

# THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

**No. 188**

**November 1991**

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## **FORTHCOMING SOCIETY MEETINGS**

**Friday 15 November 1991, Burlington House**  
**Annual General Meeting**  
**O. Penrose, R. Penrose**

**Friday 17 January 1992, Burlington House**

**Friday 21 February 1992, Bristol**

**Friday 20 March 1992, Burlington House**

**Friday 15 May 1992, Burlington House**

**Friday 19 June 1992, Burlington House**

**Monday 29 June - Wednesday 1 July 1992**

**Joint meeting of AMS and LMS, Cambridge**

**Friday 16 October 1992, Burlington House**

**Friday 20 November 1992, Burlington House**

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## **JOINT MEETING OF THE AMERICAN AND LONDON MATHEMATICAL SOCIETIES**

The two Societies are very gratified by the interest that has been shown in the Joint Meeting to be held in Cambridge, England, from Monday 29th June to Wednesday 1st July 1992. It seems possible that more people will wish to attend the meeting than had been originally expected. Whilst this is welcomed, it might cause problems in Cambridge both with housing and with lecture room accommodation. An Announcement of the meeting, with details of the scientific programme, will be sent to members in January 1992. It will specify preregistration by 1st May 1992. All participants must preregister in advance of the meeting. Intending participants are urged to preregister at the earliest opportunity. If

the number of preregistrations approaches the greatest number that the Local Organizing Committee feels can be accommodated in Cambridge then the two Societies might have to consider closing preregistration.

The Announcement of the meeting will contain information about other conferences in Europe in late June and early July 1992. It would be helpful if organisers of conferences to be held in that period would send details, not later than 15th November 1991, to the Society's Administrator, Susan Oakes, whose address, telephone number, fax number and e-mail address appear on the back page of this Newsletter.

## **VISIT OF PROFESSOR J. STROOKER**

Professor J. Strooker from the University of Utrecht, Netherlands will be visiting the UK in November. He will give the following talks: Tuesday 26th, Edinburgh, "The Monomial Conjecture and Complete Intersections"; Wednesday 27th, Sheffield, "Dimension versus Depth in Commutative Algebra" and Friday 28th, Exeter,

"The Monomial Conjecture and Complete Intersections". Professor Strooker's visit is partially supported by a Scheme 2 grant from the London Mathematical Society. For further information contact Dr L. O'Carroll, Department of Mathematics, University of Edinburgh, Mayfield Road, Edinburgh, telephone 031 650 5060.

## RECENT LMS PUBLICATIONS

**Surveys in Combinatorics, 1991** edited by A.D. Keedwell. pp 312. ISBN 0 521 40766 4. LMS Lecture Note Series 166. £22.50. LMS members discount price £16.90.

This volume contains the invited papers presented at the British Combinatorial Conference, held at the University of Surrey in July 1991. As in previous years, the speakers were mathematicians of the highest quality who spanned the subject area, and their papers will provide excellent reading for all those interested in combinatorics.

**Stochastic Analysis** edited by M.T. Barlow and N.H. Bingham. pp 384. ISBN 0 521 42533 6. LMS Lecture Note Series 167. £24.95. LMS members discount price £18.70.

Durham Symposia traditionally constitute an excellent survey of recent developments in many areas of mathematics. The Symposium on stochastic analysis, which took place at the University of Durham in July 1990, was no exception. This volume is edited by the organisers of the symposium, and contains papers contributed by leading specialists in diverse areas of probability theory and stochastic processes. Of particular note, are the papers by David Aldous, Harry Kesten and Alain-Sol Sznitman, all of which are based upon short courses of invited lectures. Researchers into the varied facets of stochastic analysis, will find that these proceedings are an essential purchase.

**Communication Theory** by C.M. Goldie and R.G.E. Pinch. pp 200. ISBN 0 521 40456 8 hardback, ISBN 0 521 40606 4 paperback. LMS Student Texts Series 20. Hardback £30.00, LMS members discount price £22.50; paperback £10.95, LMS members discount price £8.20.

This book is an introduction for mathematics students, to the theories of information and codes.

They are usually treated separately but, as they both address the problem of communication through noisy channels (albeit from different directions), the authors have been able to exploit the connection to give a reasonably self-contained treatment, relating the probabilistic and algebraic viewpoints. The book is based on a course taught at Cambridge to undergraduate students and the only major prerequisite is a good background in discrete probability theory, the necessary Galois theory is developed as needed.

**Designs, Graphs, Codes and their Links** by P.J. Cameron and J.H. van Lint. pp 256. ISBN 0 521 41325 7 hardback, ISBN 0 521 42385 6 paperback. LMS Student Texts Series 22. Hardback £35.00, LMS members discount price £26.25; paperback £12.95, LMS members discount price £9.70.

