

THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 226

April 1995

FORTHCOMING SOCIETY MEETINGS

Friday-Saturday, 12-13 May 1995, Oxford University
A Hundred Years of Analysis

P.R. Halmos, J-P. Kahane, J. Lützen, S.J. Patterson,
R. Remmert, F. Smithies

Friday 16 June 1995, Burlington House

D.G. Vassiliev, K.R. Parthasarathy

Friday-Saturday 20-21 October 1995, Scientific Societies' Lecture Theatre
Stochastic Analysis

Friday 17 November 1995, Burlington House

VISIT OF PROFESSOR S. STEPANOV

Professor Sergei Stepanov of the Department of Algebra of the Steklov Mathematical Institute of the Russian Academy of Sciences (Moscow) will be visiting the UK for about two weeks from 10 July, supported by a London Mathematical Society fSU scheme grant. He will speak on "Lower bounds for character sums over finite fields" during the 3rd International Conference on

Finite Fields & Applications at the University of Glasgow, 11-14 July, and will also participate in the Symposium on Sieve Methods, Exponential Sums and their Applications in Number Theory at the University of Cardiff, 17-21 July. Further details can be obtained from Dr S.D. Cohen, Department of Mathematics, University of Glasgow, Glasgow G12 8QW (e-mail: sdc@maths.gla.ac.uk).

VISIT OF PROFESSOR R. PARIMALA

Professor R. Parimala (Tata Institute, Bombay) is visiting the United Kingdom under Scheme 2 of the London Mathematical Society. She will give the following lectures: Tuesday 23 May, 2.00 pm, Department of Pure Mathematics, Liverpool University, "Witt groups and Chow groups - some connections";

Thursday 25 May, 2.30 pm, DPMMS, Cambridge University, "Witt groups of algebraic varieties"; Monday 29 May, 3.30 pm, Room 5215, JCMB, Edinburgh University, "Galois cohomology". The local organizers are Dr P. Newstead, Dr G. Sankaran (COW algebraic geometry seminar) and Dr A. Ranicki respectively.

VISIT OF DR OCTAVIAN CORNEA

Dr Octavian Cornea, of the University of Lille, will be visiting the Universities of Oxford, Manchester and Edinburgh during the last week of April 1995. His first lecture 'On cone-decomposition and degenerate critical points' will be given at the Mathematical Institute in Oxford at 5 pm on Monday 24 April. Dr Cornea will

give a lecture with the same title at 2.30 pm on Tuesday 25 April at Manchester University and 2.30 pm on Friday 28 April in Room 2C, Appleton Tower, University of Edinburgh. Dr Cornea's visit is partially supported by a Scheme 2 grant from the London Mathematical Society.

VISIT OF PROFESSORS TKACHENKO AND TKACHUK

Professor Mikhail Tkachenko and Professor Vladimir Tkachuk, formerly of Moscow State University and now at the Universidad Autonoma Metropolitana in Mexico City, will be visiting Oxford in the first half of April. Professor Tkachenko will give lectures on 'Free topological groups and uniform structures on their subspaces', and also

on 'M-mappings and cellularity'. Professor Tkachuk will lecture on 'Additivity of metrisability and related properties in powers', and also on 'Preserving properties of X by mappings of $C_p(X)$ '. Further information can be obtained from Peter Collins, St Edmund Hall, Oxford OX1 4AR; e-mail: picoll@maths.ox.ac.uk.

VISIT OF DR F.L. NAZAROV

Dr F.L. Nazarov of St Petersburg State University and the Institute of Advanced Study, Princeton, will be visiting the United Kingdom for approximately two weeks from 15-31 May, with support from the London Mathematical Society under

its fSU scheme. Those wishing to meet Dr Nazarov during this period should get in touch with Professor J.M. Anderson, Department of Mathematics, University College, Gower Street, London WC1E 6BT.

