THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No.160 **April 1989**

FORTHCOMING SOCIETY MEETINGS

Thursday, Friday 18-19 May 1989, Liverpool
Representations of Algebras
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 JUN-ICHI NISHIMURA

Dr J.-I. Nishimura of Kyoto University, currently visiting Paris, will be in Britain during the week 24 –28 April 1989 and will be lecturing at the Universities of Sheffield, Leeds and Edinburgh on Tuesday 25th, Wednesday 26th and Friday 28th April respectively. Further details are available from Professor R.Y. Sharp, Department of Pure Mathematics, The University, Sheffield S3 7RH (telephone 0742-768555 Ext. 4369, e-mail pm1rys@uk.ac.sheffield.primea). Those interested in hearing Dr Nishimura are advised to confirm the time of the appropriate lecture before travelling.

Dr Nishimura's visit has been made possible by a Scheme 2 travel grant from the London Mathematical Society.

VISIT OF DR U.N. BHOSLE

Dr U.N. Bhosle of the Tata Institute of Fundamental Research, Bombay, will be visiting England during May, supported by a visiting fellowing from the S.E.R.C. She will be based in Liverpool and giving talks there and in Oxford and Cambridge. Provisional dates are: Cambridge 12th May, Oxford 15th May and Liverpool 25th May.

Further information will appear in the May Newsletter and can also be obtained by contacting Dr P.E. Newstead, Department of Pure Mathematics, University of Liverpool, PO Box 147, Liverpool, L69 3BX (Tel:051 – 7944040, E-mail SU23@LIV.IBM).

SUPERMANIFOLD DAY V

The next in a series of one-day meetings on the theory and applications of supermanifolds will be held in the Department of Pure Mathematics and Mathematical Statistics, Cambridge on Monday 24th April 1989. All interested are welcome to attend and contribute.

Further information may be obtained from the organisers, Dr Marjorie Batchelor, DPMMS, 16 Mill Lane, Cambridge CB2 1SB and Dr Alice Rogers, Department of Mathematics, King's College, Strand, London WC2R 2LS. (Bitnet UDAH039@UK.AC.KCL.CC.OAK).

WORKSHOP IN FOURIER ANALYSIS

A workshop in Fourier Analysis will be held from 12th to 16th June 1989 at the University of Sussex. The workshop is supported by the London Mathematical Society. All LMS members are welcome. For further details contact Dr A. Carbery, Mathematics Division, University of Sussex, Falmer, Brighton BN1 9QH.

NORTHEAST CONFERENCE ON GENERAL TOPOLOGY

The Northeast Conference on General Topology and Applications will take place at the St George campus of The College of Staten Island, June 15 – 17, 1989. The major speakers will be Melvin Henriksen, Neil Hindman, Karl Hofmann, Peter Johnstone, Ellen Reed and Mary Rudin. In addition there will be a number of 25-minute contributed papers. For further information write to: Department of Mathematics – Topology Conference, The College of Staten Island, 130 Stuyvesant Place, Staten Island, NY 10301, USA.

COMBINATORICS COLLOQUIUM

There will be a one-day Combinatorics Colloquium at the Department of Mathematics, University of Reading on Wednesday 26th April from 10.15 am to 5.15 pm.

Speakers will include Dr B. Bollobás (Cambridge); Dr A.D. Keedwell (Surrey); Dr I. Leader (Cambridge); Dr C.J.H. McDiarmid (Oxford); Dr J.N. Ray (Manchester) and Professor H.P. Williams (Southampton).

Everyone is welcome to attend. For further information contact Dr A.J.W. Hilton, Department of Mathematics, University of Reading, telephone 0734-875123.

GEOMETRY OF LOOP SPACES

In May 1989 the Max-Planck–Institut in Bonn is arranging a month of concentrated activity concerned with all aspects of loop spaces. This will include global analysis and differential geometry on loop spaces; the representation theory of loop groups and of Diff(S^1); two-dimensional conformal quantum field theory; moduli spaces of Riemann surfaces and holomorphic bundles. The focus will be especially on the interrelation between these areas.

