

# THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 289

January 2001

## FORTHCOMING SOCIETY MEETINGS

*10 February 2001 - Oxford*

Mary Cartwright Lecture

K.W. Morton, C.S. Morawetz

*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

## COUNCIL DIARY

24 November 2000

There were no fireworks at this month's Council meeting, even though (depending on how you count) it was the last of the Millennium. But, despite the brevity of the meeting (because of the following Society meeting) there were many reminders of the great changes that have taken place in the Society in the last few years. Taking things in reverse order, the meeting ended with Council expressing its warmest thanks to the outgoing President, Martin Taylor, for his outstanding achievements over the past two years. The incoming President, Trevor Stuart, paid tribute in particular to Martin's phenomenal energy and his sensitivity in dealing with outside bodies, among the many qualities he has shown in the course of advancing the Society's aims during his time as President. We also thanked other retiring members of Council: Rob Archbold, Bill Bruce, Brian

Davies and Cathy Hobbs, for their work on Council and on the committees on which they have served.

It seems that we are making some progress on the creation of an advisory committee on mathematical education (the acronym is pure serendipity) to influence government thinking, at school and university level. On a related subject, we are working with other learned scientific societies to protect the nomenclature of 4 year undergraduate masters degrees, such as the MMath.

Had it not been for his tragic death, David Crighton would today be starting as the next president of the Society. A committee under the leadership of Professor Peter Goddard is establishing a memorial fund in David's memory, to support young researchers in Fluid Dynamics. Council felt it was only fitting to honour his contributions to all of the

Society's charitable aims by making a contribution to this memorial, and we undertook to give £2000 a year for the next 5 years to the David Crighton Fund.

Council is making changes to its committee structure to keep up with changing needs. A new 'Schools Education Committee' has been formed. This will report to Council through the main Education Committee, which will now be also responsible for funding matters related to education - formerly part of the remit of the Mathematics Funding Committee. The latter committee has been disbanded, most of its other duties being taken over by Council officers. Looking to the future, we have planned a Council Retreat for next February. With many new faces on Council this promises to be a stimulating weekend of discussions.

Tony Scholl

## DAVID CRIGHTON FUND

The organisers of the David Crighton appeal are writing to friends and colleagues of David Crighton. They are however very conscious that their list of names and addresses may be incomplete. If you would like details of the appeal, please contact Tim Pedley (t.j.pedley@damtp.cam.ac.uk).

## COUNCIL RETREAT

Council of the London Mathematical Society will be holding a retreat during the weekend of 17-18 February 2001, in order to discuss matters of policy more fully than can be done at usual Council meetings. Should members of the Society wish to suggest topics for consideration, would they please send them to the President at De Morgan house (e-mail: president@lms.ac.uk).

## LONDON MATHEMATICAL SOCIETY 2000-2001 COUNCIL

As a result of the annual election, membership of the Council is the following:

President	Professor J.T. Stuart, FRS (Imperial College)
Vice-Presidents	Professor T.J. Lyons, FRSE (Oxford) Professor A.J. Scholl (Durham)
Treasurer	Professor A.O. Morris (Aberystwyth)
Council	
& General Secretary	Professor J.S. Pym (Sheffield)
Meetings	
& Membership Secretary	Dr N.M.J. Woodhouse (Oxford)
Publications Secretary	Professor E.C. Lance (Leeds)
Librarian	Professor N.L. Biggs (LSE)
Members-at-Large	Professor M.R. Bridson (Oxford) Professor K.A. Brown, FRSE (Glasgow) Dr A.G. Chetwynd (Lancaster) Dr P.A. Covey-Crump (GCHQ) Professor J.E. Cremona (Nottingham) Professor M.M. Dodson (York) Professor K.J. Falconer, FRSE (St Andrews) Dr T.W. Körner (Cambridge) Professor M.A.H. MacCallum (Queen Mary & Westfield) Professor D. Preiss (University College London) Dr S.E. Rees (Newcastle) Professor A.M. Stuart (Warwick)

# LONDON MATHEMATICAL SOCIETY

## DAME MARY CARTWRIGHT LECTURE

Saturday 10 February 2001

Room L2, Mathematical Institute, Oxford.

- |           |   |
|-----------|---|
| 3.30-4.30 | Professor Bill Morton<br><i>Evolution Operators and Numerical<br/>Modelling of Hyperbolic Equations</i>           |
| 4.30-5.00 | Tea   |
| 5.00-6.00 | Professor Cathleen Synge Morawetz<br><i>Mathematics and Flying Aeroplanes</i><br>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". Those wishing to book accommodation should contact Susan Oakes ([oakes@lms.ac.uk](mailto: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](mailto: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.

## TREASURER'S REPORT TO THE ANNUAL GENERAL MEETING 2000

A published version of the Annual Report and Accounts will be available to all members of the Society on request and it will also be deposited in the Society's Archives on the world wide web. Thus only a few basic facts will be highlighted in this report to the Annual General Meeting.

This year has yet again proved to be a period of growth for world equity markets. As a result, the total assets of the Society (less current liabilities) have increased from £11,655,701 to £13,004,939. Income from investments decreased slightly from £338,831 to £328,221 (but if rental income for De Morgan House is included the total becomes £440,298). This reflects the general decrease in returns on investments via the traditional route of dividends with far greater emphasis now on total return through the growth in asset value.

There was a pleasing increase in publication income to £523,391 compared with £461,945 last year. This source of income is particularly important for the Society in that it is the main foundation for the growing funds available to support the Society's mathematical work. It is gratifying that this growth has been achieved against the policy of minimising the increases in publication prices. Our gratitude to all involved in the production of all our publications is as great as ever. The Society is particularly grateful to its Publications Manager (Publisher as from November 2000) Dr Susan Hezlet for the major impact she has had in producing these excellent results.

The amount expended in the Society's efforts to support its mathematical activities and to meet the requirements of its Charter to promote and extend mathematical knowledge continues to grow. What is classified as Direct Charitable Expenditure (which includes expenditure

on publications) has increased from £1,217,682 to £1,331,581. For example, the total expended on grants, subscriptions and prizes increased from £231,974 to £344,755 - within this, the net amount spent by Programme Committee increased from £145,076 to £204,937 with an additional £41,124 expended by the Research Meetings Committee. It is Council policy that the total spent by the Society on such activities should continue to grow in the next few years. The Society has been generous in its financial support to major international conferences held in the UK and also has supported mathematical activities in other parts of the world where a small sum can have a major impact.

Last year in my report, I mentioned the impending sale of Royal Oak Farm. As predicted then, the total receipts of approximately £550,000 was considerably higher than the £350,000 predicted, which was itself very much higher than earlier valuations.

Again this year I am extremely grateful to all the staff in De Morgan House for their assistance, in particular to Ephrem Belay and Susan Oakes, who this year completes twenty years service to the Society, for their meticulous work on the financial side.

It is my pleasure to recommend the Annual General Meeting

- 1) to approve the Society's Accounts for the financial year September 1st 1999 - August 31st 2000
- 2) to re-appoint Messrs Baker Tilly, Chartered Accountants as Auditors for the financial year September 1st 2000 - August 31st 2001.

A.O. Morris  
Treasurer

# BRITISH WOMEN IN MATHEMATICS DAY

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

10 January 2001

The programme for the British Women in Mathematics Day is as follows:

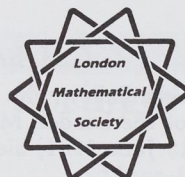
10.45 - 11.15	Arrival and Coffee
11.15 - 12.00	Alison Etheridge (Oxford)
12.00 - 12.45	Fay Dowker (QMW)
12.45 - 14.00	Lunch
14.00 - 14.30	Nicole Snashall (Leicester)
14.30 - 15.00	Juliette White (RH)
15.00 - 15.30	Bindi Brook (Sheffield)
15.30 - 16.00	Jane Hutton (Newcastle)
16.00 - 16.45	Tea
16.45 - 17.45	Discussion on Mentoring led by Ursula Martin (St. Andrews)

There will be a £5 registration fee. Tea/coffee and a sandwich lunch will be provided. Some funds are available to help with travel expenses for research students and the unwaged.

