

THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 219

September 1994

FORTHCOMING SOCIETY MEETINGS

Friday 21 October 1994, Burlington House
Mathematical Biology

A.C. Fowler, V.S. Isham, T.J. Pedley, D.A. Rand

Friday 18 November 1994, Burlington House
Annual General Meeting

B.E. Johnson, J.R. Ringrose (Presidential Address)

Friday-Saturday, 17-18 February 1995, Warwick University

Friday-Saturday, 12-13 May 1995, Oxford University

Friday 16 June 1995, Burlington House

LMS COUNCIL DIARY

Council had a busy meeting on 17 June. One unusual item was the Society's agreement with the Russian Academy of Sciences and Turpion Ltd (a jointly-owned company of the Royal Society of Chemistry and Pion Ltd), to cooperate in publishing the two journals *Izvestiya Mathematics* and *Sbornik Mathematics*, which are translations of the similarly named journals of the Russian Academy of Sciences. Hitherto these two translations have been published by the American Mathematical Society.

Council also reviewed the present state of electronic publishing. We set up a working group to advise on ways in which the LMS might improve its service to its members by 'going electronic'. We are not about to turn the LMS Proceedings into an Internet bulletin board (we would bankrupt ourselves if we did!). But there is plenty of scope for other uses of electronics, as the AMS has shown.

Evidently we were in a mood for setting up working groups. Another such group will investigate the possibility of creating local or regional LMS groups around the country. The Royal Statistical Society, for example, has a very successful network of local groups.

We discussed the draft changes to the National Curriculum for Mathematics. Several members of Council felt strongly that the watering down of school mathematics in recent years poses a major threat to physics, chemistry and engineering, not to mention higher mathematics.

The meeting began on a sad note. We heard that John Britton had recently been killed in a climbing accident on Skye. John was LMS Meetings and Membership Secretary in 1973-6, and he edited the LMS Newsletter during that period. He will be greatly missed.

Wilfrid Hodges

LONDON MATHEMATICAL SOCIETY
FRIDAY 21 OCTOBER 1994
MEETING ON MATHEMATICAL BIOLOGY

Professor V.S. Isham (University College London) 'Epidemic modelling: disease transmission and development'

Dr A.C. Fowler (Oxford) 'Delay differential equations in immunology, ecology and physiology'

Professor D.A. Rand (Warwick) 'Using spatio-temporal chaos and intermediate-scale determinism to quantify spatially-extended ecosystems'

Professor T.J. Pedley (Leeds) 'New perspectives in biological fluid dynamics'

The meeting will commence at 2.00 p.m at the Linnean Society, Burlington House, Piccadilly, London W1.

Further information will appear in the October Newsletter.

LONDON MATHEMATICAL SOCIETY
NOTICE OF GENERAL MEETING

There will be a General Meeting of the Society on Friday 21 October 1994 at 5.00 p.m. in the Linnean Society Lecture Room, Burlington House, Piccadilly, London W1, to consider a proposal by the Council of the Society to delete the existing By-Law II,3 and to substitute that printed below.

The Council has, in the light of Statute 11, increased the annual subscription of Corporation and Institutional Members for 1994-95 to £450 from the 1993-94 level of £430. The new By-Law II,3 would record the new rate.

Text of the proposed By-Law II,3

The annual subscription to the Society of Corporation and Institutional Members for the 1994-95 session shall be £450, inclusive of one volume of the Bulletin and two volumes of the Journal and of the Proceedings, except that those Corporation and Institutional Members who have more than one Representative shall pay an additional subscription of £15.50 for each Representative in excess of one.

R. Y. Sharp
Council and General Secretary

LONDON MATHEMATICAL SOCIETY

Spitalfields Day
Monday 19 September 1994

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

MODULI SPACES AND SOLITON DYNAMICS

Programme

10:30 Coffee

11:00 Sir Michael Atiyah (Cambridge)
Geometry and the Dynamics of Solitons

12:15 Lunch

13:30 Gary Gibbons (Cambridge)
Self-Gravitating Solitons

14:30 Richard Montgomery (UC Santa Cruz)
On Periodic Solutions to the Lorentzian Yang-Mills-Higgs Equations

15:30 Tea

16:00 Albert Schwarz (UC Davis)
Instantons, Chern-Simons Lagrangians and Related Topics