The mathematical programme will be organised by Graeme Segal, Mathematical Institute, 24-29 St Giles, Oxford, England.

Anyone interested in taking part should write to Professor F. Hirzebruch, Max-Planck-Institut fur Mathematik, Gottfried-Claren-Strasse 26, 5300 Bonn 3, Federal Republic of Germany.

Limited funds are available for the support of participants. Preference will be given to those staying for the whole month.

LMS INVITED LECTURES

Council of the London Mathematical Society is pleased to announce that Professor R. Melrose (M.I.T.) has accepted its invitation to inaugurate the series of LMS Invited Lectures. Professor Melrose will give a course of ten lectures on 'Spectral and inverse spectral theory of the Dirichlet problem in a planar domain' in Cambridge during the week from Monday 26 March to Friday 30 March 1990. Further details will appear in subsequent issues of the Newsletter.

A.R. Pears
Meetings and Membership Secretary

DISCOUNT MATHEMATICS BOOKS FOR LMS MEMBERS

In this month's issue of the LMS Newsletter you will find a leaflet promoting new and forthcoming pure mathematics books from Cambridge University Press. As a special arrangement with the publisher we are pleased to announce that LMS members can buy any books from the LMS Lecture Note Series or the LMS Student Texts Series at a special discount of 25%.

Details of the most recent LMS books are contained in the leaflet and a complete listing of all the discount books available can be found on the yellow flyer, together with a special LMS members' discount order form.

Further information on any of the older LMS titles, not featured in the main leaflet, can be obtained from Tom Woodruffe-Peacock at Cambridge University Press, The Edinburgh Building, Saftesbury Road, Cambridge, CB2 2RU.

LMS MAY MEETING
THURSDAY – FRIDAY
18 – 19 MAY 1989
UNIVERSITY OF LIVERPOOL
REPRESENTATIONS OF ALGEBRAS

Thursday 18 May

2.20 p.m. Opening Session

2.30 p.m. Professor C.M. Ringel *'From representations of quivers to quantized Lie algebras, via Hall polynomials and Hall algebras'.*

3.30 p.m. Tea

4.00 p.m. Dr A.H. Schofield *'Semi-invariants of quivers'.*

5.00 p.m. Professor A. Skowronski *'Tame self injective algebras'.*

Friday 19 May

9.15 a.m. Professor Yu. A. Drozd *'Categorical methods in representation theory'.*

10.15 a.m. Dr W.W. Crawley-Boevey *'Regular modules for tame hereditary algebras'.*

11.15 a.m. Coffee

11.45 a.m. Professor I. Reiten *'Tilting and contravariantly finite subfunctors'.*

The lectures will be held in Room 206 of the Mathematics and Oceanography Building, University of Liverpool, Brownlow Hill, Liverpool. All interested are welcome.

A dinner will be held in the Abercromby Room, Students' Union at the University of Liverpool on the evening of Thursday, 18th May at 7.15 p.m. Those wishing to attend should inform Dr M.C.R. Butler, Department of Pure Mathematics, University of Liverpool, P.O. Box 147, Liverpool L69 3BX, enclosing a cheque for £16.50 per person payable to the University of Liverpool, to arrive by 1st May. No booking can be made after that date.

A list of some hotels in Liverpool with approximate prices, and approximate distances from the University may be obtained from Dr Butler at the above address. Participants will be expected to contact the hotels directly for reservations.

Almost all the invited speakers will stay on in Liverpool, for varying periods, after the LMS meeting. Opportunities for specialised talks on representation theory are being planned for Friday afternoon and Saturday, May 19, 20 respectively; further details may be obtained from Dr Butler.

