte, M. Giaquinta, S. Gustafson, R. Jerrard, R. Hardt, M. Keissling, Y.Y. Li, K. Mallick, P. Mironescu, L. Nirenberg, J. Ockendon, G. Orlandi, Y. Pomeau, T. Rivière, E. Sandier, J-C. Saut, S. Serfaty, I. Shafrir, M.I. Sigal, M.Soner, P. Sternberg, P. Yang.

**Location and cost** The Workshop will take place at the Newton Institute and accommodation for participants will be provided in single study bedrooms with shared bathrooms at Wolfson Court, a hall of residence adjacent to the Institute. The workshop package costs £300, which includes registration fee, accommodation, breakfast and dinner from dinner on Sunday 24 June until breakfast on Saturday 30 June, and lunches and refreshments on the days that lectures take place.

**Further information and application forms:** These are available from the WWW at http://www.newton.cam.ac.uk/programs/NPD/npdw03.html, where further information about the Workshop will be posted and updated.

**Completed application forms** should be sent to Maureen Clark at the above address, or via email to m.clark@newton.cam.ac.uk. Scientific enquiries may be addressed to Professor Bethuel (bethuel@ann.jussieu.fr) or Professor Brezis (brezis@ccr.jussieu.fr).

Closing date for receipt of applications and abstracts is 28 February 2001.

# AN INTERVIEW WITH SUSAN OAKES

Susan Oakes took up an appointment as Administrative Assistant to the London Mathematical Society on 2 January 1981. She was the Society's first full-time appointment. Absolutely the best thing I have done in my connection with the Society was to write a glowing reference for Susan when she applied for the position. I assured the Society that she could fulfil the job description with ease and would soon be doing much more. How very much more, I could not have predicted. As the Society's Administrator from the late 80s onwards, she has taken a role central to its activities. To Susan, her involvement with the Society has never been "just a job". She has been as dedicated to the well-being and objectives of the Society as any Officer. Her knowledge of the Society and its members is now unrivalled. In the expanded administration at De Morgan House, Susan is regarded as a guru. A remark frequently heard is "Ask Susan, she'll know". In various roles for the Society, it has been my privilege to collaborate with Susan for the past twenty years. We have never exchanged a cross word, except about politics and my navigation when she drove me to Society Meetings. It was a very great pleasure for me to interview her for the Newsletter, to mark the start of her third decade in the service of the Society.

#### Alan Pears

It seems like only yesterday, Susan, that you wrote in the Newsletter about your first decade with the LMS. Now, however, you have been with the Society for twenty years. What have been the highlights of this past decade?

This has been the decade of change. There have been several memorable events. First and foremost was the purchase of the Society's own headquarters. On 16 February 1998, we moved to a property in Russell Square, subsequently named as De Morgan House. Ten years ago, the LMS was run on a day-to-day basis, primarily by me, from a small office in Burlington House rented from the Royal Astronomical Society. Now we are in our splendid new offices with a staff of ten and Ben Garling as our Executive Secretary. Although we had moved in February, the official opening was on Friday 23 October 1998 by Sir Michael Atiyah in the presence of six other Fields Medallists and 150 guests.

Another significant event was the Joint Meeting with the American Mathematical Society in Cambridge in June 1992. This meeting was the first of its type and was of course organised by you in your capacity as Meetings and Membership Secretary. I remember it was a lot of hard work, great fun and much appreciated by those who attended.

Well Susan, it was organised by you and me jointly. I remember feeling that together we were under pressure from all 200 members of the AMS staff but my memories now are entirely happy. What have been your other excursions onto the international scene?

It was a great pleasure to attend two International Congresses, particularly the 1998 ICM in Berlin when two British mathematicians were awarded Fields Medals. Looking after the LMS display at conferences and meeting members and other mathematicians there is always very enjoyable. Then, of course, there were the two trips to Russia with the LMS Publications Secretary, David Brannan. I was proud and honoured to represent the LMS administration. I believe these trips helped cement our relationship with the Russian Academy of Sciences.

#### Have there been any moments of despair?

Yes, one in particular. Norman Biggs, the Librarian, and I had to jemmy open the LMS deed box which was at least 100 years old. Somewhere in the move from Burlington House to De Morgan House, we had lost the key!

# Looking back over the past decade, do you have any regrets?

The death of Rolph Schwarzenberger is my greatest sadness when I look back over the 1990s. Rolph was a member of the interview panel that appointed me and I came to regard him as my mentor even after he had served his term as LMS Treasurer from 1979 to 1986.