Anyone who is interested is welcome to attend. Lunch will be provided at a nominal charge; please let Tracey Hibbitt at the Institute know by Monday 12 September if you intend to come, in order to help us plan for lunch: telephone (0223) 335999, fax (0223) 330508, e-mail: t.hibbitt@newton.cam.ac.uk. Scientific inquiries may be addressed to R.S. Ward at the Institute, e-mail: r.s.ward@newton.cam.ac.uk

VISIT OF PROFESSOR LEONID PUGACH

The London Mathematical Society has awarded a grant under its FSU scheme to enable Professor Leonid Pugach of Bryansk to visit the UK. Professor Pugach is an expert in the cohomology theory of Banach algebras. Professor Pugach will visit Newcastle from 15 September to 17 October (contact M.C. White), will speak in Leeds on 18 and 25 October (contact H.G. Dales), will speak in Lancaster on 31 October (contact N.J. Young) and in Cambridge on 2 November (contact G.R. Allan).

VISIT OF DR PATRICK

Dr Patrick Polo (Université de Pierre et Marie Curie, CNRS) is visiting the UK from 20 September to 7 October. His visit is supported by an LMS Scheme 2 grant. He will speak on 'A rigidity theorem for actions of finite groups on enveloping algebras and Weyl algebras' at Queen Mary and Westfield College in the Mathematics Seminar Room at 2.00 pm on 22 September, 'Automorphisms of enveloping algebras of semisimple Lie algebras' at Leeds University in Room G of the Mathematics Department at 3.45 pm on 28 September, and 'K-theory of twisted differential operators on complete homogeneous spaces' at Sheffield University in Room J11 of the Hicks Building at 3.00 pm on 4 October.

Seminar details can be confirmed by a local organiser: S. Donkin (s.donkin@qmw.ac.uk) J.C. McConnell (pmt6jcm@sun.leeds.ac.uk), M. Holland (m.holland@sheffield.ac.uk).

FOREIGN MEMBER OF THE ROYAL SOCIETY

Professor F.E.P. Hirzebruch, Director of the Max-Planck-Institute for Mathematics, Bonn, Germany, has been elected a Foreign Member of the Royal Society.

COLLINGWOOD MEMORIAL PRIZE

This prize was established by the London Mathematical Society in memory of Sir Edward Collingwood and is awarded annually to a student of the University of Durham obtaining First Class Honours in Mathematics and entering a course of postgraduate study. The 1994 prize is awarded to Mr P.G. Jones of St John's College who is intending to do research at the University of Durham.

JOHN LESLIE BRITTON

John Britton, Emeritus Professor of Pure Mathematics at King's College London, who was elected a member of the London Mathematical Society on 19 December 1957 and was Meetings and Membership Secretary and Editor of the Newsletter from 1973 to 1976, died on 13 June 1994. He suffered a fatal accident whilst walking in the Cuillin Hills, Isle of Skye.

DEPARTMENTAL NEWS

Cambridge University The following professorial appointments have recently been made in the Department of Pure Mathematics and Mathematical Statistics. Professor N.J. Hitchin FRS of Warwick University has been appointed to the Rouse Ball Professorship of Mathematics, in succession to J.G. Thompson FRS. Professor R.L. Smith of the University of North Carolina at Chapel Hill has been appointed to the new Professorship of Statistical Science. Dr R.R. Weber of Cambridge University has been appointed to the Churchill Professorship of Mathematics for Operational Research, in succession to P. Whittle FRS. In addition, Dr R.E. Borcherds FRS and Dr R.L. Taylor have been promoted to *ad hominem* Readerships.

Glamorgan University Dr Derek Smith has been appointed Professor of Mathematics.

OXFORD UNIVERSITY PRESS

Oxford University Press is a leading publisher in mathematics and is exclusively responsible for the marketing and distribution of American Mathematical Society books in the UK, Europe, Middle East, and Africa.

We are proud to present some of the latest titles from OUP and the AMS:

Wavelets: An Analysis Tool

MATTHIUS HOLSCHNEIDER

An explanation in elementary language of the mathematical foundations of the theory of wavelet analysis. The book also has examples of how to put the theory into practice.

Oxford Mathematical Monographs
0-19-853481-7, 200 pp., line drawings,
Clarendon Press, September 1994

£35.00

Random Walks

B. D. HUGHES

An introduction to the problem of "random walk" and its applications. It strikes a careful balance between rigorous analysis and more informal methods, extending from the origins of the model to contemporary theoretical developments and applications.