THE ASYMPTOTIC SOLUTION OF LINEAR DIFFERENTIAL SYSTEMS

Applications of the Levinson Theorem

The Asymptotic Solution of Linear Differential Systems by Michael Eastham, Volume 4 in the London Mathmatical Society Monographs (new series), is now available. The modern asymptotic theory of linear differential systems dates from the Levinson theorem of 1948. This book provides the first coherent account of the extensive developments that there have been on this topic since the work of Harris and Lutz in the mid-Seventies. It describes the main results and techniques now available and provides an extensive treatment of asymptotically diagonal systems, two-term differential equations, equations of self-adjoint type, and advances in resonance and non-resonance.

The published price of the volume is £30.00, 252 pp, hardcovers, ISBN 0 19 853299 7. Members of the London Mathematical Society are reminded that they are entitled to a 25% discount by ordering direct from Oxford University Press. Orders should be directed to Oxford University Press Bookshop, 116 High Street, Oxford.

UNIVERSITY OF LONDON CHAIR OF STATISTICS TENABLE AT IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE

The Senate invites applications for the above Chair of Statistics tenable in the Department of Mathematics at Imperial College of Science, Technology and Medicine. The established Chair was previously held by Professor Sir David Cox who left in October 1988 to become Warden of Nuffield College, Oxford.

The Professor appointed will be responsible for undergraduate and postgraduate teaching in probability and statistics and will also promote research and be concerned with relevant practice in these fields.

Applications (10 copies) should be submitted to the Teachers' Section (LMS), University of London, Senate House, Malet Street, London WC1E 7HU, from whom further particulars should first be obtained.

The closing date for receipt of applications is 30 April 1989.

MATHEMATICS 16 – 20

This is the next conference in the Undergraduate Mathematics Teaching Conference series, but is being jointly organised by UMTC and the London Mathematical Society. The conference is being held at the University of Nottingham from 10th to 14th July 1989.

Some of the topics for discussion by the working groups include: the next technology; making mathematics more attractive; assessment; geometry versus geometrical thinking; rigour. The aim of the conference is to enable teachers from secondary schools and lecturers from higher education to discuss the changes in the style and contents of Mathematics 11 – 16 and their effect on 'A' level and higher education mathematics.

Further information is available from Judith Rowlands, Conference Secretary, Shell Centre for Mathematical Education, University of Nottingham, Nottingham NG7 2RD. Telephone 0602 484848 ext. 2961.

IUTAM SYMPOSIUM ON TOPOLOGICAL FLUID MECHANICS

A Symposium under the auspices of the International Union of Theoretical and Applied Mechanics on the subject of "Topological Fluid Mechanics" will be held in Cambridge from 13th to 18th August 1989. The International Scientific Committee for the Symposium appointed by the Bureau of IUTAM is as follows: H.K. Moffatt, Chairman (U.K.); U. Dallmann (F.R.G.); P. Germain (France); A.K.M.F. Hussain (U.S.A.); A.E. Perry (Australia); V.I. Arnold (U.S.S.R.); U. Frisch (France); H. Hasimoto (Japan); E.N. Parker (U.S.A.) and A. Tsinober (Israel).

Nine sessions containing introductory reviews, contributed papers and poster-discussion sessions are planned on the following topics: Mathematical aspects of flow topology; Flow kinematics and Lagrangian chaos; Dynamo theory; Relaxation processes and formation of singularities; Euler equations: stability and singularity formation; Topology of 3D flows; Thermal convection/shear flows; Reconnection mechanisms; Turbulence structure.

All LMS members are welcome, and may obtain further information from Professor H.K. Moffatt, Department of Applied Mathematics and Theoretical Physics, Silver Street, Cambridge CB3 9EW.

CANADIAN MATHEMATICAL SOCIETY SUMMER MEETING

The 1989 Canadian Mathematical Society Summer Meeting will be held at the University of Windsor from 1st to 3rd June 1989. The programme consists of five special sessions in the following areas: Differential Equations; Group Algebras; Mathematical Education; Mathematical Physics; Lie and Nonassociative Algebras.