Although graph theory, design theory, and coding theory, had their origins in various areas of applied mathematics, today they are to be found under the umbrella of discrete mathematics. Here the authors have considerably reworked and expanded their earlier successful books on graphs, codes and designs, into an invaluable textbook. They do not seek to consider each of these three topics individually, but rather to stress the many and varied connections between them. The discrete mathematics needed is developed in the text, making this book accessible to any student with a background of undergraduate algebra. Many exercises and useful hints are included throughout, and a large number of references are given.

These books have recently been published and are available from Cambridge University Press, Customer Services, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU. Payment should be sent with your order, quoting account no. 089 4900 001.

## BUBBLE DYNAMICS AND INTERFACE PHENOMENA Preliminary Announcement

An IUTAM Symposium on Bubble Dynamics and Interface Phenomena will be held at the University of Birmingham from 6th to 9th September 1993. For further information contact Profes-

sor J.R. Blake, School of Mathematics and Statistics, University of Birmingham, Birmingham B15 2TT. Tel 021 414 6581, e-mail: blakejr@uk.ac.bham.vax1.

## CANADIAN MATHEMATICAL SOCIETY

The Winter Meeting of the Canadian Mathematical Society will be held from 7th to 10th December 1991 at the Victoria Convention Centre, Victoria, British Columbia. The principal speakers will be A. Casson (Berkeley), S. Grossberg (Boston), I. MacDonald (Queen Mary & Westfield College), B. Muckenhoupt (Rutgers) and M. Rieffel (Berkeley). Symposia in five areas will be organised as follows: Applied Non-linear Differential

Equations; Classical Analysis; Discrete Aspects of Lie Theory; Harmonic Analysis/Operator Algebras; Low Dimensional Topology.

For further information contact: C.R. Miers, Local Organizer, Department of Mathematics and Statistics, University of Victoria, Victoria, British Columbia V8W 3P4. Tel: (604) 721 7463, fax: (604) 721 8962.



# **LONDON MATHEMATICAL SOCIETY**

## **Annual General Meeting**

**Friday 15th November 1991 at 3.00**

O. Penrose (Heriot-Watt)  
will speak at 3.10 pm on

**The Mathematics of Metastable States**

R. Penrose (Oxford)  
(1991 Naylor Prize Lecture)  
will speak at 5.00 pm on

**Twistor Theory: some old and new ideas**

Tea will be served at 4.10 pm

The meeting will be held at the Geological Society,  
Burlington House, Piccadilly, London W1.

All interested are very welcome.

**Please note early start at 3.00 pm**

The Annual Dinner will be at the  
Chuen Cheng Ku Restaurant

**UMIST**



**LECTURESHIPS IN  
(A) PURE MATHEMATICS  
and  
(B) MATHEMATICAL  
STATISTICS**

Applications are invited for the above two posts. It is anticipated that the successful candidates will be in post no later than 1st October 1992. Applications from candidates with research interests in any branches of these two subjects will be seriously considered; however, for the Lectureship in Pure Mathematics preference will be given to candidates whose field of study is in Algebra, Number Theory or Algebraic Geometry; for the Statistics Lectureship, the Department will be particularly interested in candidates with a strong research interest in the field of Time Series Analysis.

Commencing salary will be within the scale: £12,690-£23,427 per annum (under review).

Requests for application forms and further details, quoting reference: MAT/134, should be sent to: The Appointments Officer, Registrar's Department, UMIST, PO Box 88, Manchester M60 1QD. Completed application forms should be returned as soon as possible.

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## BRITISH COMBINATORIAL COMMITTEE

At the Business meeting held during the Thirteenth British Combinatorial Conference (8-12 July 1991, University of Surrey) a new Committee was elected to serve until the next Conference. At a subsequent meeting of the newly elected Committee, members to serve as Honorary Secretary and Honorary Treasurer were chosen. The members of the new Committee are as follows: Professor C. St J.A. Nash-Williams (Chairman), Dr I. Anderson (Treasurer), Dr M.H.G. Anthony, Professor P.J. Cameron, Dr J.W.P. Hirschfeld, Dr C. McDiarmid, Dr J. Sheehan (Secretary). Ex Officio: Dr R.J. Wilson (Bulletin Editor), Mr K. Walker, Local Organizer for the 1993 Conference.

The Committee is grateful for financial support received from the London Mathematical Society Conferences Fund towards the costs of the above-mentioned Conference.

**Fourteenth British Combinatorial Conference** The Committee wishes to announce that the next British Combinatorial Conference will be held at the University of Keele from July 5th to 9th 1993.