0-19-853788-3, 256 pp., Clarendon Press,
August 1994

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Introduction to Symplectic Topology

D. MCDUFF and D. SALAMON

A self-contained introduction to symplectic topology. This book will acquaint the reader with almost all of the new methods in the field, providing proofs of the simpler versions of the most important new theorems.

Oxford Mathematical Monographs
0-19-851177-9, 340 pp., Clarendon Press,
September 1994

£40.00

Diagram Geometries

A. PASINI

This book provides a survey of the recent research in the area of diagram geometries. Applications of the research to the classification of complex groups is also discussed.

Oxford Mathematical Monographs
0-19-853497-3, 496 pp., Clarendon Press,
September 1994

£55.00

Lattice Methods for Multiple Integration

I. H. SLOAN and S. JOE

The first book devoted to the theory of lattice methods. The book includes examples and details of practical implementation including the estimation of errors.

0-19-853472-8, 250 pp., 60 line figures,
Clarendon Press, September 1994

£35.00

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RUSSIAN MATHEMATICAL MATERIAL AT THE DOCUMENT SUPPLY CENTRE

The British Library Document Supply Centre (DSC) at Boston Spa supports research by providing services based on a collection unique in its size, and unique in being dedicated to the function of inter-library document supply. Each year the Centre receives around three and a half million requests, by post or computer link from over 15,000 client libraries and organisations in the UK and overseas. Nearly 90% of requests are satisfied by retention photocopies of individual articles or loan of whole items from the Centre's own stock, though the Centre can access the holdings of other major UK library collections for its customers.

The Centre subscribes to around 50,000 journals and holds literally millions of books, reports, conference proceedings and theses. Any subject and language may be represented in DSC's holdings - there are, for example, over 1600 journal records containing the title elements "mathematic..." in DSC's Serial File. Since the Centre's inception, Russian language material has been collected. With around 1700 Russian journal subscriptions and

over 200,000 books and conferences in Russian, DSC is a unique resource for Russian scientific material in the West.

DSC responds to "known item" requests, where the bibliographic details of the item required are cited on requests received - there has been no tradition of reference services or subject searches. However, the Centre's CD-ROM publications and externally available online listings give a keyword approach to its serial, book and conference titles, and now even serial articles and conference papers.

General enquiries about DSC's services and products could be addressed to your host library in the first instance, or to DSC's Customer Services Department. Perhaps we are holding the information you seek, information which can be otherwise very difficult to obtain in the West. Please contact us if you think we can help. The British Library, Document Supply Centre, Boston Spa, Wetherby, West Yorkshire LS23 7BQ; Tel: Slavonic Section (0937) 54 6166; Customer Services (0937) 54 6060.

NORTH BRITISH DIFFERENTIAL EQUATIONS SEMINARS

Professor Morris Hirsch from Berkeley will be doing a lecture tour 16 - 28 October 1994. His main current interests are in the Dynamical Systems area. A schedule of his visit is as follows: Sunday 16 - Tuesday 18, Dundee; Tuesday 18 - Thursday 20, Heriot-Watt; Thursday 20 - Friday 21, Strathclyde; Monday 24 - Tuesday 25, Leeds; Tuesday 25 - Thursday 27, Sheffield; Thursday 27 - Friday 28, Manchester.

After mid-September, exact times and titles may be obtained by e-mail from Bob Grundy (reg@uk.ac.st-and) or Vivian Hutson (V.Hutson@sheffield.ac.uk) for the Scottish and English parts of the tour respectively. The London Mathematical Society is providing partial funding for this tour.

EDINBURGH MATHEMATICAL SOCIETY 1994-95

Meetings to be held by the Edinburgh Mathematical Society are: 21 October (Edinburgh) Annual General Meeting, Professor Sir Christopher Zeeman; 18 November (Strathclyde) Dr. J.N. Elgin; 9 December (Edinburgh) Professor D. McDuff; 13 January (Heriot-Watt) Dr. H. Ockendon; 10 February (Edinburgh) Professor M.J. Dunwoody; 10 March (Abertay) Dr. A.D. Wood; 5 May (Stirling) Dr. C.J.H. McDiarmid; 2 June (St. Andrews) Dr. MA. Berger.

Further information is available from Dr Philip Heywood, Dr C. Smyth (Honorary Secretaries), Department of Mathematics and Statistics, University of Edinburgh, James Clerk Maxwell Building, King's Buildings, Mayfield Road, Edinburgh EH9 3JZ.