For further information write to CMS Summer Meeting 1989, Department of Mathematics and Statistics, University of Windsor, Ontario, Canada N9B 3P4.

SINGAPORE PROBABILITY CONFERENCE

The Singapore Probability Conference is being held at the National University of Singapore from 8th to 16th June 1989. The invited speakers are J. Azema, A.D. Barbour, P. Diaconis, E.B. Dynkin, C.C. Heyde, T. Hida, C.R. Hwang, H. Kesten, S. Kotani, M. Pinsky, D.O. Siegmund, C. Stein, D.W. Stroock, S. Watanabe and W.A. Zheng.

For further information write to The Organizing Secretary, Singapore Probability Conference, Department of Mathematics, National University of Singapore, Lower Kent Ridge Road, Singapore 0511, Republic of Singapore. E-Mail MATLOU-JH@NUSVM.BITNET.

SYMPOSIUM ON GENERAL TOPOLOGY AND APPLICATIONS

The Symposium will be held at the Mathematical Institute, 24 – 29 St Giles, Oxford, between 27th and 30th June, 1989, and is supported by the London Mathematical Society, the Science and Engineering Council and the U.S. Office of Naval Research.

Applications to Computer Science will be stressed.

The list of forty invited speakers includes A.V. Arhangellskii (Moscow), C.A.R. Hoare (Oxford), A. Rosenfeld (Maryland), M.E. Rudin (Madison) and D.S. Scott (Carnegie-Mellon).

Further details may be obtained from P.J. Collins, St Edmund Hall, Oxford OX1 4AR.

RECENT SERC AWARDS

Visiting Fellowships.

F.J. Bloore, Liverpool. Various visitors. *17th International Conference on Differential Geometric Methods in Theoretical Physics*

P.J. Bushell, Sussex. W. Okrasinski, Poland. *Nonlinear integral equations arising in the theory of porous media.*

P.J. Cameron, Queen Mary College. A. Pasini, Italy. *A family of geometries.*

P.J. Cameron, Queen Mary College. E.E. Shult, U.S.A. *A family of geometries.*

M.J. Collins, Oxford. B. Kulshammer, Germany. *p-blocks of finite groups.*

R.J. Cook, Sheffield. J.A. Rush, U.S.A. *Packing and covering problems.*

E.F. Corrigan, Durham. L. Palla, Hungary. *The theory of strings and superstrings.*

D.R. Cox, Imperial College. P.J. Soloman, Australia. *Asymptotic theory of variance components in nonstandard problems.*

H.G. Dales, Leeds. M.P. Thomas, U.S.A. *Derivations and homomorphisms from Banach algebras.*

H.G. Dales, Leeds. S. Grabiner, U.S.A. *Derivations and homomorphisms from Banach algebras.*

S.K. Donaldson, Oxford. M.G. Katz, U.S.A. *Global Riemannian geometry, computer aided geometry.*

S.K. Donaldson, Oxford. W.M. Goldman, U.S.A. *Geometric structures on manifolds.*

K.D. Elworthy, Warwick. R. Leandre, France. *Malliavin calculus: quantitive and geometric applications.*

J.W. Essam, Royal Holloway & Bedford New College. A.C.N. Magalhaes, Brazil. *Subgraph break-collapse method for the Z(q) model.*

W.N. Everitt, Birmingham. P.B. Bailey, Mexico. *Extension of Sleign (Baileys code) to differential problems with internal singularities.*

R.A. Fenn, Sussex. D.D. Long, U.S.A. *Automorphisms of 3-manifolds.*

T.A. Gillespie, Edinburgh. E.R. Berkson, U.S.A. *Spectral decompositions in Banach spaces.*

C.R. Hajarnavis, Warwick. A. Braun, Israel. *Applications of P.I. rings.*

P. Hall, Exeter. P.J. Blennerhassett, Australia. *Nonlinear and nonparallel wave interactions in viscous shear flows.*

T.O. Hawkes, Warwick. P.J. Cossey, Australia. *Representation theory and applications.*