**British Combinatorial Bulletin** This Booklet, published annually, contains news of Conferences

and Colloquia on Combinatorial topics, a list of British mathematicians known to be interested in Combinatorics and information about forthcoming research publications. It is available on request free of charge to mathematicians resident in Great Britain and at a cost of £2.50 (to cover postage for two issues) to interested persons resident overseas. Please send £2.50 sterling to the Editor, Dr R.J. Wilson, Department of Pure Mathematics, The Open University, Walton Hall, Milton Keynes MK7 6AA, England.

### One-Day Colloquia on Combinatorial Topics

The British Combinatorial Committee has again decided to make a limited sum of money available for the support of One-Day Colloquia on Combinatorial topics. The Committee will, however, expect any Institution requesting money under this agreement to provide part of the total needed from its own funds. Proposals for consideration by the Committee should be sent in the first instance to the Secretary, Dr J. Sheehan, Department of Mathematical Sciences, University of Aberdeen, The Edward Wright Building, Dunbar Street, Aberdeen AB9 2TY.

## OPEN UNIVERSITY CHRISTMAS LECTURE

Professor Sir Christopher Zeeman FRS will give the first OU Mathematics Christmas Lecture at 4.30 p.m. on Monday 9th December in the Lecture Theatre, The Open University, Milton Keynes. His title is "Gyroscopes and Boomerangs".

Students and sixth-formers are particularly welcome. Since numbers are limited, entry is by (free) ticket only, obtainable by sending a SAE to MS K. Knight, Faculty of Mathematics, The Open University, Milton Keynes MK7 6AA.

## IRANIAN MATHEMATICS CONFERENCE

The 23rd Annual Iranian Mathematics Conference will be held from 7th to 10th April, 1992 at Razi University, Bakhtaran, Iran.

For further information write to: The Organizing Committee of AIMC-23, Razi University, PO Box 67145-1567, Bakhtaran, Iran. Fax: 0431-26183, telephone 0431-28050.

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## **LECTURESHIP IN PURE MATHEMATICS**

**UEA**  
NORWICH

Applications are invited for the post of Lecturer in Pure Mathematics. The person appointed will be expected to enhance existing research strengths and to make a contribution to the profile of analysis in the School.

It is expected that the initial salary will be at an appropriate point on the Lecturer A scale £12,690 to £17,593 per annum (interim rate), plus USS benefits. The post is available from 1st January 1992 or from a mutually agreed date later in the year.

Applications (three copies), giving full particulars of age, qualifications and experience, together with the names and addresses of three persons to whom reference may be made, should be lodged with the Administrative Secretary, University of East Anglia, Norwich NR4 7TJ. Further particulars may be obtained by telephoning 0603 592734 - quoting reference MAP 91/02, not later than **15th November 1991**. No forms of application are issued.

UEA is an Equal Opportunities Employer.

## **UNIVERSITY OF CAMBRIDGE** **Department of Pure Mathematics and** **Mathematical Statistics** **UNIVERSITY ASSISTANT LECTURER IN** **PURE MATHEMATICS**

Applications are invited for a University Assistant Lectureship in any field of Pure Mathematics to take up appointment from 1st October 1992. The statutory limit of tenure of a University Assistant Lectureship is five years, but the appointee will be considered for possible appointment to a University Lectureship during the course of his/her tenure.

The current age related salary scale is £12,690 to £17,593.

Further information and details of application procedure can be obtained from the Head of the Department of Pure Mathematics and Mathematical Statistics, 16 Mill Lane, Cambridge CB2 1SB, telephone Cambridge (0223) 337996.

**The closing date for applications is 16th January 1992.**



## ALGEBRAIC COMBINATORICS

A one-day conference on Algebraic Combinatorics will be held at the Open University, Milton Keynes, on Friday 29th November. The speakers will be L. Bénéteau (Toulouse), J. Smith (Iowa/Warsaw), L. Soicher (QMW, London), K. Curtis (Birmingham) and J. Siemons (UEA, Norwich); the organizer is C.A. Rowley (OU). Entrance is open to all without charge, but it would

be appreciated if intending participants would inform Ms K. Knight, Faculty of Mathematics, The Open University, Milton Keynes MK7 6AA, from whom further information can be obtained. Financial support for this conference has been generously provided by the London Mathematical Society and the British Combinatorial Committee.

## GRANTS IN SUPPORT OF PUBLIC UNDERSTANDING OF SCIENCE

Grants are available for new or continuing activities or initiatives directly concerned with the promotion of the public understanding of science (including mathematics, technology and engineering). Applications should be made as soon as possible on forms obtainable from Dr A. Evans, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG. (Tel: 071-839 5561, ext. 219).