Do note that there is no obligation to be either British or a woman to attend this meeting.

Please contact Helen Woodward if you are interested in attending this workshop, and also if you would like to apply for travel funds to attend ([woodward@lms.ac.uk](mailto:woodward@lms.ac.uk)).

*Sponsored by*



## DEPARTMENTAL NEWS

**Leeds University, Department of Pure Mathematics** Dr Charles J. Read of Trinity College, Cambridge, has been appointed to a chair in Pure Mathematics from 1 October 2000; he joins the group in functional analysis.

**Leeds University, Department of Statistics** has made three new appointments in the past year with interests spanning several areas of probability and statistics: Professor Alexander Veretennikov (stochastic processes), Dr Lutz Mattner (probability and classical inference) and Dr Leonid Bogachev (random media).

**Queen's University Belfast, Department of Pure Mathematics** With effect from 1 October 2000, Dr Martin Mathieu has been promoted from Lecturer to Reader in the Department of Pure Mathematics.

**Sussex University, School of Mathematical Sciences** The following promotions and appointments have been made: Dr K.P. Deckelnick to Reader, Dr J.W.P. Hirschfeld to Professor, Dr A.R. Humphries to Senior Lecturer, Dr A.V. Sobolev to Professor, and Dr D.A. Kay to Lecturer, Dr R.L. Schilling to Lecturer, Dr M.A. Sytchev to Lecturer, Dr K. Zhang to Professor.

**Warwick University, Department of Mathematics** New Lecturers: Dmitriy Rumynin (Representation Theory), Young-Eun Choi (Hyperbolic Geometry), Adam Epstein (Holomorphic Dynamics), Omri Sarig (Ergodic Theory). Promotion to Personal Chair: Derek Holt. Retirements: David Fowler and Stewart Stonehewer.

## G.H. BAILEY

Mr G.H. Bailey, who was elected a member of the London Mathematical Society on 15 June 1961, died on 17 November 2000, aged 62.

## VISIT OF DR W. HOFFMANN

Dr Werner Hoffmann (Humboldt, Berlin), will be visiting the UK during February and March supported by an LMS Scheme 2 grant. He will give talks at Exeter (22 February), Nottingham (28 February), Cambridge (6 March) and at the Number Theory Seminar at University College London (7 March). For further information contact Professor Anton Deitmar (tel: 01392 26 3972, fax: 01392 26 3997; e-mail: a.h.j.deitmar@exeter.ac.uk).

## VISIT OF DR V.B. MNUKHIN

Dr V.B. Mnukhin (TRE Taganrog, Russia, currently University of the South Pacific, Suva, Fiji Islands) is visiting the University of East Anglia, supported by an LMS Scheme 5 grant, from 28 December 2000 to 15 February 2001. For further information contact Johannes Siemons, School of Mathematics, University of East Anglia, Norwich NR4 7TJ (j.siemons@uea.ac.uk).

## VISIT OF PROFESSOR A. TELCS

Professor A. Telcs (Budapest) will be visiting Imperial College, London from 8 - 20 January 2001. The visit is supported by the LMS under the International Short Visits Scheme. Professor A. Telcs is an expert in discrete probability theory, in particular, in random walks on fractal-like graphs. He will give a seminar at Imperial College on 18 January at 3.00 pm. For further information contact Professor Alexander Grigoryan, Department of Mathematics, Imperial College, Huxley Building, 180 Queen's Gate, London SW7 2BZ (e-mail: a.grigoryan@ic.ac.uk, tel: 020 7594 8549, fax: 020 7594 8517).

# Mathematically Speaking



**L. Ribes, P. Zalesskii**

## Profinite Groups

In addition to basic facts about general profinite groups, the book emphasizes free constructions while also including homology and cohomology with a minimum of prerequisites.

2000. XIV, 435 pp. (Ergebnisse der Mathematik und ihrer Grenzgebiete. 3. Folge, Vol. 40) Hardcover \* DM 189,-; £ 65,-; FF 712,-; Lit. 208.730  
ISBN 3-540-66986-8

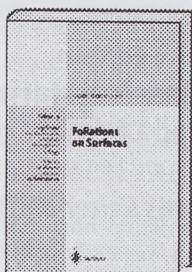
**I. Nikolaev**

## Foliations on Surfaces

Foliations is one of the major concepts of modern geometry and topology meaning a partition of topological space into a disjoint sum of leaves. This book is devoted to geometry and topology of surface foliations and their links to ergodic theory, dynamical systems, complex analysis, differential and non-commutative geometry.

2001. XXII, 450 pp. 123 figs. (Ergebnisse der Mathematik und ihrer Grenzgebiete. 3. Folge, Vol. 41) Hardcover \* DM 189,-; £ 65,-; FF 712,-; Lit. 208.730  
ISBN 3-540-67524-8

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



**G. Bachmann, L. Narici, E. Beckenstein**

## Fourier and Wavelet Analysis

This comprehensive volume develops all of the standard features of Fourier analysis.

2000. IX, 505 pp. (Universitext) Hardcover \* DM 119,-; £ 41,-; FF 449,-; Lit. 131.420 ISBN 0-387-98899-8

**J.J. Duistermaat, J.A.C. Kolk**

## Lie Groups

A (post)graduate textbook on Lie groups and Lie algebras, giving a broad introduction to the field.

2000. VIII, 344 pp. (Universitext) Softcover \* DM 79,-; £ 27,-; FF 298,-; Lit. 87.250 ISBN 3-540-15293-8

**J. Neukirch, A. Schmidt, K. Wingberg**

## Cohomology of Number Fields

2000. XV, 699 pp. (Grundlehren der mathematischen Wissenschaften. Bd. 323) Hardcover \* DM 179,-; £ 61,50; FF 675,-; Lit. 197.690 ISBN 3-540-66671-0

**G. Laumon, L. Moret-Bailly**

## Champs algebriques

2000. XII, 208 p. (Ergebnisse der Mathematik und ihrer Grenzgebiete. 3. Folge, Vol. 39) Relié \* DM 169,-; £ 58,50; FF 637,-; Lit. 186.640 ISBN 3-540-65761-4

*Come and take a look:*  
*<http://www.springer.de/math/>*



**Springer**

\* Recommended retail prices. Prices and other details are subject to change without notice.  
In EU countries the local VAT is effective. d&p · 7316.MNT/SF

# London Mathematical Society Monographs

## New books for 2000

OXFORD  
UNIVERSITY PRESS

available now

### Operator Spaces

*Edward Effros and Zhong-Jin Ruan*

This book, written by two leading experts, is an exposition of an exciting new area in functional analysis, that of "quantized Banach spaces". It lays down the foundations of the subject, using basic ideas of functional analysis, and then develops many new results. It will interest researchers in operator theory, mathematical physics, and quantum computation.

London Mathematical Society Monographs No. 23

0-19-853482-5 Hardback ~~£65.00~~ **£45.50**

September 2000

forthcoming

### Banach Algebras and Automatic Continuity

*H. G. Dales*

A substantial new account of the algebraic and analytic theory of Banach algebras, and of their homomorphisms and derivations; many examples are considered.

London Mathematical Society Monographs No. 24

0-19-850013-0 Hardback ~~£110.00~~ **£77.00**

December 2000

**LMS MEMBERS ARE ENTITLED TO THE  
FOLLOWING DISCOUNTS:**

**30% OFF LMS MONOGRAPHS**

**10% OFF ALL OTHER MATHEMATICS TITLES FROM  
OXFORD UNIVERSITY PRESS**

*For information about other titles in the  
Monographs series, please contact Debra  
Gooley on 01865 267250, or email  
gooleyd@oup.co.uk*

**TO  
ORDER:**

Contact our credit card hotline,  
quoting the code LMSAD1100

Tel: +44 (0) 1536 454534

Fax: +44 (0) 1536 454518

new edition

### Classical Harmonic Analysis and Locally Compact Groups Second Edition

*Hans Reiter and Jan D. Stegeman*

This is a new edition of the classic 1968 work by Reiter on harmonic analysis on locally compact groups. It has been carefully revised and brought up to date by Jan Stegeman; much new work is included.

