

# THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 277

December 1999

## FORTHCOMING SOCIETY MEETINGS

*Friday 31 March-Saturday 1 April 2000 - Oxford*

Modelling Dynamics in the Life Sciences

*Friday 19 May-Saturday 20 May 2000 - Oxford*

Hilbert's Problems: Past and Future

Joint meeting with the

British Society for the History of Mathematics

*Friday 23 June 2000 - London*

M. Buhmann, M.J.D. Powell

## COUNCIL DIARY 15 October 1999

One item for report at the October Council meeting concerned the future of the EPSRC Mathematics Pool for research studentships. Members will know that Council was not happy with EPSRC's plans for replacement of the pool system, and wrote to heads of departments inviting them to voice any concerns they had to EPSRC. Largely as a result of representations received from the community, EPSRC has decided to shelve this plan at least for the current year, although this is not a long-term solution, and the Society will be having further discussions with EPSRC about the allocation mechanism in the near future.

As regular readers of this column know, a part of Council meetings is spent on issues related to funding and other aspects of the management of higher education. What is reported in this diary is only the tip of the iceberg; officers and committees of the Society are regularly involved in making representations to government and other agencies on issues of funding, some-

times in response to a direct request, sometimes spontaneously. The latest of these is HEFCE's evidence-based review of research policy and funding, which could well lead to fundamental changes in research assessment and selectivity. We had a lengthy discussion on current policy and those details which are of particular concern to mathematics, which will form the basis of the Society's response.

One of the things that came out of the February retreat was the feeling that the Society should have a stronger regional structure. Although we are the London Mathematical Society, the capital is only a fraction of our constituency. For some time we have held Society meetings outside London on a regular basis, but these have always been organised or at least initiated by Programme Committee. A long-term plan was agreed to establish regional committees, which will have the responsibility for organising meetings locally.

Tony Scholl



## 2000 PRIZES

In the year 2000, the Council expects to award a Polya Prize, a Senior Berwick Prize, a Naylor Prize and up to four Junior Whitehead Prizes. It is in the process of appointing a Prizes Committee which will be chaired by the President; the membership will be K.A. Brown, E.B. Davies, S.K. Donaldson, J.T. Stuart, L.N. Trefethen, and J.R. Willis.

Members of the Society are invited to submit their views on possible candidates to the President, Professor M.J. Taylor (The President, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HP; [president@lms.ac.uk](mailto:president@lms.ac.uk)) or to any other member of the Prizes Committee by **15 January 2000**. Nominations should contain explicit reference to the grounds on which the nomination is based, and brief descriptions of the criteria for each Prize are given below. Council reserves the right not to make an award of any particular Prize in the event that no candidate of sufficient merit is recommended by the Prizes Committee.

The Polya Prize is awarded in recognition of outstanding creativity in, imaginative use of, or distinguished contribution to, mathematics within the United Kingdom.

The Senior Berwick Prize can only be awarded to a mathematician who is normally resident in the United Kingdom on 1 January 2000. Grounds for the award may include work in, influence on or service to mathematics, or recognition of lecturing gifts in the service of mathematics. This prize may not be awarded to any person who has previously received the De Morgan Medal, the Polya Prize, or any other of the Society's senior Prizes.

The details of the regulations for the Naylor Prize are under review by Council at the time of writing. The conditions will almost certainly be these. It will be awarded to a mathematician who is normally resident in the United Kingdom on 1 January 2000. The grounds for the award will be work in, influence on, and contributions to Applied Mathematics and/or the

Applications of Mathematics, and lecturing gifts. No-one who has won the De Morgan Medal, the Polya Prize or any of the Society's other senior Prizes will be eligible for this Prize.

The Junior Whitehead Prizes are awarded to mathematicians who on 1 January 2000 are normally resident in the United Kingdom or members of the Society mainly educated in the United Kingdom, who are not already Fellows of the Royal Society, and who are under the age of forty years (except that this age restriction may be relaxed when it appears desirable to do so in order to take fair account of broken career patterns). Grounds for the award may include work in and influence on mathematics. This Prize may not be awarded to anyone who has won any of the Society's other Prizes. Members are reminded that the scope of the Junior Whitehead Prizes includes all aspects of mathematics, and Council has emphasised that this includes applied mathematics, mathematical physics and mathematical aspects of computer science.

Details of the regulations and the procedure for awarding the Prizes may be obtained from the Administrator, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HP ([oakes@lms.ac.uk](mailto:oakes@lms.ac.uk)).

John Pym  
Council and General Secretary

## CHRISTINE M. SHIU

Dr Christine M. Shiu, who was elected a member of the London Mathematical Society on 18 November 1994, died on 16 October 1999, aged 57.

## LIBRARY NEWS

Now that the new eUCLid system at University College library is up and running there is an online newsletter which may be of interest to members. It is called "Library News" and can be found on the web site (<http://www.ucl.ac.uk/Library/news.htm>).



# LONDON MATHEMATICAL SOCIETY

**Two-day Meeting**  
**31 March - 1 April 2000, Oxford**

## **MODELLING SPATIOTEMPORAL DYNAMICS IN INTERACTING SYSTEMS**

As experimental technology in the life sciences increases, generating more and more data, it is becoming clear that a theoretical framework is required within which these results can be interpreted. This has led to a number of exciting new challenges to mathematics, with the result that the application of mathematics to the life sciences is becoming a rapidly growing area. The aim of this meeting is to promote this area of mathematics. A major challenge concerns how to incorporate the properties and interactions of individual, component elements into a whole population (organ) model.

This meeting of the Society is open to all who are interested in exploring these issues. In particular, it is hoped that it will bring together young mathematicians and established senior scientists in the field. Particular topics to be studied include developmental biology, cardiac physiology, neurobiology, ecology and epidemiology.

### **Confirmed Speakers:**

John Brindley (Leeds)

Neil Ferguson (Oxford)

Julian Lewis (ICRF, London)

Hans Othmer (Minnesota)

Sasha Panfilov (Utrecht)

David Rand (Warwick)

Roger Traub (Birmingham)

Kees Weijer (Dundee)

### **Organiser:** P.K. Maini

### **Scientific Committee:**

H.G. Othmer (Minnesota), T.J. Pedley, FRS (Cambridge), B.D. Sleeman (Leeds)

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 4HP (requests should include an estimate of expenses and a very brief curriculum vitae; research students should include brief letters of endorsement from their supervisors).



## LONDON MATHEMATICAL SOCIETY HARDY FELLOWSHIP 2002

The Council of the London Mathematical Society was pleased by the number of high-quality nominations for the newly instituted Hardy Fellowship in 2001. As a result, at its meeting in June 1999, it decided to offer another Hardy Fellowship in 2002.

The Hardy Fellow will be a distinguished overseas mathematician who will make a significant contribution to the UK mathematical scene, and the word 'distinguished' is not intended to exclude those at an early stage of their careers. The Fellow should visit one (or possibly two) institutions in the UK for an extended period, but during that time should also visit several other places to explain ideas and to make wide mathematical contacts in the UK community. The Council has in mind a stay of about four months with around 8 to 10 lectures being given at a variety of other locations but it is prepared to be flexible and to consider other suggestions.

The grounds on which the Fellow will be chosen include:

- (i) the nominee's work in, influence on and general service to mathematics;
- (ii) the nominee's lecturing gifts;
- (iii) the breadth of the nominee's mathematical interests (so that as many UK mathematicians as possible may benefit from the Fellow's visit);
- (iv) the overall benefit the UK mathematical community might gain from the nominee's visit;
- (v) the possibility of bringing to the UK a mathematician who might otherwise visit rarely or never.

The LMS will pay all travel expenses for the Fellow, together with initial and final travel expenses for a spouse or established partner, and will also offer a suitable honorarium. The department will be expected to provide office accommodation and the normal academic support offered to a distinguished visitor. Because departments

are expected to act as hosts, nominations must have the support of departments. Normally there should be only one nomination from any department, but Council recognizes that in some institutions Applied Mathematics, Computer Science, Pure Mathematics and Statistics are joined together and in others put asunder; the rule will therefore be interpreted flexibly.