W.K. Hayman, York. F.W. Gehring, U.S.A. *Iteration and Kleinian groups.*

P.J. Higgins, Durham. Various visitors. *Boolean function complexity (LMS Durham Research Symposium).*

P.J. Higgins, Durham. Various visitors. *Stochastic analysis (LMS Durham Research Symposium).*

J.W.P. Hirschfeld, Sussex. T.Szonyi, Hungary. *Arcs in finite projective planes.*

W.A. Hodges, Queen Mary College. S. Shelah, Israel. *Models and infinite combinatorics.*

C.S. Iliopoulos, Royal Holloway & Bedford New College. W.F. Smyth, Canada. *Parallel algorithms and graph theory.*

E.R. Johnson, University College London. T.F. Stocker, Switzerland. *Long period oscillations in shelf-estuary systems.*

F.G. Leppington, Imperial College. H. Levine, U.S.A. *Radiating sources in acoustical theory with applications to impact noise problems.*

M.W. Liebeck, Imperial College. G.M. Seitz, U.S.A. *Subgroup structure of simple groups.*

J.B. McLeod, Oxford. A. Friedman, U.S.A. *Nonlinear diffusion equations.*

J.B. McLeod, Oxford. H. Weinberger, U.S.A. *Nonlinear diffusion equations and nonlinear evolution equations.*

H.K. Moffat, Cambridge. A. Tsinober, Israel. *The relation between helicity, dissipation and transport properties of turbulent flow.*

D.M.Q. Mond, Warwick. G.R. Pellikaan, Netherlands. *Multiple points of analytic maps.*

H.R. Morton, Liverpool. M.E. Kidwell, U.S.A. *Invariants of satelite knots.*

P.M. Neumann, Oxford. S.A. Adeleke, U.S.A. *Some infinite permutation groups.*

P.M. Neumann, Oxford. M.D. Atkinson, Canada. *Development of algorithms for computation with finite permutation groups.*

P.M. Neumann, Oxford. A. Mann, Israel. *Some problems in group theory.*

P.E. Newstead, Liverpool. M. Maruyana, Japan. *Vector bundles of projective spaces.*

P.E. Newstead, Liverpool. Various visitors. *Vector bundles in algebraic geometry conference.*

R.M. Nisbet, Strathclyde. E. McCauley, Canada. *Mathematical models of the dynamics of zooplankton populations.*

A.C. Ottewill, Oxford. B. Allen, U.S.A. *The Vilkovisky-Dewitt effective action in one-loop quantum gravity.*

S.C. Power, Lancaster. R.E. Mercer, U.S.A. *Bimodules over Cartan subalgebras: tensor products, representation and classification.*

D.A. Rand, Warwick. A.C. Newell, U.S.A. *Chaos and coherence in turbulence and optics.*

A.A. Ranicki, Edinburgh. R.J. Milgram, U.S.A. *Algebraic and geometric surgery.*

M. Reid, Warwick. W. Barth, West Germany. *Algebraic geometry.*

M. Reid, Warwick. C.S. Seshadri, India. *Algebraic geometry.*

B.W. Silverman, Bath. I.M. Johnstone, U.S.A. *Statistical inverse problems.*

P.F.M. Smith, Nottingham. L.R. Pericchi. *Model choice and imprecise inference methodology in nonlinear regression, hierarchical and calibration models.*

A. Spence, I.G. Graham, Bath. J. de Pillis, U.S.A. *Parallel algorithms for nonlinear equations arising in semicoductor device modelling.*

K.S. Stelle, Imperial College. E. Bergshoeff, Italy. *Quantization of superstrings and supermembranes.*

B. Straughan, Glasgow. S. Rionero, Italy. *Improperly posed problems for partial differential equations on unbounded domains.*