# What of the Presidents you have seen come and go?

This has been the decade of the Johns with Sir John Kingman, John Ringrose and John Ball, as well as Nigel Hitchin and most recently Martin Taylor. At one point I was beginning to wonder if being called John was a prerequisite for becoming President. Working with each of them has been a valuable experience and has widened my horizon as Administrator. All have made their contributions to the well-being of the Society, but perhaps none more than John Ball. His determination and the financial acumen of Alun Morris, the current Treasurer, made the move to De Morgan House happen.

#### What do you foresee for the next decade?

Very recently we established three international schemes with the African Mathematical Union, the Moscow Mathematical Society - Russian Academy of Sciences and the Morningside Center in Beijing. So, first and foremost, over the next decade I would expect these to develop and to see the London Mathematical Society broaden its international activities. Hopefully too, we can consolidate all the changes of the last decade, grow our membership and fund even more mathematical events. I also anticipate us becoming much closer to the applied mathematics community.

Susan, thank you.



Isaac Newton Institute for Mathematical Sciences

# EuroConference

# NEEDS 2001

# Nonlinear Evolution Equations and Dynamical Systems

# 24 - 31 July 2001

#### Organisers: M. Bruschi, F. Calogero, A.V. Mikhailov, P.M. Santini

Theme of the EuroConference: The XVth NEEDS EuroConference is the opening event of the six month programme on *Integrable Systems* and all the basic aspects of the theory of integrable and nearly integrable systems (differential, partial differential, discrete and functional equations, cellular automata, etc.), together with their relevant applications to the Natural Sciences, are expected to be covered.

**Location and cost:** The EuroConference will take place at the Newton Institute and accommodation for participants will consist of study bedrooms of varying degrees of comfort, assigned mainly on a first come - first (better) served basis. The EuroConference package costs £420, which covers all meals and accommodation from dinner on 24 July to lunch on 31 July.

**Support:** The EuroConference is supported by the European Community and funding is available to support a certain number of young (age limit of 35 years) and senior researchers who are nationals of EC Member States or of the Associated States: Iceland, Liechtenstein, Norway, Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, Israel, Switzerland.

**Further information and application forms:** These are available from the WWW at http://www.newton.cam.ac.uk/programs/ITS/itsw01.html, where further information about the EuroConference will be posted and updated.

Completed application form should be sent to Tracey Andrew, Programme and Conference Secretary at the above address, or via e-mail to t.andrew@newton.cam.ac.uk.

Closing day for receipt of applications is 18 March 2001.

Isaac Newton Institute for Mathematical Sciences

## EuroConference

# NONLINEAR ELLIPTIC EQUATIONS AND TRANSITION PHENOMENA

# 2 July - 6 July 2001

Organisers: Professor H. Brezis and Professor E.N. Dancer.

**Themes:** The aim of this EuroConference is to study Reaction-Diffusion equations and systems with particular emphasis on problems with solutions which exhibit transition phenomena. Such theory is of great importance because of its applications in, for example, biology, material sciences, combustion theory, catalysis, superconductivity, and many other situations. The existence of these solutions is a nonlinear effect. In particular, we study solutions with sharp peaks (possibly many peaks) or sharp transitions on smooth surfaces (including their existence and locations). There has been enormous progress on these problems in recent years. All aspects of such phenomena, including their stability, will be under investigation using a variety of tools: Morse theory, degree theory, finitedimensional reduction, non-smooth critical point theory, gamma convergence, critical exponents etc. It is also intended that there will be several lectures on the recent work on the de Giorgi conjecture and its relation to transition on surfaces. A number of the lectures will be designed as survey lectures introducing the academic to the many techniques.

Speakers are likely to include: T. Bartsch, H. Berestycki, H. Brezis, K.C. Chang, Xinfu Chen, M. Del Pino, P. Felmer, V.A. Galaktionov, C. Gui, Y.Y. Li, M Mimura, P. Sternberg, J. Velazquez, J. Wei.

**Location and cost:** The EuroConference will take place at the Newton Institute and accommodation for participants will be provided in single study bedrooms with shared bathrooms at Wolfson Court, a hall of residence adjacent to the Institute. The workshop package costs £300, which includes registration fee, accommodation, breakfast and dinner from dinner on Sunday 1 July until breakfast on Saturday 7 July, and lunches and refreshments on the days that lectures take place.