Applicants will be asked to show clearly how their proposal relates to the public understanding of science, to submit a statement of the financial basis of their proposal, to specify any related schemes in the area of the public understanding of science of which they are aware and to give an

assurance that the grant applied for is not for an activity in direct competition or conflict with existing schemes. Successful applicants will be required to submit a brief written report after the event on how the grant has been used.

All applicants must be resident in the UK. The maximum sum available for an individual grant is £3000 and allocations will often be less than this amount. The closing date for applications are 31st March and 31st October each year; late applications will be considered at the next round.

The Council of the Royal Society is advised on suitable recipients for grants by the Committee on the Public Understanding of Science (COPUS).

## EUROPEAN CONGRESS OF MATHEMATICS

This first European Congress of Mathematics will be held in Paris from 6th to 10th July 1992 under the auspices of the European Mathematical Society. Its purpose is threefold: to present various new aspects of pure and applied mathematics to a wide audience; to be a forum for reflection on the relationship between mathematics and society in Europe; to enhance cooperation among mathematicians from all European countries.

The Congress will feature fifty invited lectures, including nine plenary lectures by the following speakers: V.I. Arnold, L. Babai, C. de Concini, S. Donaldson, B. Engquist, P.-L. Lions, W. Muller, A.-S. Sznitman, M. Vergne. Round tables will be held on the following subjects: Mathematics and

the general public; Women and mathematics; European mathematics: myth or historical fact?; Role of mathematics in educational policies; Mathematics in secondary school; Student exchange programmes and harmonisation of degrees; Mathematical libraries in Europe; Collaboration with developing countries; European scientific policy; Mathematics and computer science; Mathematics and economics; Mathematics, biology and medicine; Mathematics and chemistry; Mathematics and industry.

A preregistration form is available from Congress Secretariat, Congres Europeen de Mathematiques, College de France, 3 rue d'Ulm, 75005 Paris, France. One may preregister by e-mail: [eucom@frmap711.bitnet](mailto:eucom@frmap711.bitnet), giving name and address.

## JOURNAL BACKLOG 1991

	No of Issues	No of pages	Backlog	Estimate (Months)
Math. Proc. Camb.	6	1200	180	8-14
Edinburgh Math Society	3	470	180	15-20
Glasgow Math Journal	3	380	100	12-16
L.M.S. Bulletin	6	624	100	10-14
Journal	6	1152	700	15-20
Proceedings	6	1344	500	15-20
Mathematika	2	350	50	6-12
Oxford Q.J.M.	4	512	180	12-18
R.S. Edinburgh Proc. A.	6	1152	120	11-14

# Cambridge Mathematics

## Clifford Algebras and Dirac Operators in Harmonic Analysis

J. GILBERT and M. MURRAY

This book unites the seemingly disparate topics of Clifford algebras, analysis on manifolds and harmonic analysis. The authors show how algebra, geometry and differential equations all play a more fundamental role in Euclidean Fourier analysis than has been fully realized before.

£37.50 net HB 0 521 34654 1 350 pp. 1991  
*Cambridge Studies in Advanced Mathematics* 26

## Algebraic Number Theory

A. FRÖHLICH and M. J. TAYLOR

This long-awaited book is a brisk, thorough treatment of the foundations of algebraic number theory, introducing more advanced ideas.

£50.00 net HB 0 521 36664 X 384 pp.  
*Cambridge Studies in Advanced Mathematics* 27  
Forthcoming November 1991

## Operator Algebras in Dynamical Systems

The Theory of Unbounded \*-derivations in C\*-algebras

S. SAKAI

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*Encyclopedia of Mathematics and its Applications* 41

## Infinite Electrical Networks

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R. Seroul, S. Levy

# ***A Beginner's Book of T<sub>E</sub>X***

Translated from the French by S. Levy

1991. Approx. 295 pp. Softcover DM 58,- ISBN 3-540-97562-4

This book is a friendly introduction to T<sub>E</sub>X, the powerful typesetting system designed by Don Knuth. It is addressed primarily to beginners, but it contains much information that will be useful to aspiring T<sub>E</sub>X "wizards". Moreover, the authors kept firmly in mind the diversity of backgrounds that characterizes T<sub>E</sub>X users: authors in the sciences and in the humanities, secretaries, technical typists . . .

The book contains a careful explanation of all fundamental concepts and commands, but also a wealth of commented examples and "tricks" based on the authors' long experience with T<sub>E</sub>X. The attentive reader will quickly be able to create a table, or customize the appearance of the page, or code even the most complicated formula. The last third of the book is devoted to a Dictionary/Index, summarizing all the material in the text and going into greater depth in many areas.