ONE DAY MEETING IN MEMORIAM: BRIAN HARTLEY

A one day meeting in memory of Brian Hartley, and concentrating on topics in algebra close to his interests, will be held on Wednesday 26 April. Specialist lectures will be given by D. Segal, A. Premet and J.S. Wilson, and a talk for a more general audience by T.O. Hawkes. The meeting will be held in the Mathematics Tower of Manchester University and will commence at 1 pm. Further details are available from Roger Bryant, Department of Mathematics, UMIST, Manchester

M60 1QD (e-mail: bryant@umist.ac.uk) or from Robert Sandling, Department of Mathematics, Manchester University, Manchester M13 9PL (e-mail: rsandling@manchester.ac.uk). The meeting is supported by the London Mathematical Society which has made available some funds to provide assistance with travel expenses for postgraduate students wishing to attend; any who are interested should apply to the organisers.

LONDON MATHEMATICAL SOCIETY AND BRITISH SOCIETY FOR THE HISTORY OF MATHEMATICS

JOINT TWO-DAY MEETING
FRIDAY 12th & SATURDAY 13th MAY 1995
MATHEMATICAL INSTITUTE, OXFORD

A HUNDRED YEARS OF ANALYSIS

FRIDAY

- 2.20 Opening Session
2.30 Professor Jean-Pierre Kahane (Paris) *Interplay between Taylor series, Fourier series and Brownian motion*
3.30 Tea
4.00 Professor S.J. Patterson (Göttingen) *The Riemann—Hilbert Problem*
5.15 Professor Dr Reinhold Remmert (Münster) *From Riemann surfaces to complex manifolds*

SATURDAY

- 9.15 Professor Jesper Lützen (Copenhagen) *An overture to functional analysis. The beginnings of spectral theory*
10.15 Coffee
10.45 Dr Frank Smithies (Cambridge) *The shaping of functional analysis, 1900 to 1950*
12.00 Professor Paul R. Halmos (California) *A century of operators*

A dinner will be held at St Cross College, Oxford on the evening of Friday 12 May at 7.00 pm for 7.30 pm. The cost of the dinner will be £20.00 per person, inclusive of wine. Those wishing to attend should inform Miss Susan M. Oakes, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL, enclosing a cheque payable to "The London Mathematical Society" to arrive no later than Friday 5 May.

Enquiries may be addressed to Dr Peter M. Neumann, The Queen's College, Oxford OX1 4AW (e-mail: neumann@vax.ox.ac.uk).

THE BRITISH COMBINATORIAL CONFERENCE STIRLING 1995

The fifteenth British Combinatorial Conference will be held at the University of Stirling from Monday 3 to Friday 7 July 1995. Accommodation and meals will be available in the University from Sunday evening until Saturday morning. Nine invited lectures have been arranged: C. Godsil (Waterloo) *The Euclidean Geometry of Distance-Regular Graphs*; R. Hill (Salford) *Searching with Lies*; F. Jaeger (Grenoble) *Spin Models for Link Invariants*; M.R. Jerrum (Edinburgh) *Computational Polya Theory*; L. Lovasz (Budapest & Yale) *Mixing of Random Walks and other Diffusions on a Graph*; A. Lubotzky (Jerusalem) *Cayley Graphs: Eigenvalues, Expanders and Random Walks*; A. Rosa (McMaster) *Large Sets of Steiner Triple Systems*; E. Spence (Glasgow) *Construction and Classifications of Combinatorial Designs*; J. Spencer (Courant Institute) *Modern Probabilistic Methods in Combinatorics*.

The invited lectures will be published by Cambridge University Press, and will

be available at the conference. Sessions of contributed talks, on all branches of Combinatorics, will be arranged. Contributed papers will be published in *Discrete Mathematics*, subject to acceptance by the Editors and appropriate referees. One day of the conference will be designated *Kirkman Day*, with talks related to the achievements of the Rev. T. P. Kirkman, who died in 1895.