London Mathematical Society Monographs No. 22

0-19-851189-2 Hardback ~~£65.00~~ **£45.50**

November 2000

available now

### Characters of Finite Coxeter Groups and Iwahori-Hecke Algebras

*Meinolf Geck and Götz Pfeiffer*

This is the first book which systematically develops the subjects of conjugacy classes and irreducible characters, both from a theoretical and an algorithmic point of view.

London Mathematical Society Monographs No. 21

0-19-850250-8 Hardback ~~£65.00~~ **£45.50**

August 2000

available now

### Introduction to Local Spectral Theory

*Kjeld Laursen and Michael Neumann*

An exposition and synthesis of the spectral theory of bounded linear operators. There are many new results, including exciting work of Albrecht and Eschmeier, and substantial new applications.

London Mathematical Society Monographs No. 20

0-19-852381-5 Hardback ~~£75.00~~ **£52.50**

February 2000

## ANNUAL LMS SUBSCRIPTION

The Society is appreciative of those members who have paid their 2000/01 subscriptions. May we remind those who have not yet paid that subscriptions were due on 1 November 2000. Prompt payment ensures continuity of publications and avoids the need for time-consuming reminders. The Society reserves the right to discontinue the supply of periodicals and the *Newsletter* to members whose subscription remains unpaid by 31 January 2001. The methods of payment are either by a sterling cheque drawn on a UK bank; a US\$ cheque drawn on a US bank, Direct Debit, Credit Card or Eurocheque (quoting your card number on the reverse). If you have misplaced your renewal of subscription form, contact the LMS office (e-mail: [membership@lms.ac.uk](mailto:membership@lms.ac.uk); tel: 020 7637 3686; fax: 020 7323 3655).

## HONORARY DEGREE

The University of Sussex has awarded the honorary degree of Doctor of Science to Professor John Ball, FRS, of the University of Oxford.

## ALFRED GOLDIE 80TH BIRTHDAY CONFERENCE

A one day conference to celebrate the 80th birthday of Professor A.W. Goldie and review some recent developments in noncommutative noetherian ring theory will be held in the Mathematics Department of the University of Glasgow on Monday 9 April 2001, beginning at 10.30. The speakers will be:

- K.R. Goodearl (University of California, Santa Barbara),
- A. Joseph (Weizmann Institute and Paris 7) (provisional),
- L.W. Small (University of California, San Diego),
- J.T. Stafford (University of Michigan).

There will be a dinner in the evening at the university, at a cost of £25 including wine. (The meeting is a satellite conference of the British Mathematical Colloquium, which begins in Glasgow on the evening of 9 April and runs until Thursday lunchtime.) Funding has been provided by the London Mathematical Society, the Edinburgh Mathematical Society and the Glasgow Mathematical Journal Trust Fund. All mathematicians and postgraduate students with an interest in algebra are welcome to attend the conference and/or the dinner. For registration and accommodation details please contact Ken Brown, Department of Mathematics, University of Glasgow, Glasgow G12 8QW, or (preferably) [kab@maths.gla.ac.uk](mailto:kab@maths.gla.ac.uk). Accommodation (in the BMC Hall of Residence) must be booked by 9 March.

## THE LEVERHULME TRUST AWARDS

- Calderbank, D.M.J. (University of Edinburgh) *Integrable systems in conformal geometry* - Special Research Fellowship
- Knopps, R.J. (Heriot-Watt University) *Qualitative behaviour in continua* - Emeritus Fellowship
- Styles, V.M. (University of Sussex) *Numerical analysis of free boundaries* - Special Research Fellowship
- Vanden-Broek, J-M. (University of East Anglia) *Numerical studies of free boundary problems* - Research Project Grant

## ROYAL SOCIETY AWARD

Dr Raphael Bousso has been awarded a Royal Society University Research Fellowship to work in the Department of Applied Mathematics and Theoretical Physics, University of Cambridge, on Connecting Quantum Theory and Gravitation, starting on 1 September 2001.

## GROUPS-ST ANDREWS 2001

Groups-St Andrews 2001 will be held at the Mathematical Institute, Oxford from 5-18 August 2001. This conference, the sixth in the series of Groups-St Andrews Conferences, will be organised along similar lines to previous events in this series.

The Principal Speakers are: M.D.E. Conder (Auckland), P.W. Diaconis (Stanford), P.P. Palfy (Budapest), M.P.F. du Sautoy (Cambridge), M.R. Vaughan-Lee (Oxford). The speakers above have kindly agreed to give short courses of lectures. In addition there will be a full programme of one hour invited lectures and short research presentations. In the second week there will be two special days, a "Gorenstein Day" and a "Groups and Sets Day". The conference aims to cover all aspects of group theory. The short lecture courses are intended to be accessible to postgraduate students, postdoctoral fellows, and researchers in all areas of group theory.

Members of the Scientific Organising Committee are: Colin Campbell (St Andrews), Patrick Martineau (Oxford), Peter Neumann (Oxford), Edmund Robertson (St Andrews), Geoff Smith (Bath), Brian Stewart (Oxford) and Gabrielle Stoy (Oxford). Accommodation is at St Anne's and Lady Margaret Hall, Oxford. For further information write to: Groups - St Andrews 2001, Mathematical Institute, 24-29 St Giles', Oxford OX1 3LB (e-mail: [gps2001@mcs.st-and.ac.uk](mailto:gps2001@mcs.st-and.ac.uk), web: <http://www.bath.ac.uk/~masgcs/gps01/>).

## ISAAC NEWTON INSTITUTE

The Isaac Newton Institute is currently seeking new proposals for future scientific programmes. Information about this is available at <http://www.newton.cam.ac.uk/callprop.html>. Please note that the next deadline for submission is 31 January 2001.

## ONE DAY MEETING ON CAUSAL PROBLEMS

A one-day meeting on Causal Problems will be held at the University of Manchester on 7 February 2001. The organisers are Professor C.T.H. Baker, Professor N.J. Ford, Dr C.A.H. Paul and Dr E. Buckwar.

### Visiting Speakers:

- Professor D. Roose (KU Leuven) (co-authors: K. Engelborghs, T. Luzyanina) *Numerical Stability and Bifurcation Methods in the Analysis of Delay Differential Equations: Algorithms and Applications.*
- Professor G. Bocharov (INM, RAS Moscow) (co-authors: C. Baker, F. Rihan) *Numerical Modelling in Biomathematics with Delay Equations*

### Local Speakers:

- Professor C.T.H. Baker (Manchester) *Linearised Stability*
- Professor N.J. Ford (Chester) *New Numerical Methods for Fractional Differential Equations*
- Dr E. Buckwar (Manchester) *Stochastic Delay Differential Equations*
- Dr C.A.H. Paul (Manchester) *Numerical Solution of Delay Algebraic-Differential Equations with Non-Constant Lags*

Supported in part by the University of Manchester Anniversary Fund, this meeting is the first of a number of such meetings to be held during 2001 on the subject of the analysis, application, solution and numerical solution of causal equations (deterministic and stochastic problems, Volterra integral and integro-differential equations, retarded and neutral differential equations, etc). For further information e-mail [rfde@maths.man.ac.uk](mailto:rfde@maths.man.ac.uk) or visit the web site (<http://www.maths.man.ac.uk/~cthbaker/Manchester-Poster.html>).



New Title in:

## RESEARCH NOTES IN MATHEMATICS



### Regular Sequences and Resultants

Günter Scheja, Uwe Storch

Elimination theory is a classical topic in commutative algebra and algebraic geometry, and it has become of renewed importance recently in the context of applied and computational algebra. This monograph deals with elimination theory in weighted projective spaces over arbitrary noetherian commutative base rings and presents in careful detail the algebraic difficulties of working over general base rings.

