

THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 220

October 1994

FORTHCOMING SOCIETY MEETINGS

Friday 21 October 1994, Burlington House
Mathematical Biology

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

Friday 18 November 1994, Burlington House
Annual General Meeting

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

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

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

Friday 16 June 1995, Burlington House

ANNUAL GENERAL MEETING

The Annual General Meeting of the London Mathematical Society will be held on Friday 18 November 1994 at 3.15 pm in the Linnean Society Lecture Room, Burlington House, Piccadilly, London W1.

At the Annual General Meeting the report of the Treasurer will be read, the Council and Officers of the Society for the coming year will be elected, and Auditors appointed. The election of Council and Officers is governed by Article 9 of the Charter of the Society, by Articles 18, 24 and 31 of the Statutes of the Society and by By-Law I of the By-Laws of the Society.

A Ballot Paper is enclosed which contains a list of those persons nominated for election to Council either by Members of the Society in accordance with By-Law 1.5 or by the present Council in accordance with By-Laws 1.3 and 1.6.

THE ELECTION for Members-at-Large with two-year terms IS CONTESTED: there are only 6 vacancies for such Council members, and 7 candidates. All the

other elections (for the Officers, including for 2 Vice-Presidents, and for 4 Members-at-Large with one-year terms) are uncontested.

It should be noted that the following two Members-at-Large of Council elected for two-year terms in November 1993 have one remaining year to serve: K.A. Brown, P.T. Saunders.

A Member of the Society is entitled to vote in the election by striking out on the Ballot Paper those names for which a vote is not to be cast. The Member must then validate the Ballot Paper both by writing her/his name legibly on it and by signing it.

The completed Ballot Paper should either be brought to the AGM or sent to "The Scrutineers, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL", to arrive by 5.00 pm on Wednesday 16 November 1994. An appropriate envelope is enclosed.

R. Y. Sharp
Council and General Secretary

EUROPEAN MATHEMATICAL SOCIETY

Each year when renewing their LMS membership, members of the LMS can take the opportunity of subscribing also to the EMS. For a modest additional fee, this enables you to support a Society whose growing list of activities includes:

Newsletter The quarterly EMS Newsletter, produced in Southampton by editorial teams in Southampton and Prague, contains items of general interest, announcements of meetings, book reviews and a substantial section on mathematical education, as well as news about EMS activities.

European Union Liaison The EMS has established excellent links with the EU Commission in Brussels, and serves both as a communication channel (with an e-mail information network that has enabled mathematicians to apply for research grants within the often very tight deadlines imposed by the EU) and as a lobbying agency (pressing in particular for modifications to the forthcoming "fourth framework" of EU funding that would make it less inimical to the support of mathematics research).

East European Fund The EMS has set up a fund to assist East European mathematicians (especially younger ones) to attend meetings abroad. Organisers of

conferences, summer schools and similar meetings can apply for support for named participants from East Europe.

European Science Foundation Euroconferences The ESF is a consortium of European research councils which supports series of conferences in scientific subjects. Until recently, there were no such series in mathematics. But following proposals from the EMS, three mathematical series of Euroconferences (on mathematical methods in industrial problems; mathematical analysis; and algebra and discrete mathematics) have been approved, and the inaugural conference of the first of these series will take place this month.

European Congress of Mathematics The first EMS-sponsored European Congress of Mathematics, in Paris in 1992, was an outstanding success. Plans for ECM '96 in Budapest are now well advanced, and EMS members can again expect a modest reduction in the registration fee for the congress.

Please help to support these and other activities by acquiring, or renewing, individual membership of the EMS when you renew your LMS subscription.

Christopher Lance
EMS Secretary

LONDON MATHEMATICAL SOCIETY ANNUAL SUBSCRIPTION

The annual subscription, including publications, for the session November 1994 - October 1995 is due on 1 November 1994. Together with this Newsletter is a renewal form to be completed and returned with your remittance in the enclosed envelope. No action is required if you are already paying by Direct Debit and do not wish to change your choice of publications. Fully complete and return the form if you are paying by Direct Debit but wish to change your choice of publications or add/delete a subscription to the European Mathematical Society. Bank

accounts of members paying by Direct Debit will be debited with the appropriate amount on 16 January 1995. Other members should either enclose a cheque (£ sterling or US\$) with their form or, if they have a UK bank account and wish to take advantage of this convenient form of payment, request a Direct Debit mandate.

If the renewal form is missing from this Newsletter, write to Miss H.K. Lotay, Assistant Administrator, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL (e-mail: lms@uk.ac.kcl.cc.bay).