UNIVERSITY OF
OXFORD

Savilian Professorship of Geometry

The electors intend to proceed to an election to the Savilian Professorship of Geometry, which will fall vacant upon the retirement of Professor I.M. James, FRS, with effect from 1 October 1995. The stipend of the professorship is at present £35,859 per annum.

The professor will be required to lecture and give instruction in Geometry or some other branch of Pure Mathematics.

A non-stipendiary professorial fellowship at New College is attached to the professorship.

Applications (ten copies, or one only from overseas candidates), naming three referees, should be received not later than **26 September 1994** by the Registrar, University Offices, Wellington Square, Oxford OX1 2JD, from whom further particulars may be obtained.

ROYAL SOCIETY MEDAL

The Council of the Royal Society has awarded the Sylvester Medal for 1994 to Professor P. Whittle, FRS, Churchill Professor of the Mathematics of Operational Research in the University of Cambridge, in recognition of his major distinctive contributions to time series analysis, to optimization theory, and to a wide range of topics in applied probability theory and the mathematics of operational research.

SIR ROGER PENROSE FRS

Roger Penrose, Rouse Ball Professor of Mathematics in the University of Oxford, received a knighthood in the Queen's Birthday Honours List for 1994.

CONFERENCE ON THE LEGACY OF GEORGE BOOLE

In 1995, University College, Cork will celebrate the 150th anniversary of its foundation. As part of this celebration, the University will hold a Conference, 28 - 30 June 1995, honouring George Boole, who was its first Professor of Mathematics. The last major Conference on Boole was held in 1954. Since then, major advances have been made in many areas influenced by him, so the time is right for a re-assessment of his contribution to learning.

Invited speakers: G.K. Batchelor (University of Cambridge), R.L. Devaney (Boston University), K. Devlin (St. Mary's College of California), I. Grattan-Guinness (Middlesex University), T. Hailperin (Lehigh University), D. MacHale (University College, Cork), J. McCarthy (Stanford University), R. Penrose (University of Oxford).

Program Committee: J. Bowen (Computer Science, UCC), D. Hurley (Mathematics, UCC), D. MacHale (Mathematics, UCC), L. Murray (UCC 150).

For further information contact: UCC 150 Office, University College, Cork. Ireland, tel: +353-21-276871, fax: +353-21-276647, e-mail: UCC150@IRUCCVAX.UCC.IE.

ROGER CARTER'S 60th BIRTHDAY

On the occasion of Professor Roger Carter's 60th Birthday an afternoon meeting will take place on Friday 23 September 1994 at the Mathematics Institute, University of Warwick. Programme: 2.00 - 3.00 Professor S. Donkin 'Some representation theory of quantum GL_n '; 3.00 - 4.15 Tea; 4.15 - 5.15 Professor I. Macdonald 'Non-symmetric orthogonal polynomials associated with root systems'.

All are welcome to attend. Limited funds are available to cover travel expenses within the UK. Those interested should get in touch, as soon as possible, with Dr C.R. Hajarnavis, Mathematics Research Centre, University of Warwick, Coventry CV4 7AL, e-mail: crh@maths.warwick.ac.uk.

ISAAC NEWTON INSTITUTE

Information about the Institute can be obtained from computers connected to the Internet by anonymous ftp (*ftp ftp.newton.cam.ac.uk*, logging in as *ftp* and providing your e-mail address as a password) and also by gopher (*gopher gopher.newton.cam.ac.uk*). The information contained ranges from the names of the Institute staff and how to reach the Institute to the programmes for the next two years and how to submit proposals.

AN APPEAL

Mr A.H. Campbell of Littlefields, Bishopswood, Chard, Somerset TA20 3RS, has been appealing for the past few months for the release of a young mathematician named Liu Gang who is imprisoned in China. Mr Campbell wishes to contact other mathematicians who might care to support the appeal. For further information contact Mr Campbell at the above address or by telephone on 0460-234236.

Two Lectureships in the Department of Mathematics

School of Mathematical & Information Sciences

Vacancy UAC.458

The Department of Mathematics, one of the three departments (along with Computer Science and Statistics) in the School of Mathematical and Information Sciences, teaches a full range of undergraduate and postgraduate courses. Within the Department there are two units, the Applied and Computational Mathematics Unit and the Mathematics Education Unit, each of which operates with a certain degree of autonomy.

The Department has particular research strength in combinatorics, group theory, functional analysis and operator theory, complex analysis, topology and numerical analysis.