The first section of the book independently covers monoids of weights, generic polynomials and regular sequences. Supplements added to each section provide extra details and insightful examples.

Spring 2001; ISBN 1-56881-151-9  
hardcover; approx. 150 pp; \$30.00, £21.00 (tent.)

### Also in Research Notes in Mathematics:

#### Free Resolutions in Commutative Algebra and Algebraic Geometry

David Eisenbud, Craig Huneke, eds.  
1992; ISBN 0-86720-285-8  
paperback; 160 pp.; \$39.00, £28.00

#### Topics in Galois Theory

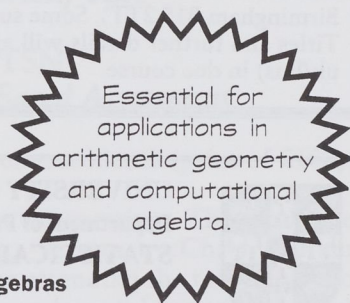
Jean-Pierre Serre  
1992; ISBN 0-86720-210-6  
paperback; 144 pp.; \$29.95, £20.00

#### Differential Algebras in Topology

David Anick  
1993; ISBN 1-56881-001-6  
hardcover; 304 pp.; \$66.00, £45.00

#### Abelian l-adic Representations and Elliptic Curves

Jean-Pierre Serre  
1998; ISBN 1-56881-077-6  
hardcover; 208 pp.; \$32.00, £22.00



Join this group of prestigious authors by contacting Klaus Peters, [klaus@akpeters.com](mailto:klaus@akpeters.com)

To Order:  
Plymbridge Distributors Limited  
Estover Road, Plymouth PL6 7PZ  
United Kingdom

Tel: +44-1752-202301 Fax: +44-1752-202331



Or Contact:  
A K Peters, Ltd.  
63 South Ave, Natick, MA 01760 United States  
Tel: 508.655.9933 Fax: 508.655.5847  
[www.akpeters.com](http://www.akpeters.com) [service@akpeters.com](mailto:service@akpeters.com)

**Publishers of the journal *Experimental Mathematics***

# LONDON MATHEMATICAL SOCIETY MEETING

University of Birmingham  
School of Mathematics & Statistics

## GROUPS AND GEOMETRIES

28 February - 3 March 2001

Michael Aschbacher (CalTech)  
Meinolf Geck (Paris)  
Gerhard Hiss (Aachen)  
Alexander Ivanov (Imperial)  
Martin Liebeck (Imperial)

Andrea Lucchini (Brescia)  
Sergey Shpectorov (Bowling Green)  
Bernd Stellmacher (Kiel)  
Gernot Stroth (Halle)  
Alex Zaleskii (UEA)

Please contact Dr C.W. Parker before **12 January 2001** if you will be attending the meeting. An accommodation deposit of £50 (£25 for research students) is required (cheques payable to the University of Birmingham and sent to Dr C.W. Parker, School of Mathematics & Statistics, University of Birmingham, Edgbaston, Birmingham B15 2TT). Some support for postgraduate students may be available. Titles and further details will appear on the website (<http://www.mat.bham.ac.uk/lms>) in due course.



## UNIVERSITY OF CAMBRIDGE

Department of Pure Mathematics and Mathematical Statistics  
STATISTICAL LABORATORY

### UNIVERSITY LECTURESHIP

Applications are invited for a three-year fixed-term position at Assistant Lecturer level, open to candidates with interests in probability, mathematical statistics, mathematics of operations research, or ergodic theory. The vacancy is in response to Dr Steve Brooks's appointment as an EPSRC Advanced Fellow. The successful applicant will be appointed from 1 October 2001 or before, and will contribute to the teaching and research programmes of the Laboratory. The current age-related scales of stipends are on the scale £17,755-£23,256. It is normal (but not obligatory) for staff to undertake supervision of undergraduates for the Colleges of the University, thereby supplementing their salaries.

The Statistical Laboratory was awarded the grade of 5\* in the 1996 Research Assessment Exercise. The Faculty of Mathematics was awarded 23/24 in the 1999 Teaching Quality Assessment.

Applicants should send a curriculum vitae, e-mail address, date of birth, list of publications, and the names and postal/e-mail addresses of three academic referees. Candidates must ask their referees to send letters of recommendation directly to: The Director, Statistical Laboratory, Centre for Mathematical Sciences, Wilberforce Road, Cambridge, CB3 0WB, UK to reach him by **2nd February 2001**.

Further particulars can be found at <http://www.statslab.cam.ac.uk/Vacancies>

*The University is committed to equality of opportunity*

# LONDON MATHEMATICAL SOCIETY REGIONAL MEETING

UNIVERSITY OF BIRMINGHAM  
SCHOOL OF MATHEMATICS & STATISTICS

Wednesday 28 February 2001  
2.00 pm - 6.00 pm

- Professor Michael Aschbacher (CalTech)  
*Modern Permutation Group Theory*
- Professor Ian Stewart (Warwick) *TBA*
- Dr Joe Kyle (Birmingham/LTSN)  
*Recent Developments in Web Based Assessment.*

Poster display presentation by postgraduate students (prize of £100).

A reception and dinner will be held after the meeting. This is will be the first LMS Regional meeting. Contact Chris Parker ([cwp@for.mat.bham.ac.uk](mailto:cwp@for.mat.bham.ac.uk)) if you will be attending the meeting. Also inform him if you would like (or if you have been told you would like) to display a poster.

Further details will shortly appear at <http://www.mat.bham.ac.uk/lms> as they become available. During the three days following this meeting there will be an LMS sponsored mini-conference (also at Birmingham) on Groups and Geometries. Further details of this event appear elsewhere in the *Newsletter*.

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](mailto: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.

## UNIVERSITY COLLEGE CORK

*Coláiste na hOllscoile, Corcaigh*



### the UCC experience

*work in an environment that is both  
challenging and rewarding - and where  
career advancement is a way of life*

## PROFESSORSHIP OF MATHEMATICS

Applications are invited for the post of Professor of Mathematics.

The Department of Mathematics is a constituent department of the School of Mathematics, Applied Mathematics and Statistics, the others being the Departments of Applied Mathematics and Statistics. The Department has ten permanent members who are active in research in a variety of areas, mainly algebra and analysis. It offers a wide range of undergraduate and postgraduate degree programmes to doctoral level, and provides extensive teaching in the Faculties of Arts, Commerce, Engineering and Science.

The successful applicant will have:

- An outstanding research and scholarly record in some area of Mathematics;
- Demonstrated excellence in teaching at undergraduate and postgraduate level;
- A proven capacity to lead the Department in the development of the subject, both inside and outside the University;
- The capability to act as Head of the Department within the School structure;
- A willingness to participate in the overall life of the University.

Further information about the Department is available at the Department's web site at <http://euclid.ucc.ie>

Informal enquiries may be made to **Dr J.J. Grannell,**  
**Chairperson of the School of Mathematics,**  
**Applied Mathematics and Statistics.**

Salary Scale: IR£53,145 - IR£68,671  
(€67,480 - €87,194) p.a. [new entrants]

Further particulars and details of the application procedure may be obtained from

**Academic Appointments,**  
**Department of Human Resources,**  
**University College, Cork, Ireland.**

**Tel: + 353 21 4902364/ Fax: + 353 21 4276995**

**Email: [acad.per@ucc.ie](mailto:acad.per@ucc.ie)**

**Closing date: 31 January 2001**

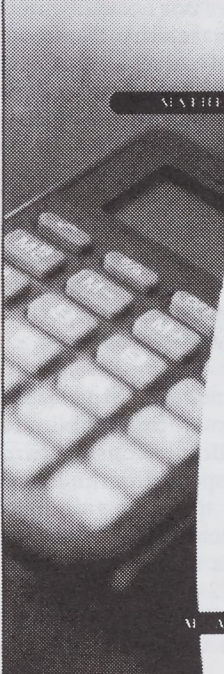
*University College Cork is an  
Equal Opportunities Employer*



## LONGSTANDING MEMBERS

The following is a list of members who have completed fifty years or more of membership of the London Mathematical Society.