The conference is organised by the British Combinatorial Committee with financial support from the London Mathematical Society and the Institute of Combinatorics and its Applications. For further information and registration forms, please contact the local organisers: Dr F.F. Bell and Dr P. Rowlinson, Mathematics & Statistics, University of Stirling, Scotland FK9 4LA; e-mail: f.k.bell@stirling.ac.uk, p.rowlinson@stirling.ac.uk; tel: 01786 467462/4; fax: 01786 464551. Registration forms (available in January) should be returned by 30 April 1995.

BRITISH APPLIED MATHEMATICS COLLOQUIUM

This meeting, which will incorporate the 37th British Theoretical Mechanics Colloquium, will be held from 10-13 April 1995 at the University of Birmingham. It is open to all with interests in the applications of mathematics. It will highlight the interaction of mathematics with exciting new areas of application in science, industry and commerce, while also featuring the traditional strengths of British applied mathematics. Invited speakers are: W. Eckhaus (Utrecht), J.R.A. Pearson (Schlumberger Cambridge Research), T.J. Pedley (Leeds), P.H.

Roberts (UCLA) - Stewartson Memorial Lecturer, P. Wilmott (Oxford and Imperial College). Scheduled minisymposia: Mathematical Biology, Mathematics in Industry, Stability and Asymptotics, Mathematics in Finance.

For further information contact: School of Mathematics and Statistics, The University of Birmingham, Edgbaston, Birmingham B15 2TT; tel: 0121 414 6587; fax: 0121 414 3389; e-mail: bamc95@bham.ac.uk. The meeting is receiving financial support from the London Mathematical Society

MEMORIAL CELEBRATION

A memorial celebration will be held for Alan B. Taylor, in The Hall, St. Catherine's College, Oxford on Saturday 8 April 1995 at 2.30 pm. Tea will be served after the Celebration.

LONDON MATHEMATICAL SOCIETY

Spitalfields Day

Tuesday 25 April 1995

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

EXPONENTIAL ASYMPTOTICS

Programme

- 10:00 M.V. Berry (Bristol) *Superoscillations, Evanescent Waves and Gaussian Beams*
- 11:15 Coffee
- 11:45 S.J. Chapman (Oxford) *Stokes Surfaces and Complex Ray Theory*
- 13:00 Lunch
- 14:15 S. Tanveer (Ohio) *Exponential Asymptotics in Viscous Fingering*
- 15:30 Tea
- 16:00 A. Wood (DCU) *Exponential Asymptotics and Spectral Theory for Curved Optical Waveguides*

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 Friday 21 April if you intend to come, in order to help us plan for lunch: telephone: (01223) 335999, fax: (01223) 330508, e-mail: t.hibbitt@newton.cam.ac.uk. Scientific inquiries may be addressed to Chris Howls at the Institute, e-mail: cjh1009@newton.cam.ac.uk

THE LIBRARY OF THE LONDON MATHEMATICAL SOCIETY

The London Mathematical Society (LMS) has had strong connections with University College, London (UCL) since its foundation there in 1865. The brain-child of two UCL students, it initially consisted almost entirely of UCL members and held all of its meetings at the College from its inauguration until November 1866. Not only was UCL's first Professor of Mathematics, Augustus De Morgan, the Society's founder President, but no fewer than six UCL mathematics professors have since occupied that post: Thomas Archer Hirst (1872-74), Olaus Henrici (1882-84), George Barker Jeffery (1935-37), Harold Davenport (1957-59), Ambrose Rogers (1970-72) and Paul M. Cohn (1982-84).

Indeed, the LMS has never been bereft of prominent mathematicians, its membership rising dramatically from the start, with early recruits including Arthur Cayley, James Joseph Sylvester, Henry Smith, William Kingdon Clifford and James Clerk Maxwell. Understandably, it was not long before members began to call for a library to match the Society's growing academic stature. At their first Annual General Meeting in January 1866, "it was proposed by Professor Sylvester, and seconded by Professor Hirst, and carried, that the Committee be empowered to spend a sum not exceeding ten pounds upon mathematical journals". Simultaneously, the Society embarked upon a policy of exchanging their *Proceedings* for those of other societies, initially receiving the *Proceedings of the Royal Society* and the *Journal of the Institute of Actuaries*. The six journals they first subscribed to ranged from the *Giornale di Matematiche* to *Mathematical Questions and Solutions from the Educational Times*. Today, over a hundred different periodicals are taken, including *Acta Mathematica*, *Bulletin de la Societe Mathematique de France*, the *Chinese Journal of Mathematics*, *Proceedings of the Indian Academy of Sciences*, the *Ukrainskii Matematicheskii Zhurnal* and the *Zeitschrift für Mathematische Logik und Grundlagen*