**Further information and application forms:** These are available from the WWW at http://www.newton.cam.ac.uk/programs/NPD/npdw04.html, where further information about the EuroConference will be posted and updated.

**Completed application forms** should be sent to Maureen Clark at the above address, or via e-mail to m.clark@newton.cam.ac.uk. Scientific enquiries may be addressed to Professor Brezis (brezis@ccr.jussieu.fr) or Professor Dancer (normd@maths.usyd.edu.au).

Closing date for receipt of applications and abstracts is 28 February 2001.

# **RECORDS OF PROCEEDINGS AT MEETINGS**

# ANNUAL GENERAL MEETING

held on Friday 24 November 2000 at University College London, Professor M.J. TAYLOR, FRS, in the Chair. There were present about 80 members and visitors. Dr A.R. Pears and Dr W. Stephenson, Scrutineers, collected ballot papers. The Treasurer, Professor A.O. Morris, presented his annual report, which is published in the Newsletter. Messrs Baker Tilly were appointed as auditors.

Seven people were elected to Ordinary Membership: G.Z. Arone, P.H. Fleischmann, G.W. Gibbons, D.B. Ingham, N. Jacob, D.J. Livingstone, I. Zois; five were elected to Associate Membership: J.H.P. Dawes, D.P. Groves, J.S. Hans, T.P. Horikis, P.L. Wilson; and six were elected to Reciprocity Membership: V.M. Buchstaber, K.Y. Hu, A. Vershik (all of the Amer. Math. Soc.), D.M. Riley (of the Can. Math. Soc.), T. Sano (of the Japan. Math. Soc.), O.J. Adeniran (of the Nigerian Math. Soc.). Six members signed the book and were admitted to the Society.

The President, on Council's behalf, presented certificates to 2000 Society Prizewinners: Polya Prize: T.J. Lyons, FRSE; Senior Berwick Prize: J.F. Toland, FRS; Naylor Prize: A.S. Fokas, Whitehead Prizes: M.A. Chaplain, G.M. Stallard, A.M. Stuart, B.J. Totaro.

Professor T.C. Chinburg gave a lecture entitled 'The Geometry of Gauss Sums'.

After tea, the Scrutineers announced the election results. The following Officers and Members of Council were elected: President: J.T. Stuart, FRS; Vice-Presidents: T.J. Lyons, FRSE, A.J. Scholl; Treasurer: A.O. Morris; Council and General Secretary: J.S. Pym; Meetings and Membership Secretary: N.M.J. Woodhouse; Publications Secretary: E.C. Lance; Librarian: N.L. Biggs; Membersat-Large for two years: A.G. Chetwynd, M.M. Dodson, K.J. Falconer, FRSE, T.W. Körner, S.E. Rees, A.M. Stuart; Member-at-Large for one year: P.A. Covey-Crump. The members elected to the Nominating Committee for 2000 were: N.J. Hitchin, FRS, U.H. Martin. Council membership is completed by the following who were elected for two-year terms in 1999: M.R. Bridson, K.A. Brown, FRSE, J.E. Cremona, M.A.H. MacCallum, D. Preiss.

The newly-elected President, Professor J.T. STUART, FRS, took the Chair. The retiring President, Professor M.J. Taylor, FRS, then gave his Presidential Address on 'L-functions and Euler Characteristics'.

After the meeting, a reception was held at De Morgan House, followed by the Annual Dinner, which was held at the Montague Hotel and attended by 63 people.