B. Straughan, Glasgow. L.e. Payne, U.S.A. *Improperly posed problems for parabolic partial differential equations.*

A. Sudberry, York. C.A. Manoge, U.S.A. *Octonionic parametrisation and covariant quantisation of superstrings.*

D.M. Titterington, Glasgow. P.G. Hall, Australia. *Smoothing techniques in nonparametric curve estimation and image processing.*

R.B. Vinter, Imperial College. A.D. Ioffe, Israel. *Nonsmooth optimization.*

G. Walker, Manchester. S.R. Dot, U.S.A. *The structure of the polynomial algebra over a finite field as a module over the full matrix semigroup ring.*

P.R. Wild, Royal Holloway & Bedford New College. J.R. Seberry, Australia. *Combinatorial designs and cryptography.*

M.A. Wolfe, St Andrews. Z Shen, China. *Interval methods for operator equations.*

Research Grants

P.J. Collins, Oxford. *Symposium on general topology and applications.*

D.J.H. Garling, Cambridge. *Microprogram on Banach space structure.*

T.A. Gillespie, Edinburgh. *Spectral decompositions of linear operators.*

R.E. Grundy, St Andrews. *Nonlinear diffusion equations.*

S.W. Hawking, G.W. Gibbons, Cambridge. *The formation and evolution of cosmic strings.*

A. Jeffrey, Newcastle-upon-Tyne. *Nonlinear hyperbolic equations and rays.*

T.J. Lyons, M.G. Roeckner, Edinburgh. *Workshop on probability theory and geometry.*

A.I. Murdoch, Strathclyde. *Continuum modelling of porous media containing fluids with specific regard for boundary conditions.*

J.R. Norris, Cambridge. *Malliavin calculus and stochastic differential equations.*

M. Reid, Warwick. *Algebraic geometry workshop.*

J.S. Rollett, D. Howard, W.M. Connolley, Oxford. *Interactive solution of Navier-Stokes equations; three dimensional computations.*

ELLIOT T. ADAMS

Professor Elliot T. Adams who was elected a reciprocity member of the London Mathematical Society on 20th June 1986, died on 3rd January 1989.

STANLEY SKEWES

Dr Stanley Skewes who was elected a member of the London Mathematical Society on 8th November 1928, died in December 1988.

LOGIC, ALGEBRA AND COMPUTATION

An International Summer School on Logic, Algebra and Computation will be held at Marktoberdorf, near Munich, from 25th July to 6th August 1989. The topics covered will be: Automated deduction; Proving techniques; Types; Concurrency and logic; Concurrent processes; Semantics; Constructive methods; Non-traditional logics. The lecturers will be: W. Brauer (West Germany), R.L. Constable (U.S.A.), G. Huet (France), Z. Manna (U.S.A.), A. Nerode (U.S.A.), J.A. Robinson (U.S.A.), H. Schwichtenberg (West Germany), D.S. Scott (U.S.A.), E.Y. Shapiro (Israel), J.V. Tucker (U.K.) and S.S. Wainer (U.K.).

Deadline for application is 11th April. For further information contact Institut fur Informatik, Technisches Universitat Muchen, Summer School, Arcisstr.21, 8000 Munchen 2, West Germany. Telephone: 89-2105-8113.

COLEG PRIFYSGOL GOGLED CYMRU
UNIVERSITY COLLEGE OF NORTH WALES
BANGOR
SCHOOL OF MATHEMATICS
LECTURESHIP IN MATHEMATICS

Applications are invited for a LECTURESHIP IN MATHEMATICS in the above School. This is an appointment under the New Academic Appointments Scheme, and is advertised prior to final confirmation from the UGC, which is expected in April.

The School would prefer candidates who will interact with at least one of the existing research groups. There is also a desire to develop appropriate research links with groups in the School of Electronic Engineering Science, for example in computer systems engineering.

Initial salary will be within the range £9,260 - £11,680 of the Universities' Lecturer Scale A and will commence on 1st October 1989 or such other date as may be arranged.