LONDON MATHEMATICAL SOCIETY

FRIDAY 21 OCTOBER 1994

MEETING ON MATHEMATICAL BIOLOGY

2.00 A.C. Fowler (Oxford)

Delay differential equations in immunology,
ecology and physiology

2.50 V.S. Isham (University College London)

Epidemic modelling: disease transmission and development

3.40 D.A. Rand (Warwick)

Using spatio-temporal chaos and intermediate-scale
determinism to quantify spatially-extended ecosystems

**A General and Ordinary Meeting
will commence at 5.00**

T.J. Pedley (Leeds)

New perspectives in biological fluid dynamics

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

All interested are very welcome.
Tea will be served at 4.30.

EUROPEAN MATHEMATICAL SOCIETY Council Meeting, 12-13 August 1994

The Council of the European Mathematical Society held its third meeting in Zürich immediately after ICM'94. The Voronezh, Belarus, Bosnian, and Macedonian Mathematical Societies were elected as corporate members. Other societies have indicated they may wish to join but have not yet submitted formal applications. Most of the national mathematical societies are already members and there are about 1600 individual members as well.

The officers for the next two years will be President: J.-P. Bourguignon (France); Vice Presidents: C. Olec (Poland), L. Marki (Hungary), D.A.R. Wallace (UK); Secretary: P.W. Michor (Austria); Treasurer: A. Lahtinen (Finland).

The Council meets only every two years, and the real work is done by the Executive and other committees. A large part of the meeting was taken up by reports of their activities since the last Council. Much of this was fairly routine, which is not to say unimportant, and I think we can feel confident that mathematics is being properly represented at the European level. There were, however, some particular points that are worth noting specially.

The Committee on Women and Mathematics has been inquiring into the situation of women mathematicians in Europe. They reported that there is great disparity between countries in the proportion of mathematicians who are women, and that in general there are fewest in the northern countries. It is known that one

disincentive to young women is the lack of role models, but the Committee found that even the presence of a few women graduate students in a department or a field could encourage more to join them.

The EMS has been actively engaged in supporting mathematics in Eastern Europe but it is also concerned with the third world and it has a Committee on Developing Countries. On the recommendation of this Committee, the Executive is seeking ways to provide scientific literature to institutions in third world countries and to make it possible for mathematicians from those countries to attend meetings in Europe. These are seen very much as only the first steps in what is bound to be a continuing responsibility.

There was a long discussion on the possibility of publishing an EMS Journal in addition to the present Newsletter. There are a number of issues to be resolved before this could be done, and no decision was reached.

UNESCO has designated 2000 as the International Year of Mathematics. The EMS will be arranging events to mark the year and will also help to coordinate what the individual societies do. An important aim will be to bring mathematics to the attention of the general public. There are still more than five years to go, but planning will have to begin at once if we are to obtain maximum support from national governments and the media. There will be a European Congress in 2000, and the site for this will be chosen during the coming year.

P.T. Saunders

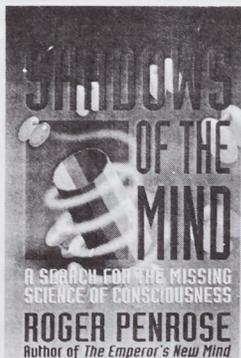
WANTED

Copies (hardback) of books by A.S. Eddington, except for the following: New pathways in science, Stars and atoms, The expanding universe, The mathematical theory of relativity, The nature

of the physical world. Please write to Dr Eric Wallace, Department of Pure Mathematics, The University, Leeds LS2 9JT, or e-mail: pmt6eww@lucs-03.novell.leeds.ac.uk.

OXFORD UNIVERSITY PRESS

Oxford University Press are pleased and proud to announce the long awaited new book from **Roger Penrose**, his sequel to the widely acclaimed **The Emperor's New Mind**



Shadows of the Mind
A Search for the Missing Science of Consciousness
Sir ROGER PENROSE

Here, Penrose is seeking a means whereby a scientifically describable brain might be able to perform non-computational actions. He develops the argument of how quantum effects might have a fundamental relevance to consciousness and to non-computable brain action. Some of the more startling implications of this are based on new scientific information which is discussed in detail, leading to one of the most extraordinary and fundamental implications of quantum theory: quantum entanglement, the process by which the behaviour of 'classically' described systems is explicable only in quantum mechanical terms.

Penrose argues that a new theory is required in order that the gap between quantum and classical physics may be spanned.

0-19-853978-9, 448 pp., line figures,
November 1994

£14.95

*Other new titles of interest
this Autumn*

Ockham Algebras

T. S. BLYTH and J. C. VARLET

The first unified account of research in to a new area of lattice theory. Many of the results presented from universal algebra and topological duality find a natural expression through the notion of boolean algebra.
0-19-859938-2, 256 pp., line drawings,
Clarendon Press, November 1994

£60.00

What is a Logical System?

Edited by D. M. GABBAY

Collection of papers addressing this fundamental question - what is a logical system? The world famous contributors present a spectrum of views on the answer.

Studies in Logic and Computation No. 4
0-19-853859-6, 416 pp., Clarendon Press,
September 1994

£50.00

NEW EDITION

Symmetric Functions and Hall Polynomials

Second Edition

I. G. MACDONALD

A new and expanded edition of a highly acclaimed monograph with many new sections and examples throughout.