Applicants must have a doctorate or equivalent and should have a proven record in research and teaching in any branch of Mathematics, but preference may be given to applicants whose field of interest is allied to those of existing staff. One of the lectureships is reserved for Pure Mathematics.

Commencing salary will be established within the range NZ\$39,500 - NZ\$50,000 per annum.

Further information, Conditions of Appointment and Method of Application should be obtained from Appointments (43014), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF (tel. 071 387 8572 ext. 206; fax 071 383 0368); or from the Academic Appointments Office, University of Auckland, Private Bag 92019, Auckland, New Zealand (tel. [64 9] 373 7999 ext. 5097; fax [64 9] 373 7454). Three copies of applications should be forwarded to reach the Registrar by 26 September 1994.

Please quote Vacancy Number UAC.458 in all correspondence.

W B NICOLL, REGISTRAR



New Zealand

*The University has an equal opportunities
policy and welcomes applications from
all qualified persons*

ANZIAM'95

The annual conference of ANZIAM (formerly the Applied Mathematics Conference), a division of the Australian Mathematical Society, is an established annual gathering of applied mathematicians, scientists and engineers with wide-ranging interests and problem-solving skills. It provides an interactive forum for presentation of results and discussions on applied and industrial problems derived in many scientific fields and amenable to quantitative description and solution. Being the summer meeting of the Australian Mathematical Society, it has traditionally maintained an informal atmosphere.

The invited speakers will include: Professor C. Grebogi (University of Maryland) 'Chaotic Dynamics'; Professor L. Leslie (University of NSW) 'Meteorology'; Professor S. McElwain (Queensland University of Technology) 'Industrial Modelling, Mathematical Biology'; Dr. A. Philpott (University of Auckland) 'Operations Research'; Professor J.M. Vanden-

Broeck (University of Wisconsin) 'Free Surface Hydrodynamics'.

The conference will be held at Broadwater Beach Resort, Busselton, Western Australia from 5 - 9 February 1995. Busselton is a coastal town about 250 km from Perth in the south west of Western Australia. Delegates should bear in mind that because of the limited availability of rooms, most accommodation will need to be shared. It is hoped that a fixed price of around A\$30 per night per person can be negotiated for those in shared accommodation.

A formal call for papers will be made in conjunction with the second circular, which should be issued in October. Papers are invited in all areas of Applied Mathematics, including modelling and applications to real-world phenomena. Further information can be obtained from: Dr G. Hocking, ANZIAM'95, Department of Mathematics, University of Western Australia, Nedlands 6009, Australia; e-mail: anziam@maths.uwa.edu.au.

COMPUTATIONAL MATHEMATICS

Scottish Computational Mathematics Symposium

A one day conference on Computational Mathematics will be held on Monday 12 September 1994 at the University of Strathclyde. The speakers will be: C.J. Budd (University of Bristol) 'Self-similarity and adaptive remeshing'; C.M. Elliott (University of Sussex) 'Phase field computations of solidification of undercooled liquids'; N.J. Higham (University of Manchester) 'Painless rounding error analysis'; E.F. Toro (Manchester

Metropolitan University) 'Multidimensional waf-type schemes for hyperbolic conservation laws'.

For further information contact Dr J.A. Mackenzie Department of Mathematics, University of Strathclyde, Glasgow G1 1XH, e-mail: j.a.mackenzie@ulc.ac.strath. The conference is receiving financial support from the London Mathematical Society.

EUROPEAN WOMEN IN MATHEMATICS

EWM95 will take place from Monday 24 to Saturday 29 July 1995 at Universidad Complutense de Madrid. Accommodation will be available at a University Dormitory very close to the Mathematics Department. The price will include all meals and, although it is not fixed yet,

will probably not exceed 4.000 Ptas. a day (around US\$25). For further information contact Capi Corrales, Facultad de Matematicas, Dept de Algebra, Universidad Complutense de Madrid, 28040 Madrid, Spain.



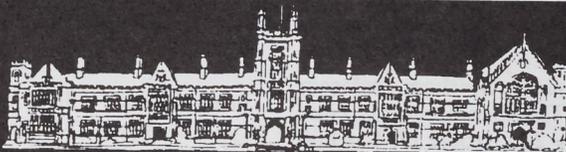
UNIVERSITY OF OXFORD

University Lecturership in Pure Mathematics (in association with Lincoln College)

Applications are invited for the above post, tenable from 1 October 1995. Stipend according to age, on the scale £14,756 - £27,473 per annum. The successful candidate may be offered a tutorial fellowship by Lincoln College, for which additional emoluments would be payable.