der Mathematik, as well as their own *Proceedings* (from 1865), *Journal* (from 1926) and *Bulletin* (from 1969), giving the LMS library one of the largest collections of mathematical periodicals in the country.

The Society's collection of mathematical books began in 1866 with an important benefaction comprising nearly all the mathematical library of the recently deceased physical astronomer Sir John Lubbock, presented by his son, later the first Lord Avebury. This formed the nucleus of the new library, containing such valuable items as the 1729 Motte translation of Newton's *Principia* and Laplace's *Mecanique Celeste* from 1798. However, various upheavals, most notably the Second World War, resulted in the loss of many such gems, although it is still possible today to find a first edition of D'Alembert's *Traite de l'equilibre et du mouvement des fluids* (1770), Euler's *Mechanica* (1736), and Newton's *Opticks* (1704). There are numerous more recent works on almost every conceivable mathematical subject.

A major part of the library is devoted to collected mathematical works by people such as Brioschi, Clifford, Gauss, Hermite, Kronecker and Newton. Several of the works are quite bulky, with the *Oeuvres de Lagrange* taking up fourteen volumes and those of Huygens filling twenty-two. These, however, do not even come close to the clear winner, the massive *Leonhardi Euleri Opera Omnia* which stands at over 60 volumes. Books on the history of mathematics are also in evidence on the shelves, from standard works such as Smith's *Source Book* (1959) to less familiar items like Mikami's *The Development of Mathematics in China and Japan* (1961) and L.G. Simon's *Bibliography of early American textbooks on algebra* (1936). The age-range is also impressive: Delambre's *Histoire de l'astronomie* (1817) to Jeremy Gray's *Ideas of space* (1989). To actually count the number of books in the possession of the LMS would be a computational achievement in itself, but

some idea of its size can be gleaned from the fact that the library currently grows on average by 300 books per annum.

The library has grown so much, in fact, that it has had to be re-housed three times in its lifetime. Not surprisingly, its first home was University College, where it resided on the shelves of the amiable professor of anatomy and physiology, William Sharpey, until 1870. In that year, the Society moved to the rooms of the Asiatic Society at 22, Albemarle Street, taking its library with it. However, by their fiftieth anniversary, the library had completely outgrown the accommodation available and, in 1916, was transferred to the Science Museum in South Kensington, while the Society's headquarters moved to the Royal Astronomical Society's premises in Burlington House, where they remain today. Lack of space again necessitated another move and in May 1928 the library was provisionally moved to the Science Library of its old home, UCL. It has remained there ever since.

It is important to mention that the library of the LMS does not occupy a distinct section of the UCL mathematics collection as, until recently, that of the Royal Statistical Society did. Rather, it is

integrated within the College library holdings and shelved alongside books belonging to the College. Consequently, multiple copies of some works are in evidence, one belonging to the Society and one to the College.

In addition to the journals and books, the library is also in possession of a few manuscript items relating to the history of the LMS. They include membership lists, a collection of over 500 letters to Thomas Archer Hirst, a *Catalogue of the Library, 1891 ... Made, and Presented to the Society, by R.A. Sampson*, and a selection of letters from the 1960s and 1970s. Further sources, such as minute books and documents relating to the early part of this century, can be viewed by appointment at Burlington House.

I would like to thank Mr. Dilip Chatarji for his help in preparing this article. Further information can be obtained by writing to him at D.M.S. Watson Library, University College London, Gower Street, London WC1E 6BT.

