THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No.162 **June 1989**

FORTHCOMING SOCIETY MEETINGS

Friday 16 June 1989, Burlington House
V.F.R. Jones, H.R. Morton
Friday 20 October 1989, Burlington House
Meeting on Stochastic Analysis
Friday 17 November 1989, Royal Society
R.M. May, J.D. Murray

VISIT OF A.V. ARHANGEL'SKII

Professor A.V. Arhangel'skii (Moscow University) will be in Oxford, as an SERC Visiting Fellow, in June and July 1989. Details of his visit are yet to be confirmed, but it is likely that he will also be lecturing in Cambridge and London. Further information may be obtained from P.J. Collins, St. Edmund Hall, Oxford OX1 4AR.

GEOMETRY AND TOPOLOGY OF FOUR-MANIFOLDS

There will be a meeting of Geometry and Topology of Four-Manifolds at the University of McMaster, Hamilton, Ontario, Canada from 9th to 20th July 1990.

The purpose of the meeting is to bring together experts in various aspects of this subject, such as differential geometry, algebraic surfaces, Yang-Mills theory, topology and analysis.

To receive further information, contact one of the organizers: I. Hambleton, M. Min-Oo, A. Nicas, V.P. Snaith or M. Wang at the Department of Mathematics, McMaster University, Hamilton, Ontario, Canada L8S 4K1. Telephone (416)525 9140.

OPERATOR ALGEBRAS AND APPLICATIONS

A two-day workshop is being organised by E. Beggs, D.E. Evans, S. Majid and T. Matsui on Friday 23rd and Saturday 24th June 1989 at the Department of Mathematics and Computer Science, University College of Swansea. Invited speakers include G.A. Elliott (Copenhagen and Toronto), F. Goodman (Iowa) and A. Macfarlane (Cambridge).

A limited amount of SERC support is available for UK mathematicians wishing to attend. There may also be some time available for contributed talks. For further information contact Ms M. Falleyn, Department of Mathematics, University College of Swansea, Singleton Park, Swansea SA2 8PP. Telephone 0792-295459.

VISIT OF PROFESSOR SAHARON SHELAH

Professor Saharon Shelah of the Hebrew University, Jerusalem will be visiting England for the first two weeks of July and it is expected that he will speak at 11.00 am on Thursday 6th July in the Mathematics Seminar Room at Queen Mary College; at 4.30 pm on Friday 7th July in the Mathematical Institute at Oxford and on the afternoon of Wednesday 12th July in the Department of Pure Mathematics and Mathematical Statistics at Cambridge.

For further information, telephone Professor Wilfrid Hodges at Queen Mary College London 01-975 5485.

VECTOR BUNDLES AND SPECIAL PROJECTIVE EMBEDDINGS

A meeting on Vector Bundles and Special Projective Embeddings will be held from 3rd to 15th July 1989 in Bergen, Norway. The meeting is being organized by G. Ellinsgrud (Oslo), C. Peskine (Paris VI) and S.A. Strømme (Bergen).

For further information contact: S.A. Strømme, Mathematical Institute, University of Bergen, Alleg.55, N-5007 Bergen, Norway. E-mail stromme@rose.uib.uninett or nmasr@nobergen.bitnet.

XIV ROLF NEVANLINNA COLLOQUIUM

The Finnish Mathematical Society is organizing the XIV Rolf Nevanlinna Colloquium at the University of Helsinki from 11th to 14th June 1990. Invited main speakers include: E. Arbarelloa (Roma), M. Atiyah (Oxford), F. Catanese (Pisa), D. Drasin (West Lafayette), B. Fuglede (Copenhagen), N.G. Makarov (Leningrad), A. Marden (Minneapolis), O. Martio (Jyväskylä), C. McMullen (Princeton), J. Moser (Zurich) and D. Sullivan (New York).

Participation is open to all mathematicians. A small number of invited lectures will be organized in addition to the main lectures. The University of Helsinki will be celebrating its 350th anniversary in 1990. The Rolf Nevanlinna Colloquium will be a part of those festivities.