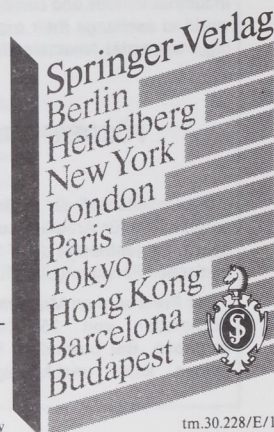
J. Désarménien (Ed.)

## ***T<sub>E</sub>X for Scientific Documentation***

Second European Conference  
Strasbourg, France, June 19-21, 1986  
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1986. VI, 204 pp. (Lecture Notes in Computer Science, Vol. 236) Softcover DM 36,-  
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☐ Avinguda Diagonal, 468-4 °C, E-08006 Barcelona, Spain ☐ Wesselényi u. 28, H-1075 Budapest, Hungary



tm.30.228/E/1

## THE PUZZLES OF COSMOLOGY AND QUANTUM THEORY

Cosmology tells us that the universe began at the 'big bang' when all matter - and indeed all of space itself - was concentrated at an infinitesimal volume and the (classical) laws of space and time must break down. Similar situations occur at the centre of black holes, collapsed stars from which no matter or light can escape. To study these 'singular' states a new quantum theory of space-time is needed. It is likely that such a theory would begin to unravel some of the underlying

mysteries of present-day quantum theory, the accepted theory of matter at the level of tiny energy differences.

Professor R. Penrose, FRS will be giving a public lecture on "The Puzzles of Cosmology and Quantum Theory" on Thursday 7th November at 17.30. The lecture is being organised by and held at The Royal Society, 6 Carlton House Terrace, London SW1 5AG.

## ANNUAL DINNER

The 1991 Annual Dinner will be held after the Annual General Meeting on Friday 15th November at 6.30 pm for 7.00 pm at the Chuen Cheng Ku Restaurant, 17 Wardour Street, London W1V 3HD. The cost is £16.50 per person and members

may book places for guests. The booking form enclosed with the October Newsletter, should be returned together with payment to the London Mathematical Society office by Friday 8th November.

## DUNDEE CONFERENCE ON ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS

The Twelfth Dundee Conference on Ordinary and Partial Differential Equations will be held in Dundee, Scotland from Monday 22nd to Friday 26th June 1992. The purpose of the Conference is to bring together research workers with a common interest in differential equations and their applications. The conference will also honour the mathematical contributions that Professor Douglas Jones has made to acoustics, electromagnetic theory and generalised functions. Particular attention will be focused on recent developments in the theory of non-linear differen-

tial equations and their applications to biological phenomena, wave propagation and dynamical systems. Principal speakers will include I.D. Abrahams, A.T. de Hoop, W.N. Everitt, A.V. Holden, D.S. Jones, M. Lapidus, Sir M.J. Lighthill, D.A. Rand, G.F. Roach and W. Rundell.

Further information and application forms may be obtained from Dr R.J. Jarvis, Department of Mathematics & Computer Science, The University, Dundee DD1 4HN, Scotland. E-mail: rjjarvis@uk.ac.dund.mcs.

## ENGINEERING MATHEMATICS AND APPLICATIONS

An International Symposium on Engineering Mathematics and Applications (ISEMA) '92 is being held from 26th to 31st May 1992 at Shenzhen, China. This Symposium is aimed principally at bringing together engineers, mathematicians, academics, scientists and users of industrial utilities and computers from all over the world to exchange their experience on engineering, industrial mathematics and its applica-

tions to various industries, electrical engineering, machines, automation, computer application and engineering science. A small exhibition for displaying new productions and computer software will be held during the conference. For further information contact: The Chinese Society of Electrical Engineering, No.1, Lane 2, Baiguang Road, Beijing 100761, China.

## FÖRDERPREIS DES MATHEMATISCHEN FORSCHUNGSINSTITUTS OBERWOLFACH

Die Gesellschaft für mathematische Forschung vergibt 1993 für Arbeiten aus dem Fachgebiet Algebra, Zahlentheorie den Förderpreis des Mathematischen Forschungsinstituts Oberwolfach.

Der Preis wird an Mathematiker (innen) bis zum Höchstalter von 35 Jahren aus Europa vergeben. Bei besonders hervorragenden Leistungen kann unabhängig vom Fachgebiet

zusätzlich ein weiterer Preis vergeben werden. Vorschlagsberechtigt sind Hochschullehrer aus Europa. Vorschläge müssen bis zum 15. November 1991 eingegangen sein.

Nähere Informationen erhalten Sie bei der Geschäftsstelle des Mathematischen Forschungsinstituts Oberwolfach, Albertstraße 24, D-7800 Freiburg.