12/01/29	Chowla, S.S.	25/01/45	Collard, K.	19/06/47	Friedlander, F.G.
12/12/29	Wright, E.M.	25/01/45	Ollerenshaw, K.	19/06/47	Smith, C.A.B.
04/02/32	Potter, H.S.A.	25/01/45	Prior, L.E.	27/11/47	Hilton, P.J.
14/12/32	Walker, A.G.	01/03/45	Barnard, G.A.	18/03/48	Burkill, H.
15/12/32	Lord, R.D.	17/05/45	Henstock, R.	18/03/48	Isaacs, G.L.
14/12/33	Young, L.C.	28/06/45	Tropper, A.M.	18/03/48	Reade, M.O.
13/12/34	Meyler, D.S.	28/06/45	Tutte, W.T.	17/06/48	Bateman, P.T.
10/12/36	Neumann, B.H.	13/12/45	Rogers, C.A.	18/11/48	Mullender, P.
16/12/37	Pitt, H.R.	21/03/46	Howarth, L.	13/12/48	Fishel, B.
20/01/38	Love, E.R.	25/04/46	Goldie, A.W.	20/01/49	Borwein, D.
15/12/38	Derry, D.	25/04/46	Rothman, M.	17/03/49	Kilmister, C.W.
15/12/38	Smithies, F.	23/05/46	Huppert, E.L.	28/04/49	Austin, M.C.
20/04/39	Spencer, D.C.	23/05/46	Rees, D.	17/11/49	Northcott, D.G.
08/02/40	Kendall, D.G.	19/12/46	Higman, G.	15/12/49	Godwin, H.J.
09/05/40	Willmore, T.J.	19/12/46	Rankin, R.A.	19/01/50	Shepherdson, J.C.
17/12/40	Good, I.J.	19/12/46	Ruston, A.F.	16/02/50	Lehner, J.
21/05/42	Edmonds, S.M.	16/01/47	Macbeath, A.M.	23/03/50	Ponting, F.W.
17/03/43	Dyson, F.J.	20/02/47	Hay, G.E.	15/06/50	Ackroyd, R.T.
15/06/44	Williams, A.E.	20/03/47	Hayman, W.K.	14/12/50	Patterson, E.M.
16/11/44	Kneebone, G.T.	22/05/47	Ghaffari, A.	15/12/50	Weightman, J.A.
16/11/44	Wilkes, E.W.	19/06/47	Cassels, J.W.S.		



MATHEMATICS

# FOYLES

THE WORLD'S GREATEST BOOKSHOP

*The greatest range of general, academic  
and technical books under one roof in the world*

*For the widest selection of*  

## MATHS & PHYSICS

*books in the UK*

Telephone: 020 7440 3247 Facsimile: 020 7434 1574  
 Email: [maths@foyles.co.uk](mailto:maths@foyles.co.uk) <http://www.foyles.co.uk>

113-119 Charing Cross Road LONDON WC2H 0EB  
*(2 minutes from Tottenham Court Road Underground Station)*

W A T T E R O R D E R W O R L D W I D E

## LMS PROGRAMME AND CONFERENCE FUND

The Programme and Conference Fund is used to give financial support for mathematical research in the UK. The fund is administered by the LMS Programme Committee. Grants are made under five main headings that are described below. In general any mathematician working in the UK is eligible for a grant, but if an applicant is not a member then the application must be countersigned by an LMS member. For Scheme 4, only LMS members working in the UK are eligible.

Applications should be sent to the Meetings and Membership Secretary at the Society's office (De Morgan House, 57-58 Russell Square, London WC1B 4HS). Applications cannot usually be considered between mid-June and mid-September. Queries regarding applications can be addressed to the Meetings and Membership Secretary Dr N.M.J. Woodhouse (tel: 01865 277943, e-mail: [nwoodh@maths.ox.ac.uk](mailto:nwoodh@maths.ox.ac.uk)) or to the Executive Secretary, Dr D.J.H. Garling (tel: 020 7637 3686; e-mail: [garling@lms.ac.uk](mailto:garling@lms.ac.uk)) who will be pleased to discuss proposals informally with potential applicants and give advice on the submission of an application.

### Multiple Applications

The Society does not like to receive sequential applications for grants to support the same or closely related events, and will not allow its limits for individual schemes to be exceeded by artificially sub-dividing an application into a number of separate requests under different headings. In the case of satellite conferences, organisers of the main meeting are asked to give brief details of any planned satellites as part of their application for a conference grant. Applications for support for satellite meetings should make clear the financial and organisational connection with the main meeting. This is particularly important in cases where the

expenses of speakers could be shared between the two meetings. Special arrangements apply to the BMC and its satellites.

### Notes for Guidance

Programme Committee distributes as grants some of the funds that the Society receives from its investments and publishing activities. This is one of the mechanisms through which the Society achieves its central purpose, namely to 'promote and extend mathematical knowledge'. The Society operates as a charity and does not receive any public funding. Thus Programme Committee has different opportunities and works within a different regulatory framework from other funding bodies, such as the EPSRC.

Applicants should keep in mind the following points:

1. The committee does not normally meet the full cost of an activity. Rather it aims to give added value to an event largely funded by other means, or to bridge the gap between cost and the resources that might reasonably be made available by a university department.
2. The grants do not cover departmental overheads. The committee will generally not allow items such as secretarial costs, which could be seen as part of normal departmental provision, or entertainment.
3. Each of the schemes has a particular aim as well as its own financial limits. It is helpful if applicants consider carefully how their proposal fits the particular scheme in question, and its detailed rules (which change from time to time). Thus the academic justification for a Scheme 2 grant should focus on the benefit to UK mathematics that the proposed visit would bring, while

that for a Scheme 5 grant should focus on the benefits in the Scheme 5 country. In neither case should it be assumed that the distinction of the visitor renders further justification unnecessary.

4. The committee is made up of mathematicians with a wide spread of research interests, but it should not be assumed that they are familiar with the technical details of any particular area of mathematics. Proposals are judged by the committee itself: although it may seek advice, it does not normally send proposals to referees. It is therefore important that the case for a grant should be written for the general mathematician and not for the specialist. Applications should be brief and self-contained. Please do not append substantial documents that contain irrelevant detail or refer to web sites for key information. Applications must be sent in hard copy to De Morgan House.
5. The committee judges each application on its merits. Since its membership changes from year to year, it should not be assumed that it is familiar with the details of previous applications and correspondence from earlier rounds; nor should it be assumed that a grant, for example under Scheme 3 or for a regular collaboration under Scheme 4, will be renewed repeatedly.
6. The limits mentioned in the various schemes are upper bounds, not standard awards. Grants are made to meet actual expenditure on items in the application, and any surplus must be returned to the Society, rather than retained for related purposes or carried forward to another year.
7. The task of collating applications, forwarding them to the committee, recording decisions, and preparing and checking notification letters is nontrivial and time-consuming. Please apply well in advance and bear in mind that you may not hear the outcome of an application immediately.

### Scheme 1 - Conference Grants

Grants are made to the organisers of conferences to be held in the United Kingdom. Programme Committee tends to give priority to the support of meetings where an LMS grant can be expected to make a significant contribution to the viability and success of the meeting. The Society expects that the meetings, which it supports, will be open to all members of the Society, and will only support a closed meeting if an exceptional case is made. Support of larger meetings of high quality is not ruled out but for such meetings an LMS grant will normally cover only a modest part of the total cost. Brief academic and financial reports of the conference are expected. An application form, obtainable from the Society's office (address above), or (as a LaTeX file) from the electronic archive, sets out conditions under which grants are normally made and requests the information Programme Committee usually requires when considering an application. The Society will not make grants to cover the cost of secretarial help, excessive room charges, or conference dinners and entertainment. It expects such items to be covered by contributions in kind from the host department, or by registration charges, or by income from other sources. The Society wishes to support research students, and applications should include details of the extent to which research students will be involved in the conference. Up to £1000 may be awarded to support student participants. Support for students is intended to contribute to travel, accommodation and subsistence costs, but not registration fees. The Society also wishes to encourage overseas participants from the former Soviet Union, Eastern Europe and other countries within the scope of Scheme 5 (see below); a further £1000 may be awarded to support such participants. Potential applicants should note that the Society is reluctant to award grants to conferences which clash with the British Mathematical Colloquium. Applications are considered three times a

year and the deadlines for submission are 31st January, 31st May and 31st August. The current upper limit for grants is £5000, the size of the grant to take into account the length of the conference, the number of UK participants and the number of research students taking part. The total grant, less the support for research students and 'Scheme 5' participants, shall not normally exceed £3000. (In this context 'research student' means 'research student of any nationality studying at a UK university'.)