Nominations should be made by letter through the head of department to the Society's Executive Secretary at The London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HP. In order to give time for a proper consideration of nominees, proposals should arrive before **15 January 2000**. The nominations will be considered by the 2000 Prizes Committee before being presented to Council. A decision should be known by early summer 2000.

Further information can be obtained from the Council and General Secretary of the Society, Professor J.S. Pym, Department of Pure Mathematics, The University, Sheffield S3 7RH (j.pym@shef.ac.uk) or from the Meetings and Membership Secretary, Dr N.M.J. Woodhouse (nwoodh@maths.ox.ac.uk).

## SECANTS

SECANTS (South of England Computational and Algorithmic Number Theory Seminars) will hold its thirteenth meeting in Nottingham on Saturday 11 December 1999. The speakers will include Alan Lauder (Oxford) on "Decomposing polytopes and polynomials" and Neil Dummigan (Oxford) on "Some evidence for the Bloch-Kato conjecture at critical points". SECANTS is funded by an LMS Scheme 3 grant with additional funding from Hewlett-Packard. For more details of the programme, as well as general information about SECANTS, and how to be put on the e-mail mailing list, see (<http://www.maths.nott.ac.uk/personal/jec/secants/secants13.html>).



# LONDON MATHEMATICAL SOCIETY

## INVITED LECTURE SERIES

Boris Dubrovin (SISSA, Trieste)

### THE GEOMETRY OF ISOMONODROMIC DEFORMATIONS

20-24 March 2000  
Mathematical Institute, Oxford

#### Programme

2 lectures per day, with possibly some other additional speakers and problem classes for graduate students.

#### Abstract

Analytic aspects of the theory of Monodromy preserving deformations of linear ordinary differential equations with rational coefficients have been studied since the beginning of the century, especially in connection with the 'Painlevé property' of integrable systems. Recently, a geometric understanding of the structure of the parameter spaces of the deformations has emerged. In particular, the structure of a Frobenius manifold was discovered on the space of isomonodromic deformations of certain special systems of first order linear differential equations.

The lectures of Professor Dubrovin will explain how the geometry of Frobenius manifolds connects the theory of isomonodromic deformations with the (topological) quantum field theory associated to Gromov - Witten invariants for symplectic manifolds and with the bihamiltonian geometry of loop spaces.

For further details contact: Lionel Mason ([lmason@maths.ox.ac.uk](mailto:lmason@maths.ox.ac.uk)).

Board and lodging can be arranged at St Peter's College for the duration of the Lecture Series. Some limited financial support is available for UK participants.

Further details can be found at the URL  
<http://www.maths.ox.ac.uk/~lmason/invlect.html>



## 2000 ADAMS LECTURES

The Adams Lectures are held annually at the University of Manchester in memory of Frank Adams. The 2000 Adams Lecturer is Professor Larry Smith of the University of Göttingen, who will be visiting Manchester in the week 21-25 February 2000. The topic will be 'Invariant Theory'. Further details of date, time and place will be announced later. The local organisers are Reg Wood (reg@ma.man.ac.uk) and Grant Walker (grant@ma.man.ac.uk), and the lectures are sponsored by KPMG.

## MEETING OF THE SOCIETY

A meeting of the London Mathematical Society was held on Friday 15 and Saturday 16 October 1999 at the Christopher Ingold Building, University College London. About 55 members and visitors were present for all or part of the meeting. The meeting began at 2:15 pm, with Dr S. Huggett in the Chair. The following lectures were given: K.P. Tod, 'Twistors in a Lorentzian world'; M.G. Eastwood, 'Involutive structures in twistor theory'.

After tea, a General and Ordinary Meeting was held, Professor M.J. Taylor, FRS, President, in the Chair. Eleven people were elected to Ordinary Membership: M. Adibpour, D.H. Fremlin, V.V. Kisil, J.G. McWhirter, FRS, C.G. Rutherford, R.A. Satnoianu, R.J. Shank, J. Stoyanov, I.A.B. Strachan, A.J. Wathen, M. Zervo; two people were elected to Associate Membership: T.R. Riley, J.R. Terry; and three people were elected to Reciprocity Membership: T.M. Koornwinder, F.O.O. Wagener (both of the Wiskundig Genootschap), E. Samiou (Deutsche Math.-Vereinigung). One person found the book and was admitted to the Society.

The President announced the awards of the Polya Prize to Professor S.K. Donaldson FRS (Imperial College, London), the Senior Whitehead Prize to Professor M.J.D. Powell FRS (Cambridge University), the Junior Berwick Prize to Dr D. Burns

(King's College, London), and Junior Whitehead Prizes to Professor M.R. Bridson (Oxford University), Professor G. Friesecke (Oxford University), Professor N.J. Higham (Manchester University) and Dr I.B. Leader (University College, London). A short citation was read for each of the Prizewinners.

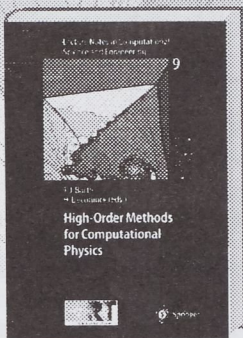
N.J. Hitchin, FRS, gave a lecture on 'HyperKähler geometry and integrable systems'. The meeting resumed at 9:15 am on Saturday morning, with Professor M.A.H. MacCallum in the Chair. The following lectures were given: S. Merkulov, 'Twistor solution of the holonomy problem'; L.J. Mason, 'Twistors and integrability'; Sir Roger Penrose, FRS, 'The physics programme of twistor theory, especially general relativity'.

## PROBABILITY AND STATISTICS

The 23rd annual Research Students' Conference in Probability and Statistics will be held jointly by the University of Wales College of Medicine and Cardiff University, from 11-14 April 2000. Participants are postgraduate students researching in the fields of probability and statistics. The purpose of the meeting is to provide a forum for participants to exchange research ideas through oral and poster presentations. The conference is arranged as a series of parallel sessions, with opportunity for informal discussion during evening social events. The sponsors are: Amgen Ltd, Glaxo Wellcome, London Mathematical Society, Mathsoft-Developers of S-Plus, Office for National Statistics, Pfizer, Unilever, Wyeth Laboratories and Zeneca Agrochemicals.

Complete up-to-date details (and electronic registration form) are available from the RSC2000 web page (<http://www.cf.ac.uk/uwcc/math/rsc2000/>). Further details may also be obtained from Sophie Gilchrist (rsc2000@cf.ac.uk) or UWCM Department of Medical Statistics, Heath Park, Cardiff CF14 4XN. The closing date for registration is **31 January 2000**.





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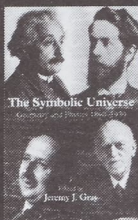


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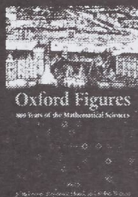


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# STOCHASTIC ANALYSIS

## LMS/EPSRC Short Course

Oxford, 20-24 March 2000

The last fifty years have seen a dramatic expansion in the field of stochastic analysis. Stochastic techniques have become crucial in diverse areas, from pure mathematics to applied sciences including biology, physics, chemistry, engineering, and of course famously, over the last twenty-five years stochastic methods have revolutionised the financial markets.

The meeting will be aimed at graduate students with an interest in stochastic analysis and its applications. The core of the meeting will be three series of lectures accessible to beginning research students, but of benefit to all research students:

- **Stochastic methods in finance**  
Professor Tomas Björk (Stockholm School of Economics)
- **Interacting particle systems**  
Professor Geoffrey Grimmett (Statistical Laboratory, University of Cambridge)
- **Martingale methods and weak convergence**  
Professor Tom Kurtz (University of Wisconsin, Madison)

Lectures will be supplemented by tutorials and discussion.