Adrian Rice

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CENTRO INTERNAZIONALE MATEMATICO ESTIVO

Probabilistic Models for Nonlinear PDEs and Numerical Applications

This Session will be under the scientific direction of Professor D. Talay and Professor L. Tubaro at Montecatini Terme, Pistoia from 22 - 30 May 1995.

Viscosity Solutions and Applications

This Session will be under the scientific direction of Professor I.C. Dolcetta and Professor P.L. Lions at Montecatini Terme, Pistoia from 12 - 20 June 1995.

Vector Bundles on Curves - New

Directions This Session will be under the scientific direction of Professor M.S. Narasimhan at the Grand Hotel San Michele, Cetaro, Cosenza from 19 - 27 June 1995.

For further information contact: Fondazione C.I.M.E., c/o Dipartimento di Matematica "U.Dini", V. le Morgagni, 67/A, 50134 Firenze, Italy; Tel: +39 55 4237123; Fax: +39 55 4222695; e-mail: cime@udini.math.unifi.it.

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This is a first course in propositional modal logic written from a mathematical standpoint, essential for mathematicians, philosophers and computer scientists. The book covers all the basic material: propositional languages, semantics and correspondence results, proof systems and completeness results. There are many exercises, most with solutions.

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LIST OF MEMBERS OF THE LMS EDITORIAL BOARD - 1995

Authors wishing to submit a paper for publication in the Bulletin, the Journal or the Proceedings should send two copies to the member of the Editorial Board whose mathematical interests are judged to be closest to its subject.

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Professor A.P. Carbery	Dept of Maths & Statistics, University of Edinburgh, King's Buildings, Mayfield Road, Edinburgh EH9 3JZ	Real and Harmonic Analysis Representation Theory and Algebra Probability
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Dr R.A. Doney	Dept of Mathematics, The University, Manchester M13 9PL.	
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Dr C.G. Gibson	Dept of Pure Mathematics, University of Liverpool, PO Box 147, Liverpool L69 3BX.	
Dr P.A. Glendinning	DAMTP, Silver Street, Cambridge CB3 9EW	
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Dr D.R. Heath-Brown	Magdalen College, Oxford OX1 4AU.	Elementary and Analytic Number Theory Graph Theory and Combinatorics Set Theory and Logic Functions of One Variable Complex Analysis Group Theory and Combinatorics Nonlinear Analysis and Differential Equations Low-dimensional Topology Algebraic Geometry Number Theory and Representation Theory Functional Analysis Logic and Theoretical Computer Science Functional
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Dr H.R. Morton	Dept of Pure Mathematics, University of Liverpool, PO Box 147, Liverpool L69 3BX.	
Dr P.E. Newstead	Dept of Pure Mathematics, University of Liverpool, PO Box 147, Liverpool L69 3BX.	
Professor R.W.K. Odoni	Dept of Mathematics, University of Glasgow, University Gardens, Glasgow G12 8QW.	
Dr J.R. Partington	School of Mathematics, University of Leeds, Leeds LS2 9JT.	
Dr A.M. Pitts	Computer Laboratory, New Museum Site, University of Cambridge, Pembroke Street, Cambridge CB2 3QG.	
Professor R.J. Plymen	Dept of Mathematics, University of	

Professor S.J. Pride	Manchester, Manchester M13 9PL. Dept of Mathematics, University of Glasgow, Glasgow G12 8QW.	Analysis Algebra
Dr S.M. Salamon	Mathematical Institute, 24-29 St Giles, Oxford OX1 3LB	Differential Geometry and Global Analysis
Professor J.T. Stafford	Dept of Mathematics, University of Michigan, Ann Arbor, MI 48109-1003, U.S.A.	Non-commutative Algebra
Professor R.S. Ward	Dept of Mathematical Sciences, University of Durham, South Road Durham DH1 3LE.	Mathematical Physics
		D.A. Brannan Publications Secretary

NUMERICAL METHODS FOR WAVE PROPAGATION PHENOMENA Short Course and International Workshop

Two related meetings on Wave Propagation Phenomena will take place at the Manchester Metropolitan University from 15 - 23 May 1995.