# NATIONAL UNIVERSITY OF SINGAPORE

## DEPARTMENT OF MATHEMATICS



Applications are invited for teaching appointments at the Lecturer or Senior Lecturer level from candidates who are able to teach in one or more of the following areas:

**Pure Mathematics**  
**Applied Mathematics**  
**Operational Research**  
**Statistics**

Candidates should possess a PhD degree in Mathematics and have a strong commitment to teaching and research.

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<b>Lecturer</b>	<b>S\$50,390 - 64,200</b>
<b>Senior Lecturer</b>	<b>S\$58,680 - 100,310</b>
<b>(STG£1.00 = S\$2.88 approximately)</b>	

The commencing salary will depend on the candidate's qualifications, experience and the level of appointment offered.

Leave and medical benefits will be provided. Depending on the type of contract offered, other benefits may include: provident fund benefits or an end-of-contract gratuity, a settling-in-allowance of S\$1,000 or S\$2,000, subsidised housing at nominal rentals ranging from S\$100 to S\$216 p.m., education allowance for up to three children subject to a maximum of S\$16,000 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore. Staff members may undertake consultation work, subject to the approval of the University, and retain consultation fees up to a maximum of 60% of their gross annual emoluments in a calendar year.

The Department of Mathematics is a department in the Faculty of Science. There are eight faculties in the National University of Singapore with a current student enrolment of some 15,000. All departments are well-equipped with a wide range of facilities for teaching and research.

All academic staff have access to the following computer and telecommunication resources: an individual microcomputer (an IBM AT-compatible or Apple Macintosh); an IBM mainframe computer with 16 MIPS of computing power; an NEC SX supercomputer with 665 MFLOPS of computing power; departmental laser printers; a wide spectrum of mainframe and microcomputer software; on-line library catalogue; voice-mail; the international computer networks BITNET and INTERNET, linking academic institutions and research centres all over the world. The campus-wide network, which is based on the high speed optical fibre based FDDI technology, enables the academic community to access the computing resources in the University from the convenience of the individual workstation.

Application forms and further information on terms and conditions of service may be obtained from:

**The Director**  
**Personnel Department**  
**National University of Singapore**  
**10 Kent Ridge Crescent**  
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**NUS Overseas Office**  
**Singapore High Commission**  
**(Students Department)**  
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or through Telefax: (65) 7783948

## 1992 BRITISH MATHEMATICAL COLLOQUIUM

The 44th British Mathematical Colloquium will be held at the University of Strathclyde in Glasgow, from Monday 6th to Friday 10th April, 1992, the lectures taking place on Tuesday, Wednesday and Thursday.

The following have agreed to speak: C. McA. Gordon (Austin), E.H. Lieb (Princeton), J.H. van Lint (Eindhoven); I. Anderson (Glasgow), I.N. Baker (Imperial), S. Brenner (Liverpool), J. Carr (Heriot-Watt), E. Cusack (BT Labs), E.B. Davies (King's College, London), S.J. Gardiner (CDU), J. Greenlees (Sheffield), J. Hawkes (Swansea), J.M. Howie (St. Andrews), M.N. Huxley (Cardiff), P.B.

Kronheimer (Oxford), M.A.H. MacCallum (QMW), D. MacHale (Cork), D.B. Pearson (Hull), R.M. Thomas (Leicester), J. Truss (Leeds), P.M.H. Wilson (Cambridge).

Other planned activities include a civic reception and an education forum. U.K. members will receive a booking form with this Newsletter. Enquiries should be addressed to: Dr A.C. McBride, Department of Mathematics, University of Strathclyde, Livingstone Tower, 26 Richmond Street, Glasgow G1 1XH. Tel: 041-552-4400 Ext. 3647, Email: caas03@uk.ac.strath.vaxa.

## STUDY VISITS AND FELLOWSHIPS TO AUSTRALIA, NEW ZEALAND AND CANADA

### Study Visits

Grants are offered to British scientists and engineers of at least postdoctoral status and of proven research ability for visits of between two weeks and six months (or occasionally, longer periods) to research laboratories in Australia, New Zealand and Canada. Applicants must supply with their applications letters of invitation from the host institution. These grants are intended to assist with travel and/or subsistence. There are no closing dates but applications for Australia and New Zealand should be received at least three months in advance of travel; applications for Canada at least four months in advance.

### Fellowships

Applications are invited from young scientists and engineers of postdoctoral status for fellowships of between six months and one year in research laboratories in the above countries. Applicants must

supply letters of invitation from the host institution. Scientists taking sabbatical leave are not eligible to apply. The closing date for applications is **17th May 1992**.