The registration fee will be 300 FIM. Those who wish to receive the second announcement should write immediately to Professor Seppo Rickman, Department of Mathematics, University of Helsinki, SF-00100 Helsinki, Finland. E-mail mathdept@finuh.bitnet. The organizing committee consists of Seppo Rickman, Chairman, Olli Lehto, Olli Martio and Mika Seppälä.

NEW TRENDS IN SYSTEMS THEORY

A joint conference, organised by the Università di Genova and the Ohio State University, on New Trends in Systems Theory will be held in Genoa, Italy from 9th to 11th July 1990. The aim of the conference is to bring together experts in various theoretical and applied areas of Systems Theory to review recent advances and to anticipate major future developments of the discipline. The conference is intended as an international forum, where the exchange of knowledge and experiences between researchers in this multidisciplinary field can take place. A major goal will be to enhance communication between scientists, engineers and mathematicians whose interests range from the very concrete to the very abstract. The topics will be: Mathematical theory of linear and nonlinear dynamical systems; Adaptive and learning control; Distributed parameter systems; Discrete event dynamic systems; Parallel and distributed computing in process control; Control and decision aspects in robotics, manufacturing and communication networks.

For further information write to Professor G. Conte, Dip. Mat. Università di Genova, via L.B. Alberti 4, 16132 Genova, Italy. E-mail gconte @igecuniv.bitnet.

ALGEBRAIC HYPERSTRUCTURES AND APPLICATIONS

The IVth International Congress on Algebraic Hyperstructures and Applications will be held in Xanthi, Greece from 27th to 30th June 1990. The topics will be Semihypergroups, hypergroups, hyperrings, hyperspaces; Ordered hyperstructures; Related topics as join spaces, cogroups, polygroups, and other multivalued structures; Applications of the above structures. The invited speakers are P. Corsini and J. Mittas.

A booklet of abstracts of the talks is being prepared. Abstracts should be typewritten, ready for reproduction (not exceeding one page) and sent to the organizers by 1st May 1990. The proceedings of the Congress will be published. The typescript of any paper (not exceeding ten pages) should be submitted by the end of the Congress. All papers will be refereed.

Further information can be obtained from L. Konguetsof and T. Vougiouklis, Democritus University of Thrace, 67100 Xanthi, Greece.

NUMERICAL ANALYSIS COLLOQUIUM

There will be a one-day Numerical Analysis Colloquium at the Department of Mathematics, University of Lancaster on Friday 2nd June, 1989 from 10.30 am to 5.00 pm. The principal speakers will be Professor E.W. Cheney (University of Texas at Austin) Multivariate interpolation and radial functions, and J. Gregory (Brunel University) Recursive subdivision algorithms for curves and surfaces.

Everyone is welcome to attend. Further details from Dr W.A. Light, Department of Mathematics, Lancaster University, Lancaster. Telephone 0524-65201, ext. 3940.

LONDON MATHEMATICAL SOCIETY

H.R. Morton (Liverpool)

INVARIANTS FOR SATELLITE KNOTS

V.F.R. Jones (Berkeley)

The 1989 Hardy Lecture

VON NEUMANN ALGEBRAS

Friday 16 June, 1989

at 3.30 pm

Geological Society's Meeting Room
Burlington House
Piccadilly, London W1

All interested are very welcome

Tea will be served at 4.30 pm

ICME 6 PROCEEDINGS

Copies of the Proceedings of ICME 6 (Budapest, 1988) are now available from the ICMI Secretariat, Centre for Mathematics Education, Southampton University, Southampton SO9 5NH. The price is £25.00 per copy (including p and p.) Please send cheques made payable to ICMI with your order.

The Proceedings (397pp) contains the texts of the plenary addresses by Nebres, Vergnaud, Ershov, Lovász and Kahane as well as detailed reports on the activities of all the working groups.