### **Scheme 2 - Visitors**

Some financial support is provided for visitors to the UK who give lectures in at least three separate institutions. Exceptionally, support under this scheme might be provided for a speaker addressing just one meeting which is regional in scope. The LMS contribution under this scheme is restricted to travel expenses (international and within the UK). Host institutions are expected to meet the cost of accommodation and subsistence, and any other costs. The application should be made in a letter, usually of no more than two A4 sides, giving a brief summary of the following information:

- the academic standing of the visitor;
- the justification for the visit;
- the proposed itinerary;
- an estimate of travel and subsistence costs.

There are no specific deadlines but normally an application should be submitted at least three months before the date of the proposed visit to allow for consideration by the LMS Programme Committee and an announcement of the visit in the Society's Newsletter. Applications cannot usually be considered between mid-June and mid-September. All arrangements for a visit under this scheme are the responsibility of the applicant.

### **Scheme 3 - Support of Joint Research Groups**

The scheme is to provide support for

groups of mathematicians, working in at least three different locations in the United Kingdom, who have a common research interest, who wish to engage in collaborative activities and whose geographical locations are such that reasonably frequent regular meetings - several per year - are a realistic possibility.

A grant may be used for a variety of purposes associated with the group's activities, such as expenses for speakers at common seminars, travel for group members between institutions either for research visits, seminars or study groups. The Society wishes to support research students and young postdoctoral mathematicians, and applications should indicate details of the extent to which they will be involved in the programme. No strict criteria will be laid down as to the use of the money but the Society reserves the right to judge whether the activities proposed in an application are appropriate for a grant. Applications should be made by a nominated 'grant-holder', who will be responsible for the use of the grant, and countersigned by a 'supporter' from each of at least two further institutions. (If none of the applicants is a member of the Society, the application must be countersigned by a member of the Society.) The grant will cover a twelve-month period and the Society will expect to receive a report, both academic and financial. Applications for the renewal of a grant will be considered along with fresh applications. The maximum grant awarded is currently £1000; for this, at least four meetings a year should be held (these should be open, and have at least two formal talks on the programme).

An application should take the form of a letter giving details of:

- the proposed activities;
- a list of participants in the group;
- a provisional budget indicating how any grant awarded is likely to be used;
- (in the case of repeat applications) an interim report on activities supported by existing grant.

While a reasonable level of detail is desirable, it should not be excessive and altogether the documentation expected might run to at most three A4 pages. Applications are considered three times a year, in September, February and June, with respective deadlines for applications of 31 August, 31 January and 31 May. Grants are expected to run from 1 March or 1 October.

#### **Scheme 4 - Collaborative Small Grants**

The aim of the scheme is to provide small grants to individual LMS members within the United Kingdom to help support a visit for collaborative research, either by the grantee to another institution within the UK or abroad, or by a named mathematician from within the UK or abroad to the home base of the grantee. The time available for joint research arising from the grant is expected to be several working days. The maximum sum available is £500 and, where necessary, grantees will have to cover further costs from other sources such as departmental or personal funds. The intention is to provide sufficient funds so that the call on other sources is held within manageable bounds.

Applications should be in the form of a letter setting out the proposed academic case for the visit, including a detailed description of a specific project, the standing of the collaborator and an estimate of costs. Whilst a reasonable level of detail is desirable, an application should not be excessively long, and the documentation should run to at most three A4 pages. Applicants should bear in mind that the purpose of the Scheme is to support specific projects with named collaborators and not, for example, simply to contribute to the costs of a sabbatical visit. A brief report on the use of the grant is expected: this should describe the academic outcome of the visit, together with very brief financial details.

Grants will be awarded three times annually, in September, February and June, with respective deadlines for appli-

cations of 31 August, 31 January and 31 May. Awards will be restricted to one in any given academic year (September to August) and in the event of oversubscription in any particular round, applicants who receive an award in the previous academic year will not be considered.

#### **Scheme 5 - International Short Visits**

This scheme, originally to support mathematics in the countries of the former Soviet Union has been extended to other countries. It now includes the countries of the former Soviet Union and Eastern Europe including the former Yugoslavia, China, India, Pakistan, Bangladesh, and the countries of Africa. It excludes the countries of Western Europe and North America and Australia. The status of other countries will be determined by Programme Committee case by case. For visits to Britain, the maximum grant shall be £50 a day for accommodation and subsistence, up to a maximum of £1400 and up to £500 for travel. For visits from Britain, the maximum grant is £1200. Success of an application will depend mainly on the likelihood of potential benefit to mathematics in the country concerned. Grants will not be made solely for attendance at conferences. Where a visit to or from the UK includes a conference, it should also include other academic activities which in themselves would justify the grant, and should be for a total period of not less than 14 days. For visits to the UK, any expenses during the period of a conference should be met by the conference organisers (see 'Conference Grants' above).

Applications for a grant under this scheme should be made by mathematicians at UK institutions, both for visits to the UK and for visits to the countries concerned. The application should be made in a letter, usually of no more than two A4 sides, giving a brief summary of the following information:

- the academic justification for the visit;
- the standing of the visitor (if from the

fSU to the UK) together with a brief CV;

- the proposed itinerary;
- a statement of travel and accommodation costs.

Any grant for travel and subsistence will normally be determined according to the formula: actual accommodation costs up to £35 per day plus £15 per day for other subsistence costs.

There are no specific deadlines but normally an application should be submitted at least three months before the date of the proposed visit to allow for consideration by the LMS Programme Committee and, in the case of visits to the UK, an announcement of the visit in the Society's Newsletter. Applications cannot usually be considered between mid-June and mid-September. All arrangements for a visit under this scheme are the responsibility of the applicant.

### Grants awarded since June 2000

#### CONFERENCE

Topic	Applicant	Grant £
British Logic Colloquium	M. Dzamonja, D. Evans	1,160
Workshop on Orbifolds, Groupoids and their Applications	T. Porter	1,000
Groups St Andrews 2001	C.M. Campbell	3,500
Belfast Functional Analysis Day 2000	M. Mathieu	810
Algorithms for Approximation 4	J.C. Mason	5,000
Mathematics in Medicine Study Group	J. King	3,200
Scottish Computational Mathematics Symposium 2000	D. Sloan	450
27th Conference on Stochastic Processes and their Applications	J.R. Norris	5,000
IUTAM Symposium on Diffraction and Scattering in Fluid Mechanics and Elasticity	I.D. Abrahams	1,000
ICMS Workshop on Algebraic Graph Theory	C. Morgan	3,300
Lévy Processes and Stable Laws	D. Applebaum	2,900
Applied Nonlinear Analysis and Differential Equations	S.D. Howison	4,000
History of Mathematical Table Making	R. Flood	2,240
4th Galway Topology Colloquium at Birmingham	C. Good	263
Conference to mark the sixty-fifth Birthday of Professor M.S.P. Eastham	B.M. Brown, W.D. Evans	640
Open University Winter Combinatorics Meeting	B. Maenhaut	350
Nonlinear Mechanics	C.J. Budd	1,200
18th British Combinatorial Conference	P. Rowlinson	2,000
16th British Topology Meeting	P. Turner	2,150
The Heritage of I Schur's 1901 Dissertation	A.O. Morris	6,007
British Mathematical Colloquium 2003	R.A. Wilson	9,000
Stochastic PDEs in Mathematical Finance	D. Elworthy	3,000
Alfred Goldie 80th Birthday Conference	K.A. Brown	2,000
Banach Algebras and Cohomology	N.J. Young	5,000
BAMC 2001	D.J. Needham	2,000