Further particulars, containing details of the duties and full range of emoluments and allowances attaching to both the University and the College post, may be obtained from the Chairman of Mathematics, Mathematical Institute, 24-29 St Giles', Oxford OX1 3LB, (telephone: Oxford (0865) 273538; fax: (0865) 273583; e-mail: DENISE@MATHS.OXFORD.AC.UK) to whom applications (10 copies or one only from overseas candidates) should be sent by 21 October 1994.

The University is an Equal Opportunity Employer.



The University of Sydney AUSTRALIA

ARC RESEARCH FELLOW/SENIOR RESEARCH FELLOW

School of Mathematics and Statistics
(Renewable)

Reference No: A25/01

The successful applicant will be part of the ARC funded project 'Group Representation Theory and Cohomology of Algebraic Varieties'. Preference will be given to applicants with expertise in all or some of the following areas: Lie and algebraic groups, geometry and topology of manifolds; group representation on cohomology spaces, Schubert varieties; Hecke algebras, hyperplane complements. Applicants should have, or expect to receive shortly, a PhD or equivalent qualification, and should have a strong record of publication of original research in the area.

The School has a large network of high performance work stations to support both research and teaching.

The position is available for 12 months initially, with the possibility of renewal for up to a further 3 years, subject to need and funding. For further information contact Professor G Lehrer on (612) 692 2976, fax on (612) 692 4534 . email on lehrer_g@maths.su.oz.au.

Salary: ARC Research Fellow A\$41,000 - \$48,688 p.a.
ARC Senior Research Fellow A\$50,225 - \$57,913 p.a.

Method of application: Three copies of the application, quoting Reference No, including curriculum vitae, list of publications and the names, addresses and fax numbers of at least three and not more than five referees to: The Personnel Officer (Group A), Carslaw Building, (F07), The University of Sydney NSW 2006, Australia, by 6 October 1994.

Equal employment opportunity and no smoking in the workplace are University policies.
The University reserves the right not to proceed with any appointment for financial or other reasons.

MERTON COLLEGE, OXFORD

RESEARCH FELLOWSHIP IN PURE MATHEMATICS

Applications are invited for this Fellowship, tenable for 3 years from 1 October 1995, for research in Pure Mathematics including its applications in Computing. Although this is primarily a Research Fellowship, the Fellow will be expected to give 16 lectures a year at the Mathematical Institute and 4 hours per week of undergraduate teaching for the College. The scale of stipends is from £13,601 at age 25 to £17,379 at age 30. In addition, the Fellow will hold a part-time consultancy at GCHQ, Cheltenham, for two months each summer, with a supplementary stipend of £2,500 a year. Funding will also be available from GCHQ up to £2,000 per year for travel expenses. Appointment is restricted to British Nationals, although in the case of an exceptionally well qualified candidate this restriction may be relaxed. The appointment is open to both men and women.

Further details, and application forms, can be obtained from the Warden's Secretary, Merton College, Oxford OX1 4JD. The closing date for applications is **28 October 1994**.

GRESHAM COLLEGE GEOMETRY

During the Autumn Semester three Public Lectures in Geometry will be given by Professor Ian Stewart (Gresham Professor of Geometry): 'The Geometry of Time Travel', Thursday 20 October 1994 at 1.00 pm at Gresham College; 'Marilyn and the Goats: Probability Paradoxes', Thursday 3 November 1994 at 5.30 pm at the City of London School for Girls, Barbican, London EC2; and 'The Pattern of Tiny Feet: The Mathematics of Animal Movement' on Thursday 24 November 1994 at 1.00 pm at Gresham College. Admission is free and without tickets. Further details of the lectures are available from Gresham College, Barnard's Inn Hall, Holborn, London EC1N 2HH; tel: 071-831 0575.