The registration fee is £60. EPSRC-supported students should expect that this will be paid from RTSG funds. Participants will pay their own travel costs. Funds are expected to be made available to cover the accommodation and subsistence costs, but not travel costs, of a number of research students at UK universities. Numbers will be limited and those interested are advised to make an early application.

Registration forms may be obtained from Helen Woodward, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HP (e-mail: [woodward@lms.ac.uk](mailto:woodward@lms.ac.uk)).



# UNIVERSITY OF CAMBRIDGE

## DEPARTMENT OF PURE MATHEMATICS AND MATHEMATICAL STATISTICS

### THE LOWNDEAN PROFESSORSHIP OF ASTRONOMY AND GEOMETRY

The Board of Electors to the Lowndean Professorship of Astronomy and Geometry (established in 1749) invite applications for this Professorship, which has become vacant on the resignation of Professor G.B. Segal, to take up appointment as soon as possible. It is the duty of the Professor to promote the study of some aspect of Geometry.

The appointment will be subject to the Statutes and Ordinances of the University. The University is committed to equality of opportunity.

Candidates for the Professorship should send one copy of their application, marked 'Confidential', together with the names of two referees, to the Secretary General of the Faculties, from whom further information regarding the Professorship is available, at the General Board Division, The University Offices, The Old Schools, Cambridge CB2 1TT, so as to reach him not later than **7 January 2000**.

Informal enquiries can be addressed to Professor W.B.R. Lickorish, Department of Pure Mathematics and Mathematical Statistics, 16 Mill Lane, Cambridge CB2 1SB or made by consulting <http://www.dpmms.cam.ac.uk>.



## CORRECTION

The Glasgow Math. J. would like to correct figures provided for the Journal Backlog data published in October's issue of the Newsletter. The correct figures are given below.

- Average time from submission to acceptance of a paper 6-8 months.
- Average time from acceptance to publication of a paper 14-16 months.

## CLASSICAL ANALYSIS

The network "Classical Analysis, Operator Theory, Geometry of Banach Spaces, their interplay and their applications" has been selected for funding by the European Commission, with an estimated budget of 1,494,000 euros. The network members are the Universities of Bordeaux (with Lille and Metz), Amsterdam (with Delft and Groningen), Dublin (with Maynooth, Belfast, London and Duisburg), Leeds (with Cambridge, Lancaster, Newcastle and Sheffield), Paris 6 (with Marne la Vallée, Lens, Lyon, Besançon and Cergy Pontoise), Trondheim (with Bergen, Lund and Uppsala), Vienna (with Regensburg) and Tel-Aviv and St Petersburg (Steklov Institute and St Petersburg University). The network coordinator is J. Esterle (e-mail: esterle@math.u-bordeaux.fr).

## PRACTICAL AND THEORETICAL ASPECTS OF PARTICLE FILTERS

The London Mathematical Society has agreed to help fund the 2nd Workshop on Practical and Theoretical Aspects of Particle Filters, which will be held in Cambridge in the period 16-18 December 1999 (organisers: Dan Crisan (Cambridge) and Arnaud Doucet (Cambridge)). The aim of the meeting is to bring together mathematicians, statisticians and engineers who work in the area and to facilitate interactions between the theoreticians and the practitioners of the subject. The meeting follows the success of the first workshop of its kind organised in Toulouse in November 1997.

The following are invited speakers at the meeting: Niclas Bergman (Linköping),

Carlo Berzuini (Pavia), Andrew Blake (Oxford), Fred Cerou (Rennes), Peter Clifford (Oxford), Pierre Del Moral (Toulouse), Bill Fitzgerald (Cambridge), Jessica Gaines (Edinburgh), Wally Gilks (Cambridge), Simon Godsill (Cambridge), Neil Gordon (Farnborough), Francois LeGland (Rennes), Jane Liu (Durham, USA), Terry Lyons (London), Allan Marrs (Farnborough), Laurent Miclo (Toulouse), Christian Musso (Chatillon), Nadia Oudjane (Chatillon), Christian Robert (Paris), Gareth Roberts (Lancaster), Michael Pitt (London), Neil Shepard (Oxford) and Mike Titterton (Glasgow).

The meeting will be open to all members of the LMS. Further information can be obtained from Dan Crisan, Statslab, DPMMS, 16 Mill Lane, Cambridge CB2 1SB (d.crisan@statslab.cam.ac.uk).

## WINTER COMBINATORICS MEETING

This meeting is the first of a series, to be held annually. It will take place in St. Michael's Church on the Open University campus on Wednesday 26 January 2000. All are welcome. Coffee will be available from 9:45. The speakers are as follows:

- 10:15-10:55 Jozef Siran (Slovak Technical University) Algebraic methods in the degree/diameter problem
- 11:20-12:00 Keith Edwards (University of Dundee) Detachments of finite graphs
- 12:05-12:45 Imre Leader (University College London) Normal spanning trees
- 14:15-14:55 Gregory Gutin (Brunel University) Hamiltonian digraphs
- 15:20-16:00 Anthony Hilton (University of Reading) The Hall and the Choice numbers of a graph

For information on how to get to the OU, and a campus map, visit the web site (<http://www.open.ac.uk/maps/>). If you plan to come to the meeting, please confirm this by e-mailing Kathleen Quinn. For further information contact: Kathleen Quinn, Department of Pure Mathematics, The Open University, Walton Hall, Milton Keynes MK7 6AA (K.A.S.Quinn@open.ac.uk) or Bridget Webb (B.S.Webb@open.ac.uk).



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## TIME-REVERSAL SYMMETRY IN DYNAMICAL SYSTEMS

The 2nd Workshop on Time-Reversal Symmetry in Dynamical Systems will be held in the Mathematics Department at Imperial College from 1-3 December 1999. It is a small scale follow-up of the 1st Workshop that was organized in December 1996 at the University of Warwick (see Physica D 112 for its proceedings). The workshop will deal with various aspects of time-reversal symmetry in dynamical systems, in Hamiltonian and in non-Hamiltonian systems. The main aim is to review recent developments in the field, including bifurcation theory for reversible equivariant (Hamiltonian) systems, reversible homoclinic orbits, reversible heteroclinic cycles, and normal form theory. For more information, including a detailed programme, see the web site (<http://www.ma.ic.ac.uk/~jswlamb/icworkshop.html>) or contact Dr Jeroen S.W. Lamb ([jsw.lamb@ic.ac.uk](mailto:jsw.lamb@ic.ac.uk)). The workshop is supported by a grant from the London Mathematical Society.

## PHYSICAL INTERPRETATIONS OF RELATIVITY THEORY

A meeting "Physical Interpretations of Relativity Theory", will take place from 14.00 on 15 September 2000 to 17.00 on 18 September 2000, in Lecture Theatre 201 in the Civil Engineering Building, Imperial College, London. This will be the seventh in a series of bi-annual conferences sponsored by the British Society for the Philosophy of Science and held at Imperial College since 1988. The major objective of the meeting is to review the various physical, geometrical and mathematical interpretations of the formal structures of relativistic physics. Papers which examine philosophical, historical and epistemological aspects of relativistic physics are invited, together with those dealing with mathematics, physics or experimental technique. The programme of the meeting will consist of morning and afternoon sessions made up of papers of 30 and 45 minutes in

length. There will be a morning and afternoon coffee break and a buffet lunch each day. A volume of papers will be circulated to registered delegates and a volume of late papers and supplementary papers will be circulated after the meeting. A brochure giving details about the meeting (and previous meetings) and about submission of abstracts, preparation of texts, deadlines, etc. is available from Dr M.C. Duffy, who will shortly inform LMS members of a website address containing information about the meeting and abstracts of papers included in the programme. Enquiries should be sent to Dr M.C. Duffy, School of Computing, Engineering & Technology, University of Sunderland, Edinburgh Building, Chester Road, Sunderland SR1 3SD (tel: 0191 515 2856; fax: 0191 515 2703; e-mail: [michael.duffy@sunderland.ac.uk](mailto:michael.duffy@sunderland.ac.uk)).