Applications (2 copies) giving full details of age, qualifications and experience together with the names of three referees should be sent by Friday, 30th April, 1989, to Mrs M.E. Macdonald, Assistant Registrar, University College of North Wales, Bangor, LL57 2DG, from whom further particulars may be obtained. Applications/enquiries may be faxed (248-361429) or sent by E-MAIL to L006@UK.AC.BANGOR.VAXA.

UNIVERSITY OF NOTTINGHAM
MATHEMATICS DEPARTMENT
LECTURER IN APPLIED MATHEMATICS

Applications are invited for a Lectureship in Applied Mathematics. Preference will be given to candidates whose research is in the field of rigorous mathematical physics but applications in other areas are welcome.

Salary will be on the scale £9260 - £19310 (under review).

Further particulars and application forms may be obtained from the Personnel Office, University of Nottingham, University Park, Nottingham NG7 2RD quoting Reference No 1229. Informal enquiries to Professor R.L. Hudson at the same address, telephone (0602) 484848 extension 2801 are also welcome. The closing date for applications is 30 April 1989.

CONFERENCE ON SKEW FIELDS IN HONOUR OF PAUL COHN ON HIS RETIREMENT

Professor Paul Cohn, FRS, will be retiring at the end of this academic year. A conference, supported by grants from the London Mathematical Society and the Department of Mathematics, University College London, on skew fields, will be held in his honour on the afternoon of Thursday July 6th 1989 at University College London, to be followed by a dinner in the evening. There will be three speakers, Professor S.A. Amitsur, Professor G. Bergman and Professor N. Jacobson.

If you would like to receive further details of the conference and dinner please contact Dr W. Stephenson, Department of Mathematics, University College London, Gower Street, London WC1E 6BT. Telephone 01-380 7397 (24 hours).

FIFTH STRUCTURED METHODS CONFERENCE

A conference concerned with the development of large computers systems, organized by the Structural Techniques Association with the cooperation of the Chicago Chapter of the ACM, will be held in Chicago, IL, U.S.A., May 8 – 11, 1989. For further information, contact the Structural Techniques Association, Inc., PO Box 603, Gurnee, IL 60031-0603, U.S.A.

1830 – 1930: A CENTURY OF GEOMETRY

An international colloquium '1830 – 1930: Un siècle de géomtrie, de C.F. Gauss et B. Riemann à H. Poincaré et E. Cartan; épistemologie, histoire, et mathématiques' will be held at the Institut Henri Poincaré in Paris from 18th to the 23rd September 1989. For further information, contact L. Boi, Centre d'Analyse et de Mathématiques Sociales, Ecole des Hautes Etudes en Sciences Sociales, 54 Boulevard Raspail, 75270 Paris, cedex 06. Tel. 33/1/45.44.03.49.

IMA CONFERENCES AND SYMPOSIA 1989

Amongst the conferences and symposia being held in 1989 by the Institute of Mathematics and its Applications are:

Recent Developments in Applicable Mathematics, *University of Dundee, 9th May*

Joint IMA/SMAI-GAMNI Conference on Computational Aeronautical Fluid Dynamics, *Sophia Antipolis, France, 17th – 19th May*

Computational Ordinary Differential Equations, *Imperial College, London, 3rd – 7th July*

Mathematical Theory of the Dyanimics of Biological Systems, *Oxford 3rd – 7th July*

Applications of Mathematics in Insurance, Finance and Acturial Work, *London, 6th – 7th July*

Robotics: Applied Mathematics and Computational Aspects, *Loughborough University of Technology, 12th – 14th July*

Joint IMA/SPE European Conference on the Mathematics of Oil Recovery, *Robinson College Cambridge, 25th – 27th July*

Credit Scoring and Credit Control, *University of Edinburgh 9th – 11th August*

Silver Jubilee, *Trinity College Cambridge, 5th – 6th September*

Mathematics in the Automotive Industry, *University of Warwick, 21st – 22nd September*

International Conference on Mathematics in Transport Planning and Control, *University of Wales College of Cardiff, 28th – 29th September*

Cryptography and Coding, *Royal Agricultural College Cirencester, 18th – 20th December*

Waves and Turbulence in Stably Stratified Flows, *University of Leeds, 18th – 20th December*

For further details of the meetings write to The Conference Officer, The Institute of Mathematics and its Applications, Maitland House, Warrior Square, Southend-on-Sea, Essex SS1 2JY.