The Short Course This consists of 2 parts. Part 1 takes place between 15th and 20th of May inclusive and focuses on the specific theme of **high resolution numerical methods**. High-resolution Upwind and Central schemes are a generation of modern numerical methods in Computational Science. Their most well known members are high-order extensions of the upwind method of Godunov and were first successfully developed for non-linear systems of hyperbolic conservation laws, such as the Euler equations of Gas Dynamics. More recently these schemes have been extended to solve other types of systems such as the Navier-Stokes equations, both compressible and incompressible. A key characteristic of these schemes is the concept of upwinding whereby physical properties of wave propagation phenomena are locally incorporated into the numerical methods. These conservative shock capturing methods are renowned for their accuracy, robustness and high resolution of sharp flow features such as shock waves, contact surfaces and vortices; they are a corner stone of the explosive development of Computational Science in the last ten to fifteen years, particularly in Computational Fluid Dynamics (CFD). Part 1 of the short

course is designed to provide participants with an understanding of the basic concepts, some of the underlying theory, the ability to critically assess current research papers on the subject, and principally, to provide them with the required information for the practical implementation of the methods. It is hoped that this course will bridge the gap between developers of modern numerical techniques and computational practitioners.

The International Workshop This is also Part 2 of the short course and is to take place on 22nd and 23rd May. The object of the International Workshop is to gather mathematicians, physicists, engineers and other scientists from a wide range of diverse disciplines, whose work has the common theme of wave propagation phenomena. The emphasis of the meeting is on numerical methods for such phenomena, but specific attention will be given to associated mathematical as well as physical aspects, including experimentation. There will be 14 invited speakers; their presentations will cover state-of-the-art work in their respective areas of research. It is expected that the meeting will contribute to the exchange of ideas and methodologies across various fields of application. Both events are aimed at Aeronautical, Mechanical, Chemical and Civil Engineers, Applied Mathematicians, Numerical Analysts, Computer Scientists, Environmental

Scientists and Physicists working in industry, research laboratories, consultancy organisations, universities and colleges of higher education. The course will be particularly suitable for research students in these areas, especially those embarking on a computationally based research programme.

The speakers for Part 1 of the course are: Professor D.M. Causon, MMU, Manchester; Professor J.F. Clarke FRS, MMU, Manchester; Professor P.L. Roe, Michigan, USA; Professor E.F. Toro, MMU, Manchester; Dr S. Billett, MMU, Manchester; Dr D.M. Ingram, MMU, Manchester. The invited speakers for the International Workshop and Part 2 of the course are: Professor M. Baines, Reading; Professor J. Ballmann, Aachen, Germany; Professor V. Casulli, Trento, Italy; Professor D.M. Causon,

MMU, Manchester; Professor D.G. Crighton FRS, Cambridge; Dr D. Duncan, Heriott-Watt University; Dr O. Hassan, Swansea; Dr M. Hortal, ECMWF Reading; Dr S. Karni, Courant Institute, USA; Professor P.G. LeFloch, California, USA; Dr J. Marti, Valencia, Spain; Professor P.L. Roe, Michigan, USA; Professor K. Takayama, Sendai, Japan; Professor E.F. Toro, MMU Manchester.

For further details and an application form please contact: Mrs Audrey Hamnett, Department of Mathematics and Physics, the Manchester Metropolitan University, Chester Street, Manchester M1 5GD. Fax: 0161 247 6337. Telephone: 0161 247 3602. Concerning any aspect of these two events, potential participants are invited to contact Professor E.F. Toro (address and fax as above), telephone: 0161 247 3593.