**SCHEME 2**

<b>Applicant</b>	<b>Visitor</b>	<b>Places to Visit</b>	<b>Grant £</b>
H.G. Dales	F. Ghahramani	Leeds, Edinburgh, Newcastle & Belfast	700
R. Cook	J. Brüdern	Sheffield, Cardiff & Liverpool	500
I. Bárány	P. Komjáth	UCL, LSE & East Anglia	165
M. Wiercigroch	E.F. Grekova	Aberdeen, Glasgow & Strathclyde	484
J.R. Whiteman	I. Babuska	Brunel, Oxford & Strathclyde	800
V. Mavron	D. Jungnickel	Sussex, QMW, RHBNC & Aberystwyth	320
H. Osbaldestin	J.D. Meiss	Loughborough, Warwick & UCL	530
J. Shackell	J. Van den Hoeven	Kent	157
M. van den Berg	B. Toth, F. Goetze, F. den Hollander	South West Probability and Analysis Seminars, Bristol	1,000
W.K. Hayman	W. Bergweiler	Imperial, Cambridge, Open & Nottingham	300
A. Ranicki	R. Geoghegan	Southampton, QMW & Edinburgh	213
K.C. Hannabuss	A.L. Carey	Oxford, King's & Cardiff	1,000
G.V. Wood	R. Nilsen	Swansea, Leeds, Newcastle, Edinburgh & Birmingham	1,000
A. Deitmar	W. Hoffmann	Exeter, Cambridge, Nottingham, London Number Theory Seminar	400
J.R. Partington & V.V. Kisil	A. Karlovich	Leeds, York, London & Cardiff	250
J.B. Fountain	B. Steinberg	York, Newcastle & Bangor	355
S.J. Malham	M. Oliver	Heriot-Watt, Imperial & Surrey	280

**SCHEME 3**

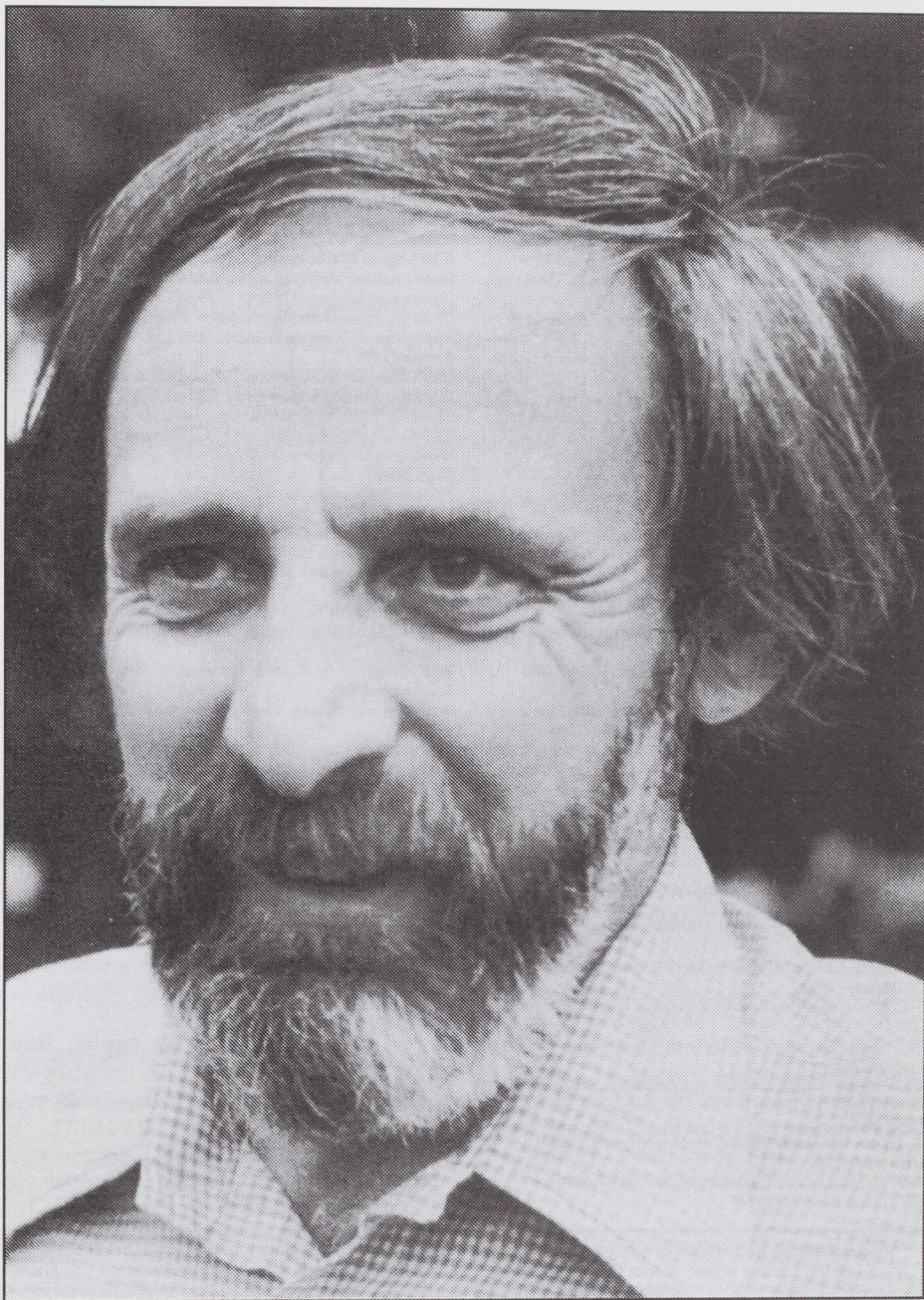
<b>Applicant</b>	<b>Institution</b>	<b>Topic</b>	<b>Grant £</b>
Z. Lykova	Newcastle	North British Functional Analysis Seminar	750
A.F. Jarvis	Sheffield	North of England Algebraic Number Theory Group	1,000
J. Brodzki	Exeter	K-theory and Analysis	1,000
C.M. Wood	York	Yorkshire Differential Geometry Day Meetings	1,000
D. Chillingworth	Southampton	Southern Bifurcation Meetings	1,000
C. Morgan	UEA	Mathematical Logic Seminar	1,000
D.E. Evans	Cardiff	Mathematical Physics - Physical Mathematics	1,000
N.M. Stephens	Goldsmiths	Computational Number Theory (SECANTS)	750
Y.V. Kurylev	Loughborough	British Inverse Problems Workshop	1,000
N. Snashall	Leicester	Representation Theory of Algebras (BLOC)	1,000
R.M. Green	Lancaster	North British Quantum Groups Collective	1,000
G.K. Sankaran	Bath	Algebraic Geometry (COW)	1,000
D. Ryder	Warwick	Junior Algebraic Geometry Seminar (CALF)	600
G. Delius	York	Integrable Boundary Quantum Field Theory	1,000
T. Brzezinski	Swansea	Quantum Geometry of Hopf Algebras and Hopf Algebroids	750
C. Morgan	UCL	Set Theory and its Neighbours	750
K. Mackenzie	Sheffield	Geometry with Brackets Seminar	960
A.P. Fordy	Leeds	Classical and Quantum Integrability	1,000