# LONDON MATHEMATICAL SOCIETY PUBLICATIONS PERSONNEL, 2001

Publications Secretary	E C Lance (1996- ).
Publisher	S P Hezlet.
Publications Committee	E C Lance (Convenor); J T Stuart; A G Chetwynd,
Tubileations Committee	G Blower; J R Partington, J K Truss; K Erdmann,
	S M Salamon; J H Davenport, D Singerman; S E Rees
Proceedings Editors	K Erdmann, S M Salamon (1998-2003);
Troccedings Editors	A C Sharp (Executive Editor, 1974- ).
Journal Editors	J R Partington, J K Truss (1998-2003);
Journal Editors	A Harper (Executive Editor, 1998- ).
Bulletin Editors	A G Chetwynd, G Blower (2000-2005);
Durrethin Durrethi	S E Rodd (Executive Editor, 2001- ).
Journal of Computation	J H Davenport (Editor-in-Chief), D Duval,
and Mathematics Editors	P M Neumann, L C Paulson;
and mathematics Eartors	S E Rodd (Executive Editor, 1998- ).
Nonlinearity Editors	P Constantin (LMS, 1998-2002);
Trommedarey Zaroses	P Cvitanovic (IOP, 1999-2003).
Monographs Editors	H G Dales (1988-2001), P M Neumann (1994-2003).
Monographs Advisers	J H Coates (1994-2004), E B Davies (2000 - 2004),
	S K Donaldson (1989-2003),
	W S Kendall (1997-2001), J F Toland (1998-2002).
Lecture Notes Editor	N J Hitchin (1997-2002).
Lecture Notes Advisers	S Donkin, I B Fesenko, J Roe, E Süli (to 2004).
Student Texts Editor	C M Series (2000-2004).
Student Texts Advisers	E G Rees, S J van Strien, J D Gibbon, P Olver,
and A.M. Stuart, S.L.	M W Liebeck (to 2004).
History of Mathematics	D H Fowler (LMS joint Editor, 1999-2003).
Series Editor	
History of Mathematics	J J Gray (LMS joint Adviser, 1999-2003),
Series Advisers	T W Körner (LMS joint Adviser, 1998-2002).
Newsletter Editors	D J H Garling, S M Oakes.
Book Reviews Editors	D Singerman, F Rhodes (1997-2001).
Obituaries Editor	A R Pears (1995-2004).
Russian Mathematical	H H McFaden (1999-2002),
Surveys Editors	D L Johnson (Deputy, 1989-2002).
Sbornik: Mathematics Editors	G G Gould (2000-2004),
	J Wiegold (Deputy, 2000-2004).
Izvestiya: Mathematics Editor	s D L Johnson (2000-2004),
	A West (Deputy, 2000-2004).
Transactions of the Moscow	L W Longdon (LMS joint Editor, 1973-).
Mathematical Society Editor	were elected for two what terms in 1993.
UK periodicals' backlog	S P Hezlet.
LMS Publishing Ltd Board	J T Stuart (Chair), E C Lance (Secretary and
of Directors	Publications Manager), A O Morris (Treasurer),
artions and Euler	N M J Woodhouse.

# LMS COMMITTEES AND REPRESENTATIVES 2001

## COUNCIL COMMITTEES

GENERAL PURPOSES COMMITTEE: President(Chair), Council and General Secretary (Secretary), Treasurer, Meetings and Membership Secretary, Publications Secretary.

FINANCE COMMITTEE: Treasurer (Convenor), President, Publications Secretary, N.L. Biggs, M.A.H. MacCallum, N.M.J. Woodhouse.

PROGRAMME COMMITTEE: President (Chair), Meetings and Membership Secretary (Secretary), K.A. Brown, P.A. Covey-Crump, T.J. Lyons, S.E. Rees, A.M. Stuart.

PERSONNEL AND OFFICE MANAGEMENT COMMITTEE: A.G. Chetwynd (Chair), N.L. Biggs, P. Covey-Crump.

2001 PRIZES COMMITTEE: President (Chair), T.J. Lyons, U. Martin, S.K. Donaldson, J.F. Toland, L.N Trefethen, A. MacIntyre, J.R. Willis.

PUBLICATIONS COMMITTEE: Publications Secretary (Convenor), President, Joint Editors of Bulletin Journal, Proceedings and JCM, Book Reviews Editor, S.E. Rees.

RESEARCH MEETINGS COMMITTEE: E.G. Rees (Chair), A.J. Scholl (Secretary), D. Abrahams, M. J. Bridson, E. Corrigan, A.M. Etheridge, S.J. Hogan, C.J. Isham, G. Robinson, A. Spence, A. Farrow (EPSRC, non-voting).

EDUCATION COMMITTEE: P.T. Saunders (Chair), S.A. Huggett (Secretary), C.J. Budd, T. Porter, P.J. Rippon, J.C. Robson, A.J. Scgoll, W.B. Stewart.

SCHOOLS EDUCATION COMMITTEE: P.T. Saunders (Chair), A.D. Barnard, A.D. Gardiner, J.C. Robson.

COMPUTER SCIENCE COMMITTEE: I.A. Stewart (Chair), A.G. Chetwynd, J.H.C. Gunawardena, W.A. Hodges, R. Martin (IMA), D. Pym, C. Stirling, R.M. Thomas, J. Whiteman (IMA).