Oxford University Press announces and invites submissions for

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Editors

P.M. Cohn, University College, London

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G. Higman and E. Scott, *Existentially Closed Groups*
M.S.P. Eastham, *The Asymptotic Solution of Linear Differential Systems*

Members of the London Mathematical Society may buy volumes in the series at a discount of 25% from Oxford University Press.

Prospective authors are encouraged to submit proposals, preferably at an early stage to one of the series editors, or to contact: Martin Gilchrist, Oxford University Press, Walton Street, Oxford OX2 6DP, England.

LONDON MATHEMATICAL SOCIETY

POPULAR LECTURES

Professor F.G. Leppington
Asymptotic Approximations Simplified

Dr R.J. Wilson
Stamping Through Mathematics

Friday 23 June 1989
Room A,
The University Lecture Rooms Building,
University of Liverpool
at 5.00 pm

Friday 30 June 1989
Great Hall, Sherfield Building,
Imperial College, Exhibition Road, London SW7
at 7.30 pm

All interested are welcome.

The lectures are intended to be suitable for a general audience and no specific mathematical knowledge will be assumed. Although the talks are not primarily intended for professional mathematicians, everyone is welcome and some members may wish to apply for tickets for friends and relatives.

Admission to the lectures will be by ticket only. Applications for the lectures on Friday 23 June at University of Liverpool should be sent to Dr I.R. Porteous, Department of Pure Mathematics, University of Liverpool, PO Box 147, Liverpool L69 3BX. Applications for the lectures on 30 June at Imperial College London should be sent to Miss S.M. Oakes, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL.

A stamped-addressed envelope would be much appreciated. There is no charge for admission.

BRAID TYPES OF PERIODIC ORBITS FOR SURFACE HOMEOMORPHISMS

The Nonlinear Systems Laboratory at the University of Warwick is going to run an informal programme on the partial order on braid types relevant to coexistence of different periodic orbits for homeomorphisms of given isotopy class on given surfaces. The main activity will be 3rd to 31st July 1989, beginning with a series of seminars from 3rd to 7th July to which all are welcome.

For further information contact Dr R.S. MacKay, Nonlinear Systems Laboratory, Mathematics Institute, University of Warwick, Coventry CV4 7AL. Telephone 0203-523737.

p-ADIC METHODS AND THEIR APPLICATIONS

The p-adic numbers and more generally complete local fields and related completions play an increasingly important part in many areas of mathematics. The aim of this meeting is to bring together a wide range of mathematicians to survey the use of such ideas and to publicise recent developments. It is hoped that the talks will be of interest to non-specialists and experts alike, and will encourage interdisciplinary contact.

The meeting will take place from Wednesday 27th to Friday 29th September 1989 and will be held in the Department of Mathematics at Manchester University. Overnight accommodation can be arranged in nearby halls of residence. As well as arranging a number of invited talks, offers of talks by intending participants are welcome, preferably up to 40 minutes duration.

For further information contact Dr A. Baker or Dr R. Plymen, Department of Mathematics, Manchester University, Manchester M13 9PL.

ANNUAL MEETING OF THE AUSTRALIAN MATHEMATICAL SOCIETY

The 33rd Annual Meeting of the Australian Mathematical Society will take place at Mcquarie University, Sydney from 3rd to 7th July 1989. It will be the first Annual meeting to be held at Macquarie University, which is located in the north western suburbs of Sydney.

The speakers confirmed to date include: H. Burkhardt (U.K.), J.W.S. Cassels (U.K.), P. Halmos (U.S.A.), T. Kamae (Japan), H. Lenstra (U.S.A.), C. Lindner (U.S.A.), W. Thirring (Austria), D. Vere-Jones (New Zealand) and H. Williams (Canada).

Contributed papers will be offered in fourteen special interest sections. The cost of registration will be A$85 for members of the Australian and New Zealand Mathematical Societies, A$40 for student members, and A$110 for non-members. (The last rate includes the first year's membership of the Society).