3rd INTERNATIONAL CONFERENCE ON FINITE FIELDS & APPLICATIONS First announcement

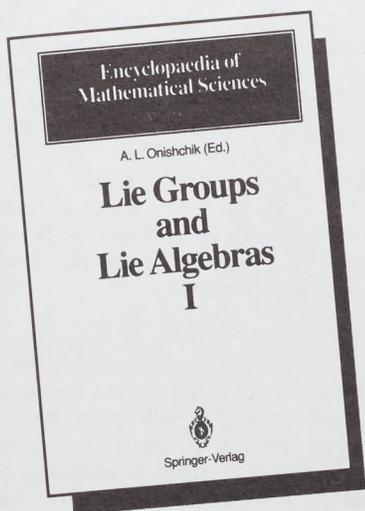
The conference will be held at the University of Glasgow, 11-14 July 1995. Anything with a significant finite field content, theoretical or applicable, will be relevant. There will be a strong international list of invited speakers and sessions for short contributed papers. Organisers: S. Cohen, J. Hirschfeld, S. Hoggar, G. Mullen, H. Niederreiter, R. Odoni, P. Shiue. Anyone wishing to be placed on the mailing list or desiring further information should contact Dr S. Cohen, Department of Mathematics, University of Glasgow, Glasgow G12 8QW; tel: 041-339 8855 (ext. 6356); e-mail: sdc@maths.gla.ac.uk.

SAVE BRITISH SCIENCE

The Annual General Meeting of Save British Science will be held on Thursday 24 November 1994 at 6.30 pm, Great Hall, Imperial College London. The guest

speaker will be The Rt. Hon. Paddy Ashdown, MP, Leader of the Liberal Democrats.

Recent Results on Lie Groups and Lie Algebras



A. L. Onishchik (Ed.)

Lie Groups and Lie Algebras I Foundations of Lie Theory. Lie Transformation Groups

With contributions by V. V. Gorbatsevich,
A. L. Onishchik, E. B. Vinberg

Translated from the Russian by A. Kozłowski

1993. VII, 235 pp. 4 tabs.
(Encyclopaedia of Mathematical Sciences, Vol. 20)
Hardcover DM 144,- ISBN 3-540-18697-2

This book is the first in a sub-series of the EMS devoted to the theory of Lie groups and Lie algebras. Its first part, which is written by Onishchik and Vinberg, is an introduction to this field. The second more advanced part by Gorbatsevich and Onishchik deals with Lie transformation groups and covers the work of the last decades including the most recent research results. The book is written for graduate students and researchers in mathematics and theoretical physics.

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Taipei, Taiwan

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A. L. Onishchik, E. B. Vinberg (Eds.)

Lie Groups and Lie Algebras III Structure of Lie Groups and Lie Algebras

With contributions by V. V. Gorbatsevich,
A. L. Onishchik, E. B. Vinberg

Translated from the Russian by V. Minachin

1994. Approx. 240 pp.
(Encyclopaedia of Mathematical Sciences, Vol. 41)
Hardcover DM 144,- ISBN 3-540-54683-9

A comprehensive account of the structure and classification of Lie groups and finite-dimensional Lie algebras (including semisimple, solvable, and general type) is contained here. In particular, a modern approach to the description of automorphisms and gradings of semisimple Lie algebras is given. A special chapter is devoted to models of the exceptional Lie algebras. The book contains many tables and will serve as a reference. At the same time many results are accompanied by short proofs. This Encyclopaedia volume will be immensely useful to graduate students in differential geometry, algebra and theoretical physics.

Also available:

A. L. Onishchik, E. B. Vinberg

Lie Groups and Algebraic Groups

Translated from the Russian by D. A. Leites

1990. XIX, 328 pp. 2 figs.
(Springer Series in Soviet Mathematics)
Hardcover DM 140,- ISBN 3-540-50614-4



Springer

Tm.1843/MNT/SF

THE MATHEMATICS OF IMPACT The Dynamics of Discontinuous Systems

This one-day meeting to be held in the Departments of Mathematics and Engineering Mathematics, University of Bristol on Monday 26 September 1994 will focus on recent mathematical developments in the dynamics of systems with discontinuities. A panel discussion will be included, to examine the relationship between impact dynamics and wear. There will be plenty of time for informal interactions.

Invited speakers: S. Foale (University College, London), H. Lamba (Strathclyde), T. Mullin (Oxford), A. Nordmark (Sweden). A small registration fee will be charged to cover catering costs. For further details contact: Professor S.J. Hogan (0272) 303246, e-mail: s.j.hogan@bristol.ac.uk; Dr. C.J. Budd (0272) 303317, e-mail: chris.budd@bristol.ac.uk. This meeting is made possible by a grant from the London Mathematical Society.

SET⁷

The second annual Week of Science, Engineering and Technology will begin on Friday 17 March 1995. The British Association seem to have decided that as it went so well last time on largely local initiatives, this will be the plan for next year as well. They haven't said anything about regional organizers, which originally they were going to have but which in the end never materialized. They have, however, asked to be told what is going to happen, so that they can include it in their Preliminary Programme to be launched in October and the final National Programme which will close for printing in early January.