COMPUTER SYSTEMS COMMITTEE: M.A.H. MacCallum (Chair), Executive Secretary, Publications Secretary, P. Kemp, S.A. Linton, S.E. Rees, N.M. Stephens.

PUBLICATIONS STRATEGY GROUP: Publications Secretary (Chair), R.J. Archbold, D.J. H. Garling, W.A. Hodges, J.F. Toland.

WOMEN IN MATHEMATICS COMMITTEE: H.D. Robinson (Chair), R.D. Camina, A.C. Chetwynd, M.A.H. MacCallum, E. Mansfield, U. Martin, S.E. Rees, F.A. Rogers, R.M. Williams.

NOMINATING COMMITTEE: J.H. Coates (Chair), K.A. Brown (Council), A.R. Camina, T.A. Gillespie, U. Martin, N.J. Hitchin.

IMU ADVISORY COMMITTEE: J. T. Stuart, (Chair) E.B. Davies, S.J. Hogan (IMA), J. Howie (Edin. M.S.), C.M. Series, B.W. Silverman (RSS), M.J. Taylor (Royal Soc.), D. Woodrow (ICME).

# Ad Hoc COUNCIL COMMITTEE

LINKS WITH THE IMA: President (Chair), Treasurer, Council and General Secretary, M.A.H. MacCallum.

PUBLICITY OFFICER: P.T. Saunders.

DIARIST: A.J. Scholl.

# LMS REPRESENTATIVES ON OTHER COMMITTEES

BOARD OF LMS PUBLISHING LTD: President (Chairman), Publications Secretary, Treasurer, N.M.J. Woodhouse

LIBRARY COMMITTEE: Librarian, S.E. Rees

EUROPEAN MATHEMATICAL SOCIETY COUNCIL: W.S. Kendall, P.T. Saunders, E.C. Lance.

BRITISH MATHEMATICAL COLLOQUIUM SCIENTIFIC COMMITTEE: A.J. Scholl, J.P.C. Greenlees.

JOINT MATHEMATICAL COUNCIL: P.T. Saunders.

ISAAC NEWTON INSTITUTE MANAGEMENT COMMITTEE: E.B. Davies.

ISAAC NEWTON INSTITUTE SCIENTIFIC COMMITTEE: A.J. MacIntyre, N.J. Hitchin.

ISAAC NEWTON INSTITUTE ADVISORY BOARD: K.A. Brown.

EDINBURGH INTERNATIONAL CENTRE FOR MATH. SCIENCES STEERING COMMITTEE: J.M. Ball.

EDINBURGH INTERNATIONAL CENTRE FOR MATH. SCIENCES PROGRAMME COMMITTEE: J. Cardy, T.J. Pedley.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, MATHEMAT-ICS COMMITTEE: T.W. Körner.

COMMITTEE OF HEADS OF DEPARTMENTS OF MATH. SCIENCES: J.W. Bruce.

UNDERGRADUATE MATHEMATICS TEACHING COMMITTEE: A.D. Barnard.

SCIENCE, TECHNOLOGY AND MATHEMATICS COUNCIL: P.T. Saunders.

TRUSTEE, APPLIED PROBABILITY TRUST: Sir John Kingman.

COLLINGWOOD PRIZE COMMITTEE: A.J. Scholl.

PARLIAMENTARY AND SCIENTIFIC COMMITTEE: J.T. Stuart, P.T. Saunders.

ROYAL SOCIETY'S SCIENTIFIC UNIONS COMMITTEE: M.J. Taylor.

CICIAM: J. Carr.