The Annual Meeting will be preceded by a workshop on Number Theory and Cryptography in Telecommunications from 29th to 30th June.

Further details of the Annual Meeting or the workshop are available from the Director, Professor John Loxton, School of Mathematics, Macquarie University, New South Wales, Australia 2109.

FIRST EDITION

Dr E.W. Wallace from the School of Mathematics, University of Leeds, wishes to acquire for his own use, a first edition copy of 'A Course of Pure Mathematics' by G.H. Hardy.

We wish to purchase runs and odd Nos of: Sphinx, Revue Mensuelle des Questions Recreatives, Bruxelles, 1931-39 Journal of Recreational Mathematics, 1968-. Recreational Mathematics Magazine, 1961-64, Sphinx-Oedipe, Nancy, 1906-1932. Mathematical Pie, 1950-. All books published in the series "Libraire du Sphinx" Bruxelles, Rouse-Ball, W.W. "Mathematical Recreations and Essays" all editions from the first (1891) to 11th (1939). Also mathematical books of all kinds from very elementary to advanced texts. Also biographies of mathematicians and physicists.

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1989 HARDY LECTURE TOUR

In June, the 1989 Hardy Lecturer, Professor V.F.R. Jones (Berkeley), will give the following lectures.

Friday 2 June	Liverpool Index for subfactors 4.00 pm, Room 206, Mathematics Building
Monday 5 June	Yorkshire Pure Mathematics Colloquium, Sheffield Braid group representations in quantum physics 2.30 pm, Mathematics Lecture Room 9, Hicks Building.
Wednesday 7 June	Glasgow Knot polynomials 3.00 pm, Room 3a, Mathematics Department
Friday 9 June	Edinburgh Mathematical Society, Edinburgh Braid group representations in quantum physics 4.30 pm, Lecture Theatre B, David Hume Tower, George Square
Monday 12 June	North British Functional Analysis Seminar, Lancaster Type II factors 2.30 pm and 4.30 pm, Room C62, Fylde College
Wednesday 14 June	Durham Knot polynomials 3.15 pm, Room CM221, Department of Mathematical Sciences
Friday 16 June	1989 HARDY LECTURE von Neumann algebras 5.00 pm, Burlington House, London
Monday 19 June	Swansea Knot theory and statistical mechanics 3.30 pm, Lecture Theatre F, Mathematics Building
Wednesday 21 June	Sussex Braid group representations in quantum physics 2.15 pm, Mathematics and Physics Building

All interested are welcome to attend any of the meetings addressed by the Hardy Lecturer, but it is advisable to check the time and venue with the Department concerned. General enquiries about Professor Jones' visit may be directed to the LMS Administrator, Miss Susan Oakes, telephone 01-437 5377.

Spitalfields Lectures

Wednesday 12th July 1989
Mathematics Institute, University of Warwick

The Spitalfields Lectures are expository 'colloquium style' talks for a general mathematical audience. They will be given by participants in the Symposium on Singularity Theory and its Applications being held at Warwick between October 1988 and September 1989.

11.00	G. Schwarz (Brandeis)	*Exotic Algebraic Groups Actions*
12.00	Buffet Lunch	
14.00	A.N. Varchenko (Moscow)	Title to be announced.
15.00	Tea	
15.30	M. Golubitsky (Houston)	Title to be announced.

(The list of lecturers is subject to final confirmation.)

All lectures will be held in the Mathematics Institute, University of Warwick. Bookings and payment of £2 per head for the lunch should be made by 30th June 1989 to Elaine Shiels, Mathematics Research Centre, University of Warwick, Coventry CV4 7AL (telephone 0203-523053). Cheques should be made payable to the 'University of Warwick'.

A research Workshop on Dynamics, Bifurcations and Singularity Theory will be held at the Mathematics Institute on 10th-11th and 13th-14th July. Further details are available from the above address.

UNIVERSITY OF LIVERPOOL

DEPARTMENT OF PURE MATHEMATICS

Applications are invited for the post of Lecturer in Pure Mathematics. Candidates are welcome in any field of pure mathematics. Initial salary within the range £9260 - £13365 per annum.