## HOPF ALGEBRAS IN LOCAL QUANTUM FIELD THEORY Seminars by Professor Dirk Kreimer (Mainz)

Local quantum field theories need to be renormalized. The resulting combinatorics establishes a universal Hopf algebra structure. Algebraic properties of renormalization schemes combine with this Hopf algebra to regard the renormalization problem as a Birkhoff decomposition. Relations to noncommutative geometry and number theory will be discussed.

Friday December 3 at 12 noon, Mathematical Institute, Oxford. Contact: Dr S.T. Tsou ([tsou@maths.ox.ac.uk](mailto:tsou@maths.ox.ac.uk))

Monday December 6 at 2 pm, Laver Building, University of Exeter. Contact: Dr Jacek Brodzki: ([brodzki@maths.ex.ac.uk](mailto:brodzki@maths.ex.ac.uk))

Tuesday December 7 at 2 pm, King's College, London. Contact: Dr Gerard Watts ([gmtw@mth.kcl.ac.uk](mailto:gmtw@mth.kcl.ac.uk)) (<http://www.mth.kcl.ac.uk/events/theor-physics.html>).

Professor Kreimer's visit is supported in part by the LMS. Members of the LMS are welcome.



25% off LMS books to LMS members

**Singularity Theory**

*Proceedings of the European Singularities Conference, August 1996, Liverpool and Dedicated to C.T.C. Wall on the Occasion of his 60th Birthday*

W. Bruce and D. Mond

Singularity theory draws on and contributes to many areas both within and outside mathematics. This volume, containing articles from well known figures, presents an up-to-date survey of research in this area.

**£29.95** PB 0 521 65888 8 445pp 1999

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**Sets and Proofs**

S. Barry Cooper and John K. Truss

This book and its sister volume, *Models and Computability*, provide readers with a comprehensive guide to the current state of mathematical logic. All the authors are leaders in their fields and are drawn from invited speakers at 'Logic Colloquium '97'.

**£29.95** PB 0 521 63549 7 446pp 1999

*London Mathematical Society Lecture Note Series, 258*

**Propositional Logic**

*Deduction and Algorithms*

Hans Kleine Büning and Theodor Lettmann

This account concentrates on the algorithmic translation of important methods, especially of decision procedures for (subclasses of) propositional logic. The algorithmic approach will appeal to researchers and graduate students in computer science and logic.

**£50.00** HB 0 521 63017 7 420pp 1999

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**Surveys in Combinatorics, 1999**

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The British Combinatorial Conference is one of the most well known meetings for combinatorialists. This volume collects the invited talks from the 1999 conference held at the University of Kent, spanning a broad range of combinatorial topics.

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**The Eightfold Way**

*The Beauty of Klein's Quartic Curve*

Silvio Levy

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*Mathematical Sciences Research Institute Publications, 35*

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J. Madore

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DHAHRAN, SAUDI ARABIA

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## EDITOR'S NOTE

This number of the *Newsletter* contains two advertisements for posts at the King Fahd University of Petroleum and Minerals. The Dean of the Faculty has informed us that this University comprises male students only, and that the posts are therefore only for men. There are other universities in Saudi Arabia which employ women, and the Dean will be glad to refer enquiries from women to them.

## HONORARY DEGREES

Honorary degrees have been awarded to members of the London Mathematical Society in the past year:

Ali Fröhlich	Bristol
Andrew Wiles,	Nottingham

The Editors would be glad to learn of the names of other recipients of honorary degrees.

## DEPARTMENTAL NEWS

**Open University** Professor David Brannan has been re-elected Dean of the Faculty of Mathematics and Computing for the period 14 December 1999 to 31 December 2002. The following lectureship appointments have been made in the Department of Pure Mathematics, all from 1 October 1999: Dr Barbara Maenhaut (previously of the University of Queensland) Lecturer in Discrete Mathematics; Dr Toby O'Neil (previously of the University of Edinburgh): Lecturer in Analysis; Dr Kathleen Quinn (previously Research Fellow, Open University) Lecturer in Discrete Mathematics; Dr Steve Vickers (previously of Imperial College) Lecturer in Theory of Computation. Professor Terry Griggs and Professor Mike Grannell (previously of the University of Central Lancashire) were Visiting Professors in the Department from 1 January 1998, and have been appointed Research Fellows from 1 August 1999.

# UNIVERSITY OF SHEFFIELD

## *Department of Pure Mathematics*

### LECTURER AND TEMPORARY LECTURER IN PURE MATHEMATICS

Applications are invited for the above posts, which will be tenable from 1 July 2000 or as soon as possible thereafter. The temporary lectureship will be tenable for a fixed period of two years. These posts are part of the university's ongoing research stimulation, and are the third and fourth new appointments in Pure Mathematics since August 1998.

Preference may be given to candidates whose research interests link with those already established in the department, namely algebraic topology, geometry, algebra (mainly ring theory), number theory and functional analysis. More information about the department's research strengths is on the department's website at <http://www.shef.ac.uk/~puremath/>. It is expected that the appointees will have proven research records (possibly with some postdoctoral experience), and will contribute to the high quality research and teaching of the department.

The salary will be on the lecturer A/B scale in the range £17,238 - £30,065 per annum, according to qualifications and experience. Informal enquiries may be made to Professor Rodney Sharp (0114-222-3746, [R.Y.Sharp@sheffield.ac.uk](mailto:R.Y.Sharp@sheffield.ac.uk)), Professor John Pym (0114-222-3725, [J.Pym@sheffield.ac.uk](mailto:J.Pym@sheffield.ac.uk)), or Professor John Greenlees (0114-222-3786, [J.Greenlees@sheffield.ac.uk](mailto:J.Greenlees@sheffield.ac.uk)).

The closing date for applications is 10 December 1999.

Requests for further particulars and an Information Pack about the posts should quote the reference number R1837 and be directed to the Personnel Department, The University of Sheffield, Western Bank, Sheffield S10 2TN (tel: 0114-222-1631 (24 hr); e-mail: [jobs@sheffield.ac.uk](mailto:jobs@sheffield.ac.uk); website: [www.shef.ac.uk/jobs/](http://www.shef.ac.uk/jobs/)).

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# King Fahd University of Petroleum & Minerals

DHAHRAN, SAUDI ARABIA

## College of Sciences Department of Mathematical Sciences

The Department of Mathematical Sciences at King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia, invites applicants for faculty positions at the levels of Lecturer, Assistant Professor and above, to start September 1, 2000. Candidates with the following specialization are sought: Analysis, Applied Mathematics, Numerical Analysis, Probability Theory, Stochastic Processes & Statistics. Applicants from other fields will also be considered.

Applicants should hold a Ph.D. degree, should be able to teach undergraduate and graduate courses, and should be committed to research.

The Department of Mathematical Sciences currently has over 60 faculty members in a wide range of areas of specialization. The department has BS, MSc and Ph.D. programs in Mathematics.

**Salary/Benefits:** Two year renewable contract. Competitive salaries based on qualifications and experience. Free furnished air-conditioned on-campus housing unit with free essential utilities and maintenance. The appointment includes the following benefits according to the University's policy: air ticket to Dhahran on appointment; annual repatriation air tickets for up to four persons; assistance with local tuition fees for school-age dependent children; local transportation allowance; two months' paid summer leave; end-of-service gratuity. KFUPM campus has a range of facilities including a medical and dental clinic, an extensive library, computing, research and teaching laboratory facilities and a recreation center.