INTERNATIONAL CONGRESS OF THEORETICAL AND APPLIED MECHANICS

The 19th International Congress of Theoretical and Applied Mechanics will be held from 25 - 31 August 1996 at Kyoto International Conference Hall, Kyoto, Japan. The Congress (ICTAM Kyoto 1996) is organized under the auspices of the International Union of Theoretical and Applied Mechanics (IUTAM) by invitation of the Japan National Committee of Theoretical and Applied Mechanics, with the sponsorship of the Science Council of Japan and the support of other academic and public institutions.

The scientific program of the Congress will consist of General (Opening and Closing) Lectures, Invited Sectional Lectures, six Mini-Symposia on special topics, and Contributed Papers presented in Lecture Sessions or in Seminar Presentation Sessions. Opening Lecturer: T. Kobori (Japan), Closing Lecturer: Sir James Lighthill (UK). Sectional Lecturers are G.D. Cheng (P.R. China), D. Crighton (UK), M.J. Crochet (Belgium), P. Huerre (France), D. Krajcinovic (USA), P.F. Linden (UK), G. Milton (USA), R.

Narasimha (India), S. Nemat-Nasser (USA), M.P. Paidoussis (Canada), H. Petryk (Poland), F. Pfeiffer (Germany), A. Pouquet (France), B.A. Schrefler (Italy), P. Wright (USA). Six topics have been selected for special emphasis in Mini-Symposia. Titles and co-chairmen are: Vorticity dynamics and turbulence, R.M. Kerr (USA) & S. Kida (Japan); Non-Newtonian fluid flow, K. Walters (UK) & R.A. Brown (USA); Aero- and hydroacoustics, J.E. Ffowcs Williams (UK) & A. Prosperetti (USA); Mechanics of heterogeneous and composite solids, G.A. Maugin (France) & V. Tamuzs (Latvia); Solid mechanics in manufacturing, D.B. Bogy (USA) & T. Inoue (Japan); Structural optimization, M.P. Bendsoe (Denmark) & R.T. Haftka (USA).

For further information contact: Professor Eiichi Watanabe, Secretary General, ICTAM 1996, Department of Civil Engineering, Kyoto University, Sakyo-ku, Kyoto 606-01, Japan, tel: +81-75-753-5079; fax: +81-75-752-5296; e-mail: ictam@strsun1.kyoto-u.ac.jp

UNIVERSITY OF LIVERPOOL DEPARTMENT OF PURE MATHEMATICS

Lecturer in Pure Mathematics

Applications are invited for a lectureship, tenable from 1 October 1995, with the initial salary within the range £14,756 - £25,735 per annum (under review).

Applications, by c.v., should be received not later than **28th April 1995** by the Director of the Personnel Department (AS), The University, PO Box 147, Liverpool L69 3BX, from whom further particulars may be obtained. Applicants should arrange for 3 supporting references to be received by the same date. Informal enquiries to Professor J.W. Bruce (tel: 0151-794-4062, fax: 0151-794-4061, e-mail: jwbruce@uk.ac.liv).

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Applications are invited for a Chair in Pure Mathematics in the School of Mathematics at the University of East Anglia. The successful candidate will be a distinguished and active research worker who will enhance the reputation of the Pure Mathematics sector of the School, currently a small but active research group. It is expected that the successful candidate will reinforce the existing strengths of the School and will promote research in Pure Mathematics.

The post is available from 1 September 1995. Salary will be negotiable within the professorial salary range, minimum £31158 per annum.

Further details and an application form should be obtained from Mr M.G.E. Paulson-Ellis, Registrar and Secretary, University of East Anglia, Norwich NR4 7TJ (telephone 01603 592208), to be returned by **21 April 1995**. Please quote reference AC 50.

Information about the School and the post can be found on World Wide Web at <http://www.mth.uea.ac.uk/welcome.html>.

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LONDON MATHEMATICAL SOCIETY

INVITED LECTURES

Professor Paul F. Baum
(Pennsylvania State University, U.S.A.)

will give a course of ten lectures on

**TREES, BUILDINGS, SYMMETRIC SPACES
AND K-THEORY FOR GROUP C^* -ALGEBRAS**

at Dalton-Ellis Hall, University of Manchester
18 - 22 April 1995

Accommodation and meals will be available in Dalton-Ellis Hall and further particulars can be obtained from Professor R.J. Plymen, Mathematics Department, University of Manchester, Manchester M13 9PL (e-mail: roger@ma.man.ac.uk).