Applications with C.V. together with the names of three referees should be received not later than 16 June 1989 by the Director of Staffing Services, The University, P.O. Box 147, Liverpool L69 3BX, from whom further particulars may be obtained.

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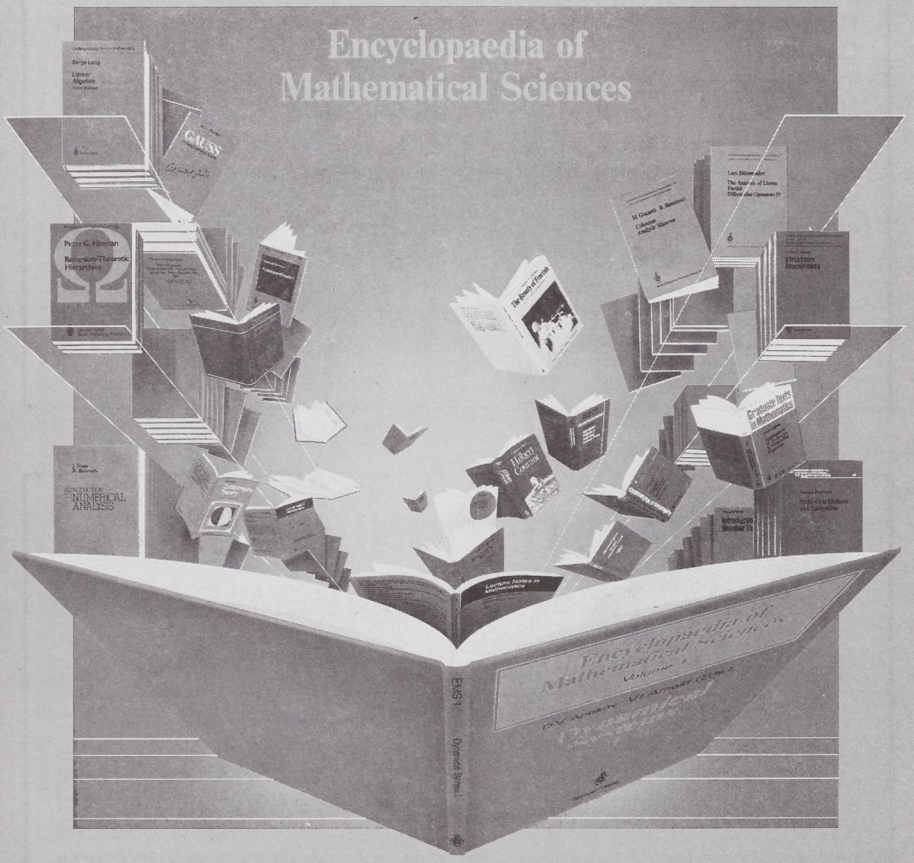

Volumes on topology, geometry, algebra, algebraic geometry, analysis, harmonic analysis, functional analysis, PDE, Lie groups and algebras are currently in preparation. If interested please contact

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UNIVERSITY OF CAMBRIDGE

LOWNDEAN PROFESSORSHIP OF ASTRONOMY & GEOMETRY

The Board of Electors to the Lowndean Professorship of Astronomy & Geometry invite applications for the Professorship which became vacant on 7 January 1989 on the death of Professor J.F. Adams. Candidature for the Professorship is limited to persons whose work is within the general field of Geometry.

The appointment will be subject to the Statutes and Ordinances of the University. The University follows an equal opportunities policy.

The present pensionable stipend attached to the Professorship is £27,828 a year, or £27,729 a year if the Professor is ordinarily resident in College. The stipend would be subject to deduction on account of certain College emoluments.

Further information may be obtained from the Secretary General of the Faculties, The General Board Office, The Old Schools, Cambridge, CB2 1TT, to whom applications (10 copies) should be sent, together with the names of two referees, so as to reach him not later than 30 June 1989.