#### SCHEME 4

Applicant	Institution	Collaborator	Institution	Grant £
W.M. Oxbury	Durham	C. Pauly	Nice	400
R.A. Wilson	Birmingham	I. Suleiman	Oman	500
T.H. Lenagan	Edinburgh	V. Bavula	Antwerp	300
S. Coombes	Loughborough	G. Lord	Heriot-Watt	364
M. Roberts	Warwick	G. Patrick	Saskatchewan	300
A.R. Humphries	Sussex	A. Sarychev	Aveiro, Portugal	300
X. He	Warwick	R.L. Ricca	UCL	498
M. Berg	Bristol	E. Bolthausen	Zurich	250
A. Pushnitski	Loughborough	E.L. Korotyaev	Potsdam, Germany	300
M. Nazarov	York	P. Papi	Rome	300
S.B. Cooper	Leeds	S. Ishmukametov	Ulyanovsk	500
P.M. Higgins	Essex	J. Howie, N. Ruscuk	St Andrews	370
O.V. Zaboronski	Warwick	J. Cardy	Oxford	500
V. Gould	York	G. Gomes	Lisbon	500
J.R. Terry	Warwick	P. Robinson,	Sydney	500
		M. Breakspear		
D.J. Higham	Strathclyde	P. Kloeden	Johann-Wolfgang-Goethe	500
J. Bolton	Durham	L. Vrancken	Utrecht	350
P. Busch	Hull	J.A. Brooke	Saskatchewan	500
M.A. Singer	Edinburgh	R. Melrose	MIT	500
K.C. Hannabuss	Oxford	E. Langmann	Stockholm	500
M. Edjvet	Nottingham	A. Juhasz	Technion, Haifa, Israel	300

#### SCHEME 5

Applicant	Visitor	Institution	Places to Visit	Grant £
H.G. Dales	A.Y. Helemskii	Moscow	Leeds, Reading, Newcastle & Cambridge	1,000
V. Biktashev	E.E. Schnol	Moscow region	Liverpool & Plymouth	1,200
Y.M. Suhov	A.N. Rybko	Moscow	Cambridge, Swansea & London	1,000
A.D. Keedwell	V. Scerbacov	Kishinev	Surrey	1,410
E.G. Rees	V.M. Buchstaber	Moscow	Edinburgh	1,600
C. Smyth	A. Dubickas	Vilnius	Edinburgh, Glasgow & Nottingham	1,498
A. Movchan	S.V. Sorokin	St Petersburg	Liverpool	1,700
G. Everest	K. Gyory	Hungary	UEA	1,900
K. Brown	D. Stefan	Bucharest	Glasgow, Edinburgh	1,065
I.J. Siemons	V.B. Mnukhin	Taganrog	UEA	1,900
J.R. Parker	A. Mednykh	Novosibirsk	Southampton & Durham	1,900
V.B. Kuznetsov	E. Horozov	Sofia	Leeds, Loughborough & York	1,800
V.B. Kuznetslov	S. Slavyanov	St Petersburg	Leeds, Manchester & Oxford	1,800
A.A. Ivanov	V.I. Trofimov	Ekaterinburg	Imperial College	1,500
A. Grigor'yan	A. Davydov	Vladimir	Imperial College	520
A. Grigor'yan	A. Telcs	Budapest	Imperial College	820
V.M. Rothos	M. Feckan	Comenius, Bratislava	Loughborough	1,050
D.J. Henwood			Zimbabwe University	1,090
Y.V. Kurylev			Euler MI, St Petersburg	450



R. BOTT  
HONORARY MEMBER 1976

## DIARY

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>).

### JANUARY 2001

- 4 Algebra and Set Theory Meeting, London (288)
- 8-12 Wave Motion LMS/EPSRC Short Course, Birmingham University (285)(286)
- 8-18 Nonlinear Partial Differential Equations ICMS Instructional Conference, ICMS Edinburgh (284)
- 10 British Women in Mathematics Meeting, London (287)(289)
- 10 EPSRC Mathematics Programme - Open Meeting, University College London (288)
- 12 Edinburgh Mathematical Society Meeting, Edinburgh University (285)
- 24 Winter Combinatorics Meeting, Open University (288)

### FEBRUARY 2001

- 7 Causal Problems Meeting, Manchester University (289)
- 9 Edinburgh Mathematical Society Meeting, Edinburgh University (285)
- 10 Mary Cartwright Lecture, LMS Meeting, Oxford University (287)(289)
- 28 Inaugural LMS Regional Meeting (Midlands), Birmingham University (289)
- 28-3 Mar Groups and Geometries Meeting, Birmingham University (289)

### MARCH 2001

- 9 Edinburgh Mathematical Society Meeting, Aberdeen University (285)
- 18-24 Geometric Analysis and Index Theory Conference, Trieste, Italy (286)
- 19-24 Discrete and Continuous Stochastic Evolutions Workshop, Warwick University (287)
- 26-29 Quantum Field Theory, Noncommutative Geometry and Quantum Probability Workshop, Trieste, Italy (286)
- 26-29 Numerical Methods for Fluid Dynamics Conference, Oxford University (286)
- 26-31 Computational Stochastic Differential Equations Workshop, Warwick University (287)

### APRIL 2001

- 2-5 British Applied Mathematics Colloquium, Reading University (288)
- 2-6 Lévy Processes and Stable Law Conference, Warwick University (287)
- 7-9 British Topology Meeting, Edinburgh and Heriot-Watt Universities (286)
- 9 Alfred Goldie 80th Birthday Conference, Glasgow University (289)
- 9-12 British Mathematical Colloquium, Glasgow University (287)
- 20 Group Theory Postgraduate Conference, Imperial College (288)
- 28-29 Great Lakes Geometry Conference, Northwestern University, USA (288)

### MAY 2001

- 4 Edinburgh Mathematical Society Meeting, Stirling University (285)
- 6-13 Symmetry and Perturbation Theory Workshop (SPT2001), Sardinia (284)

- 28 -1 June Harmonic Morphisms and Harmonic Maps Conference, CIRM, Luminy, France (284)

### JUNE 2001

- 1 Edinburgh Mathematical Society Meeting, St Andrews University (285)
- 3-8 Mathematical Population Dynamics Conference, Marrakech (288)
- 8-10 Belgian Mathematical Society/Deutsche Mathematiker Vereinigung joint meeting, Liège University, Belgium (284)
- 19-22 Computational Intelligence: Methods and Applications Congress (CIMA 2001) University of Wales, Bangor (283)
- 19-23 Calculus of Functors, T. Goodwillie, LMS Invited Lectures, Aberdeen University (286)
- 22 Hardy Lecture, LMS Meeting, London
- 25-28 Banach Algebras and Cohomology Conference, Newcastle University (288)

### JULY 2001

- 1-6 British Combinatorial Conference, Sussex University (276)
- 4-6 Uncertainty in Geometric Computations MathFIT Workshop, Sheffield University (287)
- 5-7 British Congress of Mathematics Education, Keele University (286)
- 6 LMS Northern Regional Meeting, Manchester University
- 9-13 Stochastic Processes and their Applications Conference, Cambridge (275)
- 9-13 Progress in Partial Differential Equations, ICMS Edinburgh (288)
- 9-13 Algebraic Graph Theory Workshop, ICMS Edinburgh (288)
- 9-20 Modern Methods in Scientific Computing and Applications Seminar, Université de Montréal, Canada (287)
- 15-20 Algorithms for Approximation IV Symposium, Huddersfield University (286)
- 16-27 Stochastic Partial Differential Equations Workshop, Warwick University (287)
- 29-2 Aug Teaching of Mathematical Modelling and Applications (ICTMA 10), Tsinghua University, China (284)

### AUGUST 2001

- 5-18 Groups-St Andrews, Oxford University (289)
- 12-19 Homological Conjectures for Finite-Dimensional Algebras Summer School, Nordfjordeid, Norway (275)

### SEPTEMBER 2001

- 12 LMS South Western Regional Meeting, Bristol University

### JUNE 2002

- 24-28 Analytic Number Theory Workshop, Max Plank Institute, Bonn (288)

### APRIL 2002

- 7-12 Joint BMC/BAMC, Warwick University

### AUGUST 2002

- 20-28 ICM2002, Beijing, China (272)

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: [lms@lms.ac.uk](mailto:lms@lms.ac.uk)  
World Wide Web: <http://www.lms.ac.uk/>

The London Mathematical Society is registered with the Charity Commissioners.