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Fax: 966-3-860-2429  
E-Mail: [faculty@kfupm.edu.sa](mailto:faculty@kfupm.edu.sa) or [c-math@kfupm.edu.sa](mailto:c-math@kfupm.edu.sa)

## BAMC 2000 Call for papers

The British Applied Mathematics Colloquium 2000 will be held at UMIST from 25-29 April 2000. British participation is open to all with an interest in the applications of mathematics. This meeting will include speakers in fluids, dynamical systems, numerical analysis, mathematical biology, solid mechanics, combustion, etc. Mathematicians, engineers, physicists and all others interested, from universities, industry, research establishments and colleges are invited. Talks and posters are invited in both traditional and emerging applications of mathematics. The organisers particularly encourage younger researchers to attend and present talks.

Plenary talks will be given by:

- Professor J.D. Buckmaster (Urbana)
- Professor P.G. Drazin (Bristol)
- Professor H.B. Keller (Caltech)
- Professor J.P. Keating (Bristol)
- Professor S.R. Reid (UMIST)
- Professor J.A. Yorke (Maryland)

Minisymposia are planned for the following areas:

- Dynamical systems
- Solids
- Financial mathematics
- Granular flows
- Numerical analysis

- Mathematical biology
- Rotational flows
- Combustion
- Inverse problems

Professor Drazin will give the Stewartson Lecture. A question and answer session will be hosted by the Mathematics Secretariat of EPSRC. There will also be a short presentation by the BBSRC.

Those wishing to attend should return the registration forms available at the web-site below (preferably electronically) and their fees (by post, addressed to the Treasurer), by **Friday 25 February 2000**. A late fee of £25 will be payable after this date. Cheques should be made payable to UMIST. Alternatively payment by credit card is welcome.

Information about the programme and the electronic registration forms may be accessed at the conference web site (<http://www.ma.umist.ac.uk/bamc/>). For other enquiries, contact the committee by e-mail ([bamc2k@umist.ac.uk](mailto:bamc2k@umist.ac.uk)). The organising committee are: J.W. Dold (chairman) (UMIST), I.D. Abrahams (Manchester), J.B. Parkinson (secretary) (UMIST), P.W. Duck (Manchester) D.S. Broomhead (treasurer) (UMIST). The organisers are greatly indebted to the following for their generous support of the Colloquium and minisymposia: The London Mathematical Society, The Stewartson Memorial Fund, SIAM (UK and Irish section) and the IMA.

## WARWICK WORKSHOPS 2000

- 12 February British Women in Mathematics Discussion Day  
 25 February Meeting in Honour of Professor Sir Christopher Zeeman's 75th Birthday  
 (Organiser: David Rand)  
 3 - 7 April Workshop on Ergodic Theory of  $\mathbb{Z}^d$ -actions. Joint venture with the Newton Institute as part of the Programme on Ergodic Theory, Geometric Rigidity and Number Theory. (Organisers: Peter Walters, Mark Pollicott (Manchester) and Klaus Schmidt (Vienna))  
 8 - 15 April Workshop on Topology, Geometry & Physics  
 9 - 22 July Workshop on Geometry & Topology  
 (Organisers: John Jones, Victor Pidstrigatch and Colin Rourke)

For further information contact: Peta McAllister, Mathematics Research Centre, University of Warwick, Coventry CV4 7AL (e-mail: [peta@maths.warwick.ac.uk](mailto:peta@maths.warwick.ac.uk); tel: 01203-524403; fax: 01203-523548).



## RSS 2000

The International Conference of the Royal Statistical Society in 2000 will be hosted by the Department of Applied Statistics at The University of Reading. The main conference will be held from 13-15 September 2000. This will be preceded by two pre-conference short courses, on 'Multivariate Statistics for Manufacturing Performance Enhancement' and 'Statistics in Finance' on 11-12 September. The Fisher Memorial Lecture will be given by Professor Bradley Efron (Stanford University) in the evening of 12 September, and the conference will open the following morning with the Campion Lecture to be delivered by Mr Richard Jolly (UNDP). There will be a closing plenary session on the Friday by Professor Peter Diggle (Lancaster University). Full details about the conference are given on the web site (<http://www.rdg.ac.uk/rss2000/>) and copies of the conference brochure can be obtained from the Conference Administrator, Department of Applied Statistics, The University of Reading, P O Box 240, Earley Gate, Reading RG6 6FN (tel: +44 (0)118 931 8022 or e-mail: [rss2000@reading.ac.uk](mailto:rss2000@reading.ac.uk)).

## PARTNERSHIPS IN SCIENCE AND ART

Can you bring the insights of science and art closer together with an idea that captures the public's imagination? A unique opportunity exists for scientists and artists to research, develop and produce projects that reflect contemporary practice in each discipline. Approximately ten research and development grants (up to £10,000 each) and two production grants (up to £50,000 each) will be made available. Projects may involve artists inspired by scientific research, scientists interested in the creation of new forms of expression, or a combination of both. The finished work should enhance the public understanding of science and art.

SciArt is as much concerned with the process of developing ideas as the ideas themselves. The deadline for submission is **10 January 2000**. Short-listed partnerships will be notified by early March 2000. All partnerships will be advised of their success or otherwise by the end of March 2000. Further details about SciArt can be found on the Wellcome Trust's website ([www.wellcome.ac](http://www.wellcome.ac)).

## POSTGRADUATE OPEN DAY

The Mathematics Department of King's College London is holding an Open Day for prospective postgraduate students on 18 February 2000. The day will include talks by members of the various research groups in the Department, as well as a panel discussion and small group discussions with prospective supervisors and current students. Coffee, lunch and tea will be provided, and the department will consider making a contribution towards students' travel expenses.

King's College has one of the largest departments of mathematics in the United Kingdom. Furthermore, King's is one of the four London Colleges with the highest RAE research rating in both pure and applied mathematics. The mathematics department of King's is an exceptionally active, balanced and broad research unit, which offers research supervision in a wide range of subjects in pure and applied mathematics, including Analysis, Number Theory, Geometry and Topology, Theoretical Physics, General Relativity, Neural Networks and Disordered Systems, Statistical Mechanics, Quantum Probability, Mathematical Biology and Financial Mathematics.

For full details of the Open Day programme, an application form, and the booklet "Postgraduate Mathematics at King's", please contact: The Postgraduate Secretary, Department of Mathematics, King's College London, Strand, London WC2R 2LS (tel: 020 7848 2107, fax: 020 7848 2017, e-mail: [pgopenday.maths@kcl.ac.uk](mailto:pgopenday.maths@kcl.ac.uk)). Details are also available from the Department's web site (<http://www.mth.kcl.ac.uk/postgraduate/openday2000.html>).



Continued in  
MATHEMATICAL  
MONOGRAPHS

# Number Theory 1

Fermat's Dream

Kazuya Kato,  
Tokyo Institute of Technology,  
Japan, and Takeshi Saito,  
University of Tokyo, Japan

AMERICAN MATHEMATICAL SOCIETY



## Number Theory 1 Fermat's Dream

Kazuya Kato, University of Tokyo, Japan, Nobushige Kurokawa,  
Tokyo Institute of Technology, Japan, and Takeshi Saito, University of  
Tokyo, Japan

This is the first volume of an English translation of the original  
Japanese book in which core theories in modern number theory are  
introduced. Developments are given in elliptic curves,  $p$ -adic  
numbers, the  $\zeta$ -function, and the number fields. This work  
presents an elegant perspective on the wonder of numbers. Subsequent  
volumes, **Number Theory 2** on class field theory, and **Number Theory**  
3 are forthcoming.