I'd be grateful if departments organiz-

ing local events could let me know what they are doing. I will pass on what I get to the BA (though there's nothing to stop you from contacting them directly). If you contact me by e-mail (p.saunders@uk.ac.kcl.cc.bay) I can make up an electronic circulation list, which will make it easier to pass information around.

Above all, it's important that as many departments as possible should actually do something, even if it is only moving to the middle of March something you would have done anyway. SET⁷ is becoming recognized as a major scientific event, and mathematics has to be part of it.

P.T. Saunders

UNIVERSITY OF WALES VIDEO SEMINAR

A two-day workshop will be held at the University of Wales on 12 and 13 September 1994. Talks will be given at Aberystwyth, Bangor, Cardiff and Swansea using the live video network of the University. Invited speakers include R. Carter (Warwick), A.G. Elachvili (Tbilisi), K.C.H. MacKenzie (Sheffield), D. Stephenson (Michigan), M. Takesaki (UCLA) and V. Tarasov (St Petersburg). This is part of a programme of extended visits in Mathematical Physics and Physical Mathematics at the University in 1993-94, supported by the Research Committee of the Higher Education Funding Council for Wales. Visitors

making extended stays and speaking on the video network include V. Burenkov, Z. Brzezniak, V.F.R. Jones, L. Kauffman, Y. Kawahigashi, R. Kerman, R. Lewis, T. Miwa, W. Nahm, A. Lascoux, R. Nest, B. Opic, L. Pick, V. Rozet, M. Shubin, H. Siedentop, V. Turaev and A. Vershik. Such video seminars and series of lectures have been recorded on tape since 1992 - building up a library of video tapes which new graduate students and postdoctoral fellows can use. For further information on the workshop, contact D.E. Evans (Swansea), R. Brown (Bangor), W.D. Evans (Cardiff), A.O. Morris (Aberystwyth).



H.G. ZEUTHEN
Honorary Member 1875

DIARY

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

SEPTEMBER 1994

- 5-10 Model Theory and Algebraic Geometry Workshop, Manchester University (217)
5-16 Electron-Phonon Workshop, Warwick University (214)
9-12 Physical Interpretations of Relativity Theory, Imperial College, London (216)
16-18 Network of Communications in Mathematics, Gonville & Caius College, Cambridge (218)
19 LMS Spitalfields Day, Cambridge (218)
19-24 Analytic Aspects of Partial Differential Equations Instructional Conference, University of Bath (213)
21-22 British Topology Meeting, Southampton University (213)
26 One-Day Function Theory Meeting, Imperial College London (218)
28-30 Open Taniguchi Symposium, Warwick University (214)

OCTOBER 1994

- 10-28 School/Workshop on Variational and Local Methods in the Study of Hamiltonian Systems, ICTP, Trieste, Italy (207)
21-22 Festschrift in Honour of Professor P.D. Barry, Aspects of Analysis Conference, University College, Cork (218)

DECEMBER 1994

- 12-17 Pacific Rim Geometry Conference, National University of Singapore (214)

FEBRUARY 1995

- 7-10 Fractals in the Natural and Applied Sciences International Working Conference, Marseilles, France (217)

MARCH 1995

- 19-22 Carolus Magnus on Arithmetic and Geometry Colloquium, Aachen, Germany (217)

APRIL 1995

- 3-6 British Mathematical Colloquium, Heriot-Watt
18-22 Professor P.F. Baum, LMS Invited Lectures, Manchester University (218)
23-26 Korteweg and de Vries International Symposium, Amsterdam, The Netherlands (210)
24-28 Operator Algebras Symposium, Fields Institute, Canada (212)

MAY 1995

- 29-1 June Mathematical Modelling Conference, University of Brunei Darussalam (214)

JULY 1995

- 3-7 Fifteenth British Combinatorial Conference, University of Stirling (210)
3-7 International Congress on Industrial and Applied Mathematics, Hamburg (213)
17-28 Banach Algebras Conference, Newcastle University (217)

AUGUST 1995

- 28-1 Sep The A.C. Aitken Centenary Conference, University of Dunedin, New Zealand (210)

JULY 1996

- 21-27 European Congress of Mathematicians, Budapest, Hungary.

AUGUST 1998

- 18-28 International Congress of Mathematicians 1998, Berlin, Germany.

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