FOURTH ASIAN LOGIC CONFERENCE

The Fourth Asian Logic Conference will take place in Tokyo, Japan from 3rd to 6th September 1990, just after the International Congress of Mathematicians (21st-29th August 1990 in Kyoto, Japan).

Submissions to the Conference are invited from areas related to mathematical logic. The deadline for abstracts will be March 1990. Details will be announced later. Send all correspondence including requests for further information to: K. Kakehi, Department of Mathematics, Waseda University, 3-4-1 Okubo, Shinjuku-ku, Tokyo, 169 Japan.

UMIST

Lectureship in Pure Mathematics

Applications are invited for the above post, under the NAAS Scheme. It is anticipated that the appointment will run from 1 October 1989. Preference will be given to candidates whose field of study is in Number Theory, Algebraic Geometry or Algebra. However, applications from candidates in other fields will be seriously considered.

Commencing salary will be within the scale: £9,260-£14,500 per annum.

Requests for application forms and further particulars, quoting reference MAT/7/L, should be sent to The Appointments Officer, Registrar's Department, UMIST, PO Box 88, Manchester M60 1QD, as soon as possible.

An equal opportunity employer.

NONLINEAR SYSTEMS LABORATORY MATHEMATICS INSTITUTE UNIVERSITY OF WARWICK

POSTDOCTORAL RESEARCH ASSISTANTSHIP

Applications are invited for a three-year postdoctoral research assistantship in the area of dynamical systems. Preference will be given to applicants with research interests in the areas of

- symplectic topology and Hamiltonian systems, Morse-Conley theory, Floer homology
- Experimental nonlinear dynamics

Starting Date: October 1989

Salary: on the RA.1A scale, min. starting salary for age < 27 £9,865, min. starting salary for age $\geqslant 27$ £11,680

Applicants should hold or be about to obtain a Ph.D. Applications consisting of Curriculum Vitae, Publications List, outline of research interests and names and addresses of three referees, should be submitted to A. Solman, Nonlinear Systems Laboratory, Mathematics Institute, University of Warwick, Coventry CV4 7AL, England, by 30th April, 1989.

Early application is strongly recommended.

Alfred Bray Kempe (1849-1922) graduated from Cambridge in 1872 and became a barrister and an authority on ecclesiastical law whose favourite recreations were mathematics and music. In many ways he was Clifford's mathematical successor, and he is remembered today for his work on coloured graphs and a flawed attempt on the four colour theorem that not only stood for ten years but may be seen as foreshadowing the successful, computer-aided proof of our own day. A keen Alpinist, he was elected an FRS in 1881, and was the Society's fifteenth President, from 1892-1894.

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

APRIL	
3–7	British Mathematical Colloquium, Nottingham (156)
5–7	Mathematical Revolution Inspired by Computing, Brighton (159)
10	Mathematical Physics Group, London (158)
10–13	Applications of Singularity Theory to Geometry, Newcastle-upon-Tyne (159)
10–14	Probability Theory, Edinburgh (157)
11-13	British Colloquium for Theoretical Computer Science, Surrey (156)
12-13	Operator Algebra Workshop, Lancaster (158)
17–21	Algebraic and Analytic Geometry Aspects of Singularity Theory, Warwick (153)
17–28	Hyperbolic Geometry and Ergodic Theory, Italy (152)
21–22	Atiyah's 60th Birthday Meeting, Oxford (155)
25	Convexity, Knots and Surfaces, Durham (159)
MAY	
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