American Mathematical Society

165pp, MMONO/186 0-8218-0863-X, 2000 £18.00 Pbk

# Foliations I

Alberto Candel  
Lawrence Conlon

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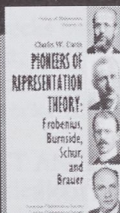
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American Mathematical Society

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## FORTHCOMING CONFERENCES

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*Loughborough University 26 – 28 April 2000*

### COMPUTATIONAL CHALLENGES FOR THE MILLENNIUM

*Cambridge 13–14 July 2000*

### NINTH MATHEMATICS OF SURFACES

*Cambridge 4 – 6 September 2000*

### THIRD QUANTITATIVE MODELLING IN THE MANAGEMENT OF HEALTH CARE

*University of Salford, 5 – 7 September 2000*

### SECOND INTERNATIONAL BOUNDARY INTEGRAL METHODS: THEORY AND APPLICATIONS

*University of Bath 11 – 15 September 2000*

### SHORT COURSE AND THIRD IMAGING AND DIGITAL IMAGE PROCESSING: MATHEMATICAL METHODS, ALGORITHMS AND APPLICATIONS

*De Montfort University, Leicester 12–15 September 2000*

### SHORT COURSE AND FIRST FRACTAL GEOMETRY: MATHEMATICAL TECHNIQUES, ALGORITHMS AND APPLICATIONS

*De Montfort University, Leicester 19–22 September 2000*

### FIFTH MATHEMATICS IN SIGNAL PROCESSING

*University of Warwick 18 – 21 December 2000*

### THIRD SPATIAL PATTERNS IN PERMEABLE ROCKS

*Churchill College, Cambridge 27 – 29 March 2000*

### FOURTH MATHEMATICAL MODELS OF MAINTENANCE

*University of Salford 9–11 April 2001*

### ADVANCED SIMULATION AND CONTROL FOR AUTOMOTIVE APPLICATIONS

*Keble College, Oxford 24 – 26 September 2001*

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To: Mrs Pamela Bye, Conference Officer, The Institute of Mathematics and its Applications, Catherine Richards House,  
16 Nelson Street, Southend-on-Sea, Essex, SS1 1EF.

Tel: (01702) 354020

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## MATHEMATICIANS VISITING THE UK IN 1999/2000

### ABERDEEN UNIVERSITY

- Bowen, J. (Bucknell University, USA)  
Relativity Theory, Aug '99 - Jan '00.  
Neusel, M. (University of Göttingen)  
Algebraic Topology, Dec '99.  
Smith, L. (University of Göttingen)  
Algebraic Topology, Dec '99.

### BATH UNIVERSITY

- Chaves, M. (Universidad Autonoma de Madrid, Spain) Nonlinear Partial Differential Equations, Jan - Feb '00  
Kuske, R. (Minnesota University)  
Industrial Applied Mathematics, Sept - Dec '99  
Pohozaev, S.I. (Steklov Math Institute, Moscow) Jan - Feb '00.  
Shiskov, I. (Donetsk, Ukraine) Nonlinear Partial Differential Equations, Nov - Dec '99

### CITY UNIVERSITY

- Itoh, H. (Nagoya University) Theoretical Physics, 1 Apr - 30 Sept '00.

### DURHAM UNIVERSITY

- Guest, M.A. (Tokyo Metropolitan University) Differential Geometry, 5 weeks between Jan & Apr '00.  
Pedit, F.J. (University of Massachusetts at Amherst) Differential Geometry, 5 weeks between Jan & Apr '00.

### EAST ANGLIA UNIVERSITY

- Einsiedler, M. (University of Vienna)  
Arithmetic Dynamics, Sept '99 - Aug '00.

### EDINBURGH UNIVERSITY

- Alabert, A. (University of Barcelona)  
Stochastic Dynamical Systems, 1 Nov - 24 Dec '99  
Barcelo, J.A. (University of Madrid)  
Differential Equations & Harmonic Analysis, 1 Mar - 31 May '00  
Bavula, V. (Kiev) Non-Commutative Algebra, 11 Oct - 24 Dec '99  
Beyerstadt, B. (Mathematics Institute, Göttingen) Number Theory, 15 Oct '99 - 30 Apr '00  
Buchstaber, V. (Steklov Institute,

- Moscow) Algebraic Topology, Integrable Systems, 1 Oct - 6 Nov '99  
Doust, I. (University of NSW) Functional Analysis, 12 Jul - 17 Dec '99  
Kumar, A. (Rajdhani College India)  
Functional Analysis, Operator Spaces, 5 Oct - 20 Dec '99  
Rykov (Moscow State University)  
Deformed Configuration/Direct Search and Multi Objective, 1 Oct - 11 Dec '99  
Sun, X-L. (Shanghai University) Nonlinear Optimisation, 30 Oct - 1 Nov '99

### ESSEX UNIVERSITY

- Umar, A. (King Fahd University of Petroleum & Minerals, Saudi Arabia)  
Algebraic Semi-group Theory, Jul-Dec '99.

### EXETER UNIVERSITY

- Schubert, G. (University of California)  
Fluid Dynamics & Magneto-hydrodynamics, Jul - Dec '99.

### GLASGOW UNIVERSITY

- Cain, B. (Iowa State University) Matrix and Operator Theory, 15 Sep '99 - 31 Aug '00.  
Liu, Z. (Chansha University of Electric Power, China) Nonlinear Analysis, 1 Sep '99 - 28 Feb '00.  
Zarhin, Y. (Pennsylvania State University)  
Algebraic Geometry, Number Theory, Lie Groups and Lie Algebras, 15 Aug '99 - 15 Jul '00.

### GOLDSMITH COLLEGE

- Wong, N.C. (National Sun Yat-Sen University) Functional Analysis, Jul-Dec '99.

### HULL UNIVERSITY

- Alberverio, S. (Universität Bonn) Feynman Path Integrals, Oct '99.  
Daletski, A. (Universität Bonn) Stochastic Differential Equations, Dec '99.  
Haba, Z. (University of Wroclaw)  
Feynman Path Integrals, Oct - Nov '99.  
Thaler, H.M. (Universität Bonn)  
Schrödinger Equations on Lie Groups, Nov '99.



Zuleta, L. (University of Geneva) Spectral and Scattering Theory, Jan '00

### IMPERIAL COLLEGE

Beck, B. (Catholic University of Louvain, Belgium) Statistics, Oct '99 - Jan '00.

Finkel, F. (Universidad Computense de Madrid, Spain) Applied Mathematics, Jan '99 - Jan '00.

Its, A. (Indiana University at Purdue) Applied Mathematics, Nov '99 - Jun '00.

Kapaev, A.A. (Russian Academy of Sciences, St. Petersburg, Russia) Applied Mathematics, Nov '99 - Apr '00.

Kato, R. (Kagoshima University, Japan) Mathematical Physics, Jul '99 - Jun '00.

Lee, Y. (Seoul National University, Korea) Statistics, Sept '99 - Aug '00.

Lopez, J. (Institute de Fisica de Cantabria, Spain) Mathematical Physics, '97 - Jan '00.

Ono, Y. (Nagoya University, Japan) Mathematical Physics, Nov - Dec '99 & Jun - Aug '00.

Yang, J. (Beijing Information Technology Institute, China) Applied Mathematics, Nov '99 - Jan '00.

### KING'S COLLEGE LONDON

Ghikas, D. (University of Patras, Greece) Disordered Systems, 15 Sept '99 - 30 Sept '00.

### LEEDS UNIVERSITY (Applied)

Colton, D.L. (University of Delaware, USA) Inverse Problems Applied to Medicine, Feb - Mar '00.

Hao, D.N. (Hanoi Institute, Vietnam) Inverse Problems, Sept - Oct '99.

Hua, C. (Wuhan University, China) Partial Differential Equations, Sept '99 - Jan '00.

### LEEDS UNIVERSITY (Pure)

Bhattachargee, M. (IIT, Guwahati, India) Group Theory (Logic) one year 2000

### LIVERPOOL UNIVERSITY

Aslanyan, A.G. (MIRA, Moscow) Eigenvalue Problems for Elastic Shells, Sept '99.

Bae, Y.J. (Kyung Pooh University, S. Korea) Knot Theory, Dec '99 - Jan '01.