LANCASTER UNIVERSITY

DEPARTMENT OF MATHEMATICS LECTURESHIP IN NUMERICAL ANALYSIS

Applicants for the above post should have research interests in some area of numerical analysis. The department has recently become part of a new School of Engineering, Computing and Mathematical Sciences and will particularly welcome applications from candidates with interests in an area relevant to the other departments in the School.

Salary will be near the lower end of the lecturer A scale (£9260 – £14500) (under review).

Application form and further particulars available from the Establishment Office (quoting reference L494/C) University House, Bailrigg, Lancaster LA1 4YW, where applications (6 copies) should be received by 21 June 1989.

Edwin Bailey Elliott (1851-1937) graduated with a first from Oxford in 1873 and remained there all his life, becoming the first Waynflete Professor in 1892, and holding this Chair until his retirement in 1921. His field was the theory of invariants, and his Algebra of Quantics, 1895, was the standard English text on the subject for many years. He founded the Oxford Mathematical Society in 1888, was elected an FRS in 1891, and was the Society's seventeenth President, from 1896-1898.

DIARY

The diary lists Society meetings and other events publicised 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.

1989

JUNE	
1–3	CMS Summer Meeting, Canada (160)
5–9	Mathematical Analysis, Spain (157)
8–16	Probability Conference, Singapore (155)
12–16	Fourier Analysis Workshop, Sussex (160)
12–17	Geometry of Banach Spaces, Austria (154)
14–16	Nonlinear Control Systems Design, Italy (150)
15–17	General Topology, U.S.A. (160)
15-23	Methods of Nonconvex Analysis, Italy (161)
16	LMS Meeting, London
23	LMS Evening of Popular Lectures, Liverpool
25–30	Geometry and Analysis of Loop Spaces, Hungary (159)
27–30	General Topology and Applications, Oxford (160)
30	LMS Evening of Popular Lectures, London
30–11 Jul	L-functions in Arithmetic, Durham (156)
JULY	
2–7	Gregynog Symposium on Differential Equations (156)
3–7	British Combinatorial Conference, East Anglia (146)
3–7	Annual Meeting of the Australian Mathematical Society, Australia (157)
3–7	International Category Theory, Bangor (157)
3–11	Microlocal Analysis and Applications, Italy (161)
3–21	Séminaire de Mathématiques Supérieures, Canada (156) (157)
6	Skew Fields, London (160)
10–14	Mathematics 16-20, Nottingham (160)
10–14	Dynamics, Bifurcations and Singularity Theory, Warwick (153)
10–14	Combinatorial Mathematics and Computing, Australia (152)
11–21	Geometry of Low-dimensional Manifolds, Durham (156)
21–31	Image analysis, Durham (156)
25–6 Aug	Logic, Algebra and Computation, West Germany (160)
27–29	Cauchy and the French Mathematical World, France (152)
29–12 Aug	Groups, St Andrews (156)
AUGUST	
13–18	Topological Fluid Mechanics, Cambridge (160)
13–19	Differential Equations and Applications, Bulgaria (148)
28–8 Sept	Variational Problems in Analysis, Italy (152)
SEPTEMBER	
6–8	Category Theory and Computer Science, Manchester (154)
7–8	Irish Mathematical Society meeting, Ireland (161)
18–23	A Century of Geometry, France. (160)
OCTOBER	
20	LMS Meeting, London
NOVEMBER	
17	LMS Meeting, London

1990

MARCH	
26–30	Invited Lectures (160)
JUNE	
6–9	European Consortium for Mathematics in Industry, Finland (159)
12–15	Analysis and Optimization of Systems, France (161)

The Newsletter is published monthly except in August. Items and advertisements for inclusion in the Newsletter should be sent to the Editor, Susan Oakes, London Mathematical Society, Burlington House, Piccadilly, London WIV 0NL (telephone 01-437 5377, fax 01-439 4629), to arrive before the first day of the month prior to publication.

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