### Note

These study visits and fellowships are administered jointly with partner organisations in the countries concerned. The visits cannot be taken up until formal approval has been granted by these organisations and this can take some weeks after the Royal Society result is made available. Obtaining the necessary visas and permits can also cause delays so applicants are advised to take account of these eventualities when arranging their visits.

Further details and application forms can be obtained from: The Executive Secretary (Ref.JG), The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG, Telephone: 071-839 5561 (ext. 309).

## BAIL VI

The sixth international conference on Boundary and Interior Layers - Computational and Asymptotic Methods will be held at Summit County, Colorado, U.S.A. from 17th to 21st August, 1992 under the auspices of the Institute for Numerical Computation and Analysis, Dublin, Ireland. The session topics will include stiff systems of ordinary differential equations, numerical and asymptotic methods for boundary and interior layers, singular perturbations,

shocks, multiphase problems, solitary waves, bifurcation, chaos, singular perturbations in biology, chemistry, control theory, engineering, mathematics and physics. Several one-day tutorial, non-specialist short courses will be held in parallel on the first day. Lecture Notes will be provided. For further information contact Professor John Miller, NASECODE Secretariat, 26 Temple Lane, Dublin 2, Ireland. Telephone 353-1-679-7655, e-mail: jmiller@vax1.tcd.ie.

## NASECODE VIII

The Eighth International Conference on the Numerical Analysis of Semiconductor Devices and Integrated Circuits will be held at the City Club, Vienna, Austria from 18th to 22nd May 1992 under the auspices of the Institute for Numerical Computation and Analysis, Dublin, Ireland. The session topics will include process simulation, device modelling, circuit analysis, physical aspects, computational techniques, mathematical

analysis, Monte Carlo simulations, quantum effects, energy transport models, code validation against real devices and processes. Several one-day tutorial, non-specialist short courses will be held in parallel on the first day. Lecture Notes will be provided. For further information contact Professor John Miller, NASECODE Secretariat, 26 Temple Lane, Dublin 2, Ireland. Telephone 353-1-679-7655, e-mail: jmiller@vax1.tcd.ie.



# UNIVERSITY OF HONG KONG CHAIR OF MATHEMATICS

(ref. 91/92-14)

Applications are invited for the Chair of Mathematics, tenable from 1st January 1992.

Applicants should be mathematicians with an outstanding research record in a main area of mathematics and with some administrative experience. The successful candidate is expected to provide academic leadership in teaching and research, and may be appointed as Head of Department.

The University would prefer to make a permanent appointment, but consideration may also be given to applications for appointment on fixed or secondment terms of preferably not less than three academic years.

The University reserves the right not to fill the Chair or to fill the Chair by invitation or to make an appointment at a lower level.

Annual salary (superannuable) will be within the professional range, of which the minimum is HK\$685,620 and the average is HK\$848,040 (approx. £51,170 and £63,290 respectively; sterling equivalent as at 24th September 1991). At current rates, salaries tax will not exceed 15% of gross income. Housing at a charge of 7.5% of salary, children's education allowances, leave, and medical benefits are provided.

Further particulars and application forms may be obtained from Appointments (39910), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, UK; or from the Appointments Unit, Registry, University of Hong Kong, Hong Kong (Fax (852)-5592058; E-mail: [apptunit@hkuvvm1.hku.hk](mailto:apptunit@hkuvvm1.hku.hk)).

**Closes 31st December 1991.**

# OUTSTANDING JOURNALS

## **JOURNAL OF KNOT THEORY AND ITS RAMIFICATIONS (JKTR)**

### **Managing Editors**

**Louis H Kauffman** (*Univ. of Illinois at Chicago*)

**W B R Lickorish** (*Univ. of Cambridge*)

**M Wadati** (*Univ. of Tokyo*)

This Journal is intended as a forum for new developments in knot theory, particularly developments that create connections between knot theory and other aspects of mathematics and natural science. Our stance is interdisciplinary due to the nature of the subject.

Papers that will be published include:

- (1) new research in the theory of knots and links, and their applications
- (2) new research in related fields
- (3) tutorial and review papers.

**Institutions/Libraries US\$185 (airmail please add US\$30)**

## **INTERNATIONAL JOURNAL OF ALGEBRA AND COMPUTATION (IJAC)**

### **Editor-in-Chief**

**J Rhodes** (*UC, Berkeley*)

The International Journal of Algebra and Computation publishes original papers in mathematics in general, but giving a preference to those in the areas of mathematics represented by the editorial board. The journal is published quarterly, or more frequently whenever necessary, to bring out new results without delay. Occasionally, expository papers of exceptional value may also be published.