Beltrami, E. (University of Pisa, Italy) Knot

Theory, Oct '99 - Sept '00.

Manchon, P. (Universidad Politecnica, Madrid, Spain) Low-Dimensional Topology, Mar '00 - Jan '04.

### LIVERPOOL JOHN MOORES UNIVERSITY

Leinback, C. (Gettysburg College, Pennsylvania) Computer Algebra Systems, Mathematics Education, Numerical Linear Algebra, Parellel Computing, 1 Sept '99 - 22 Jul '00.

### LONDON SCHOOL OF ECONOMICS

Beck, A. (University of Wisconsin) Search Problems, Mathematics for the Social Sciences, 2 Jun '99 - 8 Aug '00.

### NEWCASTLE UNIVERSITY

Yeh, B. (University of Taiwan) Functional Analysis, Aug '99 - Jul '00.

### NOTTINGHAM UNIVERSITY

Iovita, A. (University of Washington, Seattle) Number Theory, Sept '99 - Mar '00.

Izhboldin, O. (St. Petersburg University) Arithmetic Geometry, May - Jun '00.

Shu, X. (Huaihai Institute of Technology, China) Modelling Laminate Composites, Nov '99 - May '00.

Stoll, M. (University of Düsseldorf, Germany) Number Theory, Sept - Oct '99.

Vostokov, S. (St. Petersburg University) Arithmetic Geometry, Apr - May '00.

Zarhin, Y. (Penn State University, USA) Number Theory, Jan - Jun '00.

### OXFORD UNIVERSITY

Archangel'ski, A. (Moscow State University) General Topology, 1 - 30 Sep '99

Bradlow, S. (University of Illinois) Differential Geometry, 1 - 31 Jan '00

Cohen, M. (University of Jerusalem) Perturbation Theory, 1 May - 30 Jun '00

Fink, J.B. (Kalamazoo College) Combinatorics, 1 Sept '99 - 31 Aug '00.

Havas, G. (Queensland University) Algebra, 1 Sep - 31 Dec '99

Hillie, L. (Hamburg University) Representation Theory, 15 Sep - 15 Dec



'00

Hitchcock, A.G. (University of Zimbabwe)  
General Topology, 1 Sep - 30 Nov '99.

Judd, K. (University of Western Australia)  
Nonlinear Systems, 14 Oct - 3 Dec '99

Koshitani, S. (Chiba University, Japan)  
Representation of Finite Groups, 31 Aug  
- 16 Oct '99.

Kunzi, H. (Berne University) General  
Topology, 1 - 15 Oct '99

Moller, R.G. (University of Iceland)  
Algebra, 28 Apr - 28 Jul '00

Oyehuag, L. (University of Norway)  
Mathematical Biology, Jan - Jun '00

Pavol, S. (IHES) Analysis, 1 Oct '99 - 31  
Mar '00

Peterson, R. (Colorado University)  
Periglacial Processes, Sep '99 - Sep '00

Plahte, E. (University of Norway) Pattern  
Formation, 1 Sept '99 - 1 Jun '00.

Sgarra, C. (Politecnico di Milano)  
Mathematical Finance, 1 Sept '99 - 1 Feb  
'00.

Szoke, R. (Eötvös University) Analysis, 1  
Sept - 1 Dec '99.

Theil, F. (Max Planck Institute) Applied  
Analysis, 1 Sept '99 - 31 Aug '00.

Zhenhai, L. (Changsa University, China)  
Nonlinear Partial Differential Equations,  
1 Nov - 31 Dec '99

### **SALFORD UNIVERSITY**

Nolde, E.V. (Russian Academy of Science)  
Asymptotic Methods, Wave Propagation  
in Layered Structures, Fluid-Solid  
Interaction, Oct - Nov '99 & Jun - Aug  
'00.

### **SOUTHAMPTON UNIVERSITY**

Fuertes, Y. (Autonoma, Madrid) Riemann  
Surfaces, Sep '99 - Sep '00

Vieira, I. (Federal University of Bahia,  
Brazil) Health Modelling, OR, 5 Aug -  
31 Dec '99.

### **STRATHCLYDE UNIVERSITY**

McLeod, B. (University of Pittsburgh)  
Linear and Nonlinear Partial and  
Ordinary Differential Equations, May -  
Jun '00.

Wensham, D. (Northwest Normal  
University, China) Nonlinear Waves, Jun  
'00 - Jun '01.

### **SURREY UNIVERSITY**

Ilyin, A. (Keldysh Institute, Moscow)  
Functional Analysis and the Navier-  
Stokes Equations, Aug - Oct '99.

Voss, H. (Potsdam, Freiburg) Nonlinear  
Dynamics of Systems with Time Delay,  
Sept - Nov '99.

### **SUSSEX UNIVERSITY**

van Vleck, E.S. (Colorado School of Mines)  
Computational Dynamical Systems,  
Spatially Discrete Diffusion Equations,  
Jan - Jun '00.

### **UNIVERSITY COLLEGE LONDON**

Ludwig, M. (Technische Universität,  
Wien) Pure Mathematics, '99 - '00.

Ronan, M. (University of Illinois, Chicago)  
Pure Mathematics, May '00 - '04.

Twomey, B. (University of Cork, Ireland)  
Pure Mathematics, '99 - '00.

### **UNIVERSITY OF WALES, BANGOR**

Kobal, D. (University of Ljubljana) K-theory,  
Mar '00.

Snellman, J. (Stockholm Universitet)  
Gröbner bases, '99 - '00.

### **WARWICK UNIVERSITY (Mathematics)**

Dixon, M. (Alabama University) Group  
Theory, 10 Jan - 21 Jul '00

Fujiwara, K. (Tohoku University, Sendai)  
Geometry, 1 Jan - 1 Feb '00.

Hambleton, I. (McMaster University)  
Geometry & Topology, 9 Jun - 22 Jul '00

Hara, K. (Ritsumeikan University)  
Stochastic Analysis, 1 Apr - 21 Sep '00

Karydas, N. (University of Thrace)  
Dynamical Systems, Oct '99 - Jul '00

Keum, J. (Konkuk University, Seoul)  
Algebraic Geometry, 3 Jan-2 Feb '00.

Kowalewski, A. (University of Mining &  
Metallurgy, Krakow) Control Theory, 25  
Oct '99 - 9 Dec '00

Marden, A. (Minnesota University)  
Geometry, 30 Mar - 1 Jun '00

Wulff, C. (Freie Universität, Berlin) Pattern  
Formation, 20 Feb-1 Apr '00.

### **WARWICK UNIVERSITY (Statistics)**

Settimi, R. (Chicago University) Bayesian  
Statistics, Apr '00.