INTERNATIONAL COMMISSION ON MATHEMATICAL INSTRUCTION: D. Woodrow



E. BOMBIERI HONORARY MEMBER 1977

The diary lists Society meetings and other events publicized in the Newsletter. Further information can be obtained from the appropriate LMS Newsletter whose number is given in brackets. A fuller list of meetings and events is given in the Society's web site (http://www.lms.ac.uk/meetings/diary.html). **FEBRUARY 2001** Hall, Powys (290) 3-8 Mathematical Population Dynamics Conference, 7 Causal Problems Meeting, Manchester University (289) Marrakech (288) 7 Royal Society Bakerian Lecture, Royal Society, London (290) 8-10 Belgian Mathematical Society/Deutsche Mathematiker Vereinigung joint meeting, Liège University, Belgium (284) 9 Edinburgh Mathematical Society Meeting, Edinburgh 19-22 Computational Intelligence: Methods and University (285) 10 Mary Cartwright Lecture, LMS Meeting, Oxford Applications Congress (CIMA 2001) University of Wales, University (287) (289) Bangor (283) 23 Mathematics Postgraduate Open Day, King's College 19-23 Calculus of Functors, T. Goodwillie, LMS Invited Lectures, Aberdeen University (286) London (290) 22 Hardy Lecture, LMS Meeting, London 28 Inaugural LMS Regional Meeting (Midlands), 25-28 Banach Algebras and Cohomology Conference, Birmingham University (289) 28-3 Mar Groups and Geometries Meeting, Birmingham Newcastle University (288) 25-29 Variational Problems with Singularities Workshop, University (289) **MARCH 2001** Isaac Newton Institute, Cambridge (290) **IULY 2001** 9 Edinburgh Mathematical Society Meeting, Aberdeen 1-6 British Combinatorial Conference, Sussex University University (285) 18-24 Geometric Analysis and Index Theory Conference, (276)2-6 Nonlinear Elliptic Equations and Transition Phenomena Trieste, Italy (286) EuroConference, Isaac Newton Institute, Cambridge (290) 19 Walter Ledermann 90th Birthday Conference, Sussex 4-6 Uncertainty in Geometric Computations MathFIT University (290) 19-24 Discrete and Continuous Stochastic Evolutions Workshop, Sheffield University (287) 5-7 British Congress of Mathematics Education, Keele Workshop, Warwick University (287) 26 Random Partial Differential Equations, Spitalfields Day, University (286) 6 LMS Northern Regional Meeting, Manchester University Warwick University (290) 26-29 Quantum Field Theory, Noncommutative Geometry 9-13 Stochastic Processes and their Applications Conference, and Quantum Probability Workshop, Trieste, Italy (286) Cambridge (275) 26-29 Numerical Methods for Fluid Dynamics Conference, 9-13 Progress in Partial Differential Equations, ICMS Oxford University (286) Edinburgh (288) 9-13 Algebraic Graph Theory Workshop, ICMS Edinburgh 26-31 Computational Stochastic Differential Equations Workshop, Warwick University (287) (288)9-20 Modern Methods in Scientific Computing and APRIL 2001 2-5 British Applied Mathematics Colloquium, Reading Applications Seminar, Université de Montréal, Canada University (288) (2.87)15-20 Algorithms for Approximation IV Symposium, 2-6 Lévy Processes and Stable Law Conference, Warwick University (287) Huddersfield University (286) 7-9 British Topology Meeting, Edinburgh and Heriot-Watt 16-27 Stochastic Partial Differential Equations Workshop, Universities (286) Warwick University (287) 24-31 Nonlinear Evolution Equations and Dynamical 9 Alfred Goldie 80th Birthday Conference, Glasgow Systems EuroConference, Isaac Newton Institute, University (289) 9-12 British Mathematical Colloquium, Glasgow University Cambridge (290) 29-2 Aug Teaching of Mathematical Modelling and (287)Applications (ICTMA 10), Tsinghua University, China 20 Group Theory Postgraduate Conference, Imperial College (284)(288) 28-29 Great Lakes Geometry Conference, Northwestern AUGUST 2001 5-18 Groups-St Andrews, Oxford University (289) University, USA (288) 12-19 Homological Conjectures for Finite-Dimensional MAY 2001 4 Edinburgh Mathematical Society Meeting, Stirling Algebras Summer School, Nordfjordeid, Norway (275) University (285) SEPTEMBER 2001 12 LMS South Western Regional Meeting, Bristol University 6-13 Symmetry and Perturbation Theory Workshop (SPT2001), Sardinia (284) **IUNE 2002** 24-28 Analytic Number Theory Workshop, Max Plank 28 -1 June Harmonic Morphisms and Harmonic Maps Institute, Bonn (288) Conference, CIRM, Luminy, France (284) APRIL 2002 **JUNE 2001** 7-12 Joint BMC/BAMC, Warwick University 1 Edinburgh Mathematical Society Meeting, St Andrews University (285) AUGUST 2002 20-28 ICM2002, Beijing, China (272) 2-5 The Heritage of I. Schur's 1901 Dissertation, Gregynog 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. The London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS Tel: 020 7291 9977 fax: 020 7323 3655, e-mail: Ims@lms.ac.uk. World Wide Web: http://www.ims.ac.uk/

The London Mathematical Society is registered with the Charity Commissioners.

Printed by Armstrong Press Ltd, Southampton 023 8033 3132