H. HERTZ
Honorary Member 1892

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.

APRIL 1995

- 3-6 British Mathematical Colloquium, Heriot-Watt (221)(223)
3-6 Conference on Numerical Methods for Fluid Mechanics, Oxford (221)
10-13 British Theoretical Mechanics Colloquium, University of Birmingham (223)
18-22 Professor P.F. Baum, LMS Invited Lectures, Manchester University (218)(223)
23-26 Korteweg and de Vries International Symposium, Amsterdam, The Netherlands (210)

MAY 1995

- 5 Edinburgh Mathematical Society Meeting, Stirling University, Dr C.J.H. McDiarmid (219)
6 A Celebration of Two Lives, William Kingdon Clifford and Lucy Clifford, Kent University, Canterbury (222)(224)
12-13 Two-day London Mathematical Society Meeting, 'A Hundred Years of Analysis', Oxford University.
15-17 June New Developments in Homotopy Theory Research Workshop, Mathematical Institute, Oxford (225)
18-20 Groups in Galway 95 (In Honour of Professor S.J. Tobin) University College Galway (225)
29-1 June Mathematical Modelling Conference, University of Brunei Darussalam (214)

JUNE 1995

- 2 Edinburgh Mathematical Society Meeting, St Andrews University, Dr M.A. Berger (219)
4-8 50th Anniversary Summer Meeting, Canadian Mathematical Society, Toronto (224)
9-13 Canadian Operator Symposium 1995, Fields Institute, Canada (212)
16 London Mathematical Society Meeting, Burlington House, London
25-29 European Consortium for Mathematics in Industry Conference, Technical University of Denmark, Lyngby (222)
28-30 Conference on the Legacy of George Boole, University College, Cork (219)

JULY 1995

- 3-7 Fifteenth British Combinatorial Conference, University of Stirling (210)(223)
3-7 International Congress on Industrial and Applied Mathematics, Hamburg (213)

- 3-7 Mathematics of Neural Networks and Applications, Lady Margaret Hall, Oxford (221)(223)
3-14 Gauge Theory and Symplectic Geometry Seminar, Montreal University, Canada (222)
9-16 European/Gregynog Stochastic Analysis Symposium, Gregynog, Wales (222)
10-12 Linear Algebra and Its Applications Conference, Manchester University (220)
10-13 The ATLAS 10 Years On, Birmingham University (223)
10-20 Mathematical Models of Liquid Crystals and Related Polymeric Systems, LMS Durham Symposium, Durham University (223)
10-21 Workshop on Ergodic Theory on Riemannian Manifolds, Warwick (222)
11-14 Finite Fields & Applications International Conference, University of Glasgow (219)(223)
13-16 British Congress of Mathematics Education, Manchester Metropolitan University (220)
17-21 Symposium on Sieve Methods, Exponential Sums and their Applications in Number Theory, University of Wales College of Cardiff (221)
24-5 Aug Workshop on Differential Geometry & Stochastic Analysis, Warwick (222)

AUGUST 1995

- 17-4 Completely Bounded Maps and Cohomology in Operator Algebras EPSRC Workshop, Newcastle University (223)

SEPTEMBER 1995

- 4-7 Technology in Mathematics Teaching Conference, Napier University, Edinburgh (225)
6-8 Information Processing in Cells and Tissues Workshop, Liverpool University (225)
18-26 Pan-African Congress of Mathematicians, Ifram, Maroc (224)
25 One-day Function Theory Meeting, Nottingham University (224)

OCTOBER 1995

- 20-21 Stochastic Analysis, London Mathematical Society Meeting, Scientific Societies Lecture Theatre, London

NOVEMBER 1995

- 17 London Mathematical Society Meeting, Burlington House, London

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