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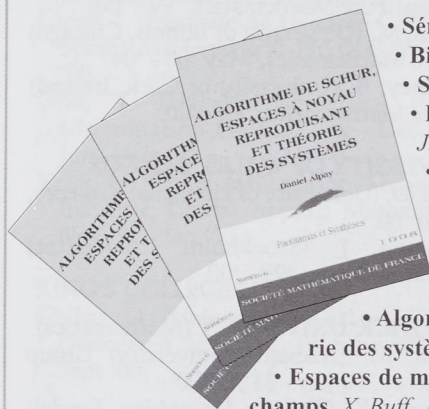
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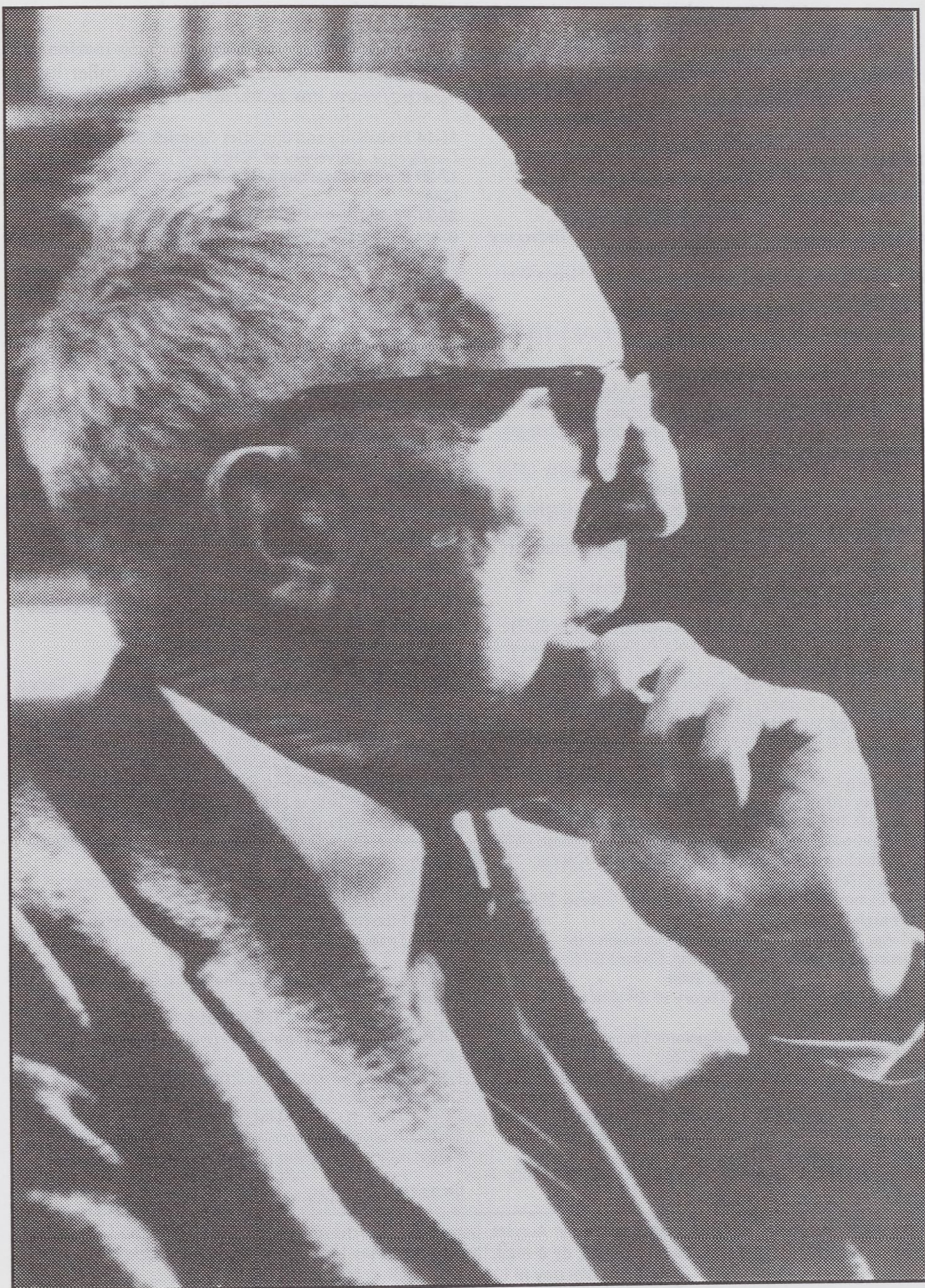
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## DIARY

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>).

### DECEMBER 1999

- 1-3 Time-Reversal Symmetry in Dynamical Systems Workshop, Imperial College London (277)
- 3 Ian Sneddon 80th Birthday Conference, Glasgow University (276)
- 4 Scottish Geometry & Topology Day, Glasgow University (276)
- 10 Edinburgh Mathematical Society Meeting, Heriot-Watt University (275)
- 11 SECANTS, Nottingham University (277)
- 16-18 Practical and Theoretical Aspects of Particle Filters Workshop, Cambridge (277)

### JANUARY 2000

- 5-8 Non-Fermi Liquid Effect in Metallic Systems Conference, Isaac Newton Institute, Cambridge (275)
- 14 Edinburgh Mathematical Society Meeting, Edinburgh University (275)
- 26 Winter Combinatorics Meeting, Open University (277)

### FEBRUARY 2000

- 4-6 Meeting in Honour of David Burgess's 65th Birthday, Nottingham University (274)
- 11 Edinburgh Mathematical Society Meeting, Edinburgh University (275)
- 12 British Women in Mathematics Discussion Day, Warwick University (277)
- 18 Postgraduate Open Day, King's College London (277)
- 21-25 Adams Lectures (L. Smith of Göttingen University) Manchester University (277)
- 25 Meeting in Honour of Professor Sir Christopher Zeeman's 75th Birthday, Warwick University (277)
- 28 Feb - 3 Mar Hyperbolic Problems Conference, Magdeburg, Germany (275)

### MARCH 2000

- 10 Edinburgh Mathematical Society Meeting, Dundee University (275)
- 20-24 LMS Invited Lectures: The Geometry of Isomonodromic Deformations (B. Dubrovin), Oxford (277)
- 20-24 Stochastic Analysis, LMS/EPSRC Short Course, Oxford (276) (277)
- 27-31 Quantum Computing Instructional Course, ICMS Edinburgh (276)
- 31-1 Apr Modelling Spatiotemporal Dynamics in Interacting Systems, LMS Meeting, Oxford (276)

### APRIL 2000

- 3 - 7 Workshop on Ergodic Theory of  $Z^d$ -actions, Warwick University (277)
- 5-14 Operator Algebras and Operator Spaces Instructional Conference, ICMS, Edinburgh (276)
- 8-15 Topology, Geometry & Physics Workshop, Warwick University (277)
- 10-20 New Theoretical Approaches to Strongly Correlated Systems NATO/EC Summer School, Isaac Newton Institute, Cambridge (276)
- 11-14 Differential Geometry Workshop, Leeds University (274)

- 11-14 Probability and Statistics Research Student's Conference, University of Wales (277)
- 17-20 British Mathematical Colloquium, Leeds University (274)
- 25-27 Postgraduate Combinatorial Conference, Queen Mary & Westfield College, London (276)
- 25-29 British Applied Mathematical Colloquium, UMIST (277)

### MAY 2000

- 5 Edinburgh Mathematical Society Meeting, Stirling University (275)
- 19-20 Hilbert's Problems: Past and Future, 2-day BSHM-LMS Meeting, Oxford

### JUNE 2000

- 2 Edinburgh Mathematical Society Meeting, St Andrews University (275)
- 23 LMS Meeting, London

### JULY 2000

- 3-7 Functional Analysis Meeting, Technical University, Valencia, Spain (265)
- 3-14 Approximation, Complex Analysis & Potential Theory Seminar, Montreal University (276)
- 9 - 22 Geometry & Topology Workshop, Warwick University (277)
- 10-14 3rd European Congress of Mathematics, Barcelona, Spain (272)
- 10-14 Free Surface Flows IUTAM Symposium, Birmingham University (272)
- 17-21 Integrable Systems in Differential Geometry, Tokyo, Japan (275)
- 17-22 International Congress of Mathematical Physics, Imperial College, London (275)

### SEPTEMBER 2000

- 10-17 Geometry of Quiver-Representations and Preprojective Algebras Summer School, Isle of Thorns, Sussex University (275)
- 13-15 Royal Statistical Society International Conference, Reading University (277)
- 15-18 Physical Interpretations of Relativity Theory Meeting, Imperial College London (277)
- 18-23 Differential Geometry International Congress, Bilbao, Spain (275)

### APRIL 2001

- 9-12 British Mathematical Colloquium, Glasgow University

### JULY 2001

- 1-6 British Combinatorial Conference, Sussex University (276)
- 9-13 Stochastic Processes and their Applications Conference, Cambridge (275)

### AUGUST 2001

- 12-19 Homological Conjectures for Finite-Dimensional Algebras Summer School, Nordfjordeid, Norway (275)

### 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.

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