**Institutions/Libraries US\$185 (airmail please add US\$25)**

## **INTERNATIONAL JOURNAL OF MATHEMATICS (IJM)**

### **Co-Chairs**

**A Casson** (*UC, Berkeley*)

**S Kobayashi** (*UC, Berkeley*)

International Journal of Mathematics publishes original papers in mathematics in general, but giving a preference to those in the areas of mathematics represented by the editorial board. The journal will be published bi-monthly from 1991, to bring out new results without delay. Occasionally, expository papers of exceptional value may also be published. The first issue appeared in March 1990.

**Institutions/Libraries US\$250 (airmail please add US\$25)**

## **MATHEMATICAL MODELS AND METHODS IN APPLIED SCIENCES (M<sup>2</sup>AS)**

### **Editors**

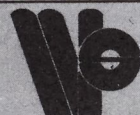
**Nicola Bellomo** (*Politecnico di Torino*)

**Franco Brezzi** (*Univ. Pavia*)

The purpose of this journal is to provide a medium of exchange for scientists engaged in applied sciences (physics, mathematical physics, natural and technological sciences) where there exists a non-trivial interplay between mathematics, mathematical modelling of real systems and mathematical and computer methods oriented towards the qualitative and quantitative analysis of real physical systems.

**Institutions/Libraries US\$190 (airmail please add US\$25)**

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William Vallance Douglas Hodge (1903-1975) was first educated at Edinburgh University, where Whittaker advised him to proceed to Cambridge. There he preferred projective geometry to Littlewood's analysis. His career was secured when in 1930 he applied ideas of Lefschetz to solve a problem posed by Severi. This was the start of a decade's deep consideration of algebraic geometry that culminated in his major book on harmonic integrals. In 1936 he succeeded Baker as Lowndean Professor at Cambridge. After the war he was active in reviving the International Mathematical Union. In 1938 he was elected an FRS and in 1974 awarded the Copley medal. The London Mathematical Society awarded him the Senior Berwick Prize in 1952 and the De Morgan Medal in 1959. He was the Society's 42nd President, from 1947-1949.



## DIARY

The diary lists Society meetings and other events published 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.

### 1991

#### NOVEMBER

- 15 LMS Meeting, London
- 15 Edinburgh Mathematical Society Meeting, Glasgow (186)

#### DECEMBER

- 6 Edinburgh Mathematical Society Meeting, Edinburgh (186)
- 9-13 European Women in Mathematics, France (180)

### 1992

#### JANUARY

- 11 Clifford's Geometric Algebra Meeting, Canterbury (186)
- 17 LMS Meeting, London
- 17 Edinburgh Mathematical Society Meeting, Edinburgh (186)

#### FEBRUARY

- 2-6 Australian Applied Mathematics Conference, NSW, Australia (186)
- 14 Edinburgh Mathematical Society Meeting, Edinburgh (186)
- 21 LMS Meeting, Bristol

#### MARCH

- 13 Edinburgh Mathematical Society Meeting, Dundee (186)
- 20 LMS Meeting, London
- 30-2 April 34th British Theoretical Mechanics Colloquium, Keele (185)

#### APRIL

- 10-12 The Uses of History in Mathematics Education Conference, Nottingham (186)
- 12-16 Diophantine Approximation and Abelian Varieties Conference, Soesterberg, Netherlands (187)
- 13-16 LMS Invited Lectures, Professor P.J. Olver, Bath University (187)

#### MAY

- 1 Edinburgh Mathematical Society Meeting, Stirling (186)
- 15 LMS Meeting, London
- 29 Edinburgh Mathematical Society Meeting, Aberdeen (186)

#### JUNE

- 19 LMS Meeting, London
- 27-3 July The Penrose Transform and Analytic Cohomology in Representation Theory Conference, Massachusetts, U.S.A. (186)
- 29-1 July Joint AMS/LMS Meeting, Cambridge (155)

#### JULY

- 4-14 Evolutionary Problems, Durham (178)
- 6-10 Mathematical Conferences in Perth, Australia (186)
- 6-10 European Congress of Mathematics, France (180)
- 11-18 St Andrews Colloquium, St Andrews (185)
- 14-24 Non-commutative Rings, Durham (178)
- 21-31 The Geometry of Operator Algebras and Banach Spaces, Durham (178)

#### AUGUST

- 3-7 International Linear Algebra Society Meeting, Lisbon, Portugal (186)
- 16-23 International Congress on Mathematical Education, Canada (175)

#### OCTOBER

- 16 LMS Meeting, London

#### NOVEMBER

- 20 LMS Meeting, London

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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 W1V 0NL, to arrive before the first day of the month prior to publication. Telephone 071- 437 5377, Fax 071-439 4629, E-mail lms@uk.ac.kcl.cc.oak.