Oxford Mathematical Monographs
0-19-853489-2, 400 pp., 9 line figures,
Clarendon Press, November 1994

£55.00



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For further information about mathematics titles from OUP please fax
Gill Heasman for a catalogue: +44 (0)1536 267782

NEW DEVELOPMENT IN LMS PUBLISHING

For over 25 years, the Society has translated and published in English the Russian-language journals 'Russian Mathematical Surveys' (in collaboration with the British Library Document Supply Centre, Boston Spa) and 'Transactions of the Moscow Mathematical Society' (in collaboration with the American Mathematical Society).

Recently, the Society signed an agreement with the Russian Academy of Sciences declaring the commitment of both sides to existing collaborations and their mutual willingness in principle to extending these collaborations. The first examples of this happening are in the publishing area.

As from the beginning of 1995, the Russian-language journals *Izvestiya: Seriya Matematicheskaya* and *Matematicheskii Sbornik* will be translated and published in English by a collaboration between the Russian Academy of Sciences, the respective journal Editorial Boards, and the London Mathematical Society.

Issues of the two journals that appear in Russia before the end of 1994 will continue to be translated and published by the American Mathematical Society.

It is hoped that as soon as is reasonably practicable, the bulk of the translation work and of the keyboarding will be done in Moscow in future, and that the delay between the appearance of the Russian original and its translation will be reduced to a month or two at most. Practical assistance in the venture is being provided by Turpion Ltd., a joint venture of the Royal Society of Chemistry and Pion (the printers of *Russian Mathematical Surveys*).

The English titles of the journals will be *Izvestiya: Mathematics* and *Sbornik: Mathematics*, and their UK Honorary Editors will be Dave Johnson (Notting-

ham) and Gerald Gould (Cardiff), respectively; the Editors-in-Chief of the Russian-language versions are Academician V.S. Vladimiroff and Academician A.A. Gonchar.

Purchasing information on the two journals is as follows:

IZVESTIYA: MATHEMATICS
(*Izvestiya: Seriya Matematicheskaya*)
1995, vol. 59 (same volume number to be used in Russian and English versions)
Six issues per year
US\$808 per annum, including postage
ISSN 1064-5632

SBORNIK: MATHEMATICS
(*Matematicheskii Sbornik*)
1995, vol. 186 (same volume number to be used in Russian and English versions)
Twelve issues per year
US\$1030 per annum, including postage
ISSN 1064-5616

LIBRARY ORDERS:

Send subscription orders, and requests for specimen copies and other information to
Turpion Distribution Services Ltd,
Blackhorse Road, Letchworth,
Herts SG6 1HN, UK
Tel: + 44 (0) 1462-672555;
fax: + 44 (0) 1462-480947

CORPORATE MEMBERS ORDERS:

Corporate members of the LMS are eligible for a 20% discount on the above-quoted list prices, on orders made via the Society. For information, specimen copies and subscription arrangements, please contact:

The Administrator,
London Mathematical Society,
Burlington House, Piccadilly,
London W1V 0NL, UK.

This is a new and exciting development in the Society's publications programme.

David A Brannan
Publications Secretary

UNIVERSITY OF CAMBRIDGE

DEPARTMENT OF PURE MATHEMATICS AND MATHEMATICAL STATISTICS

University Lecturer or Assistant Lecturer in Pure Mathematics

Applications are invited for this post in any field of Pure Mathematics to take up appointment from 1 October 1995.

The current age-related scale for an Assistant Lecturer is £14,756 - £19,326, and for a Lecturer is £17,813 - £27,473.

Further information can be obtained from the Head of Department, DPMMS, 16 Mill Lane, Cambridge CB2 1SB; e-mail: vacancies@pmms.cam.ac.uk; telephone: (0223) 337996; fax: (0223) 337920. Applications should be sent to the Head of Department and should include a curriculum vitae and list of publications, together with the names of 3 referees. Candidates should ask their referees to send their reports directly to the Head of Department, to reach him by the closing date.

The closing date for applications is **15 December 1994**.

(STATISTICAL LABORATORY)

Assistant Lecturers (limited tenure)

Applications are invited for up to two limited tenure Assistant Lectureships commencing 1 October 1995, and lasting 3 years. The positions are open to candidates with interests in any area of probability, statistics, mathematics of operations research, or ergodic theory. The successful applicants will be expected to contribute to the teaching and research programmes of the Laboratory.

The current age-related scale for an Assistant Lecturer is £14,756 - £19,326.

Further information can be obtained from the Director, Statistical Laboratory, 16 Mill Lane, Cambridge CB2 1SB; e-mail: vacancies@pmms.cam.ac.uk; telephone: (0223) 337958; fax: (0223) 337956. Applications, including curriculum vitae and the names of 2 referees, should be sent to the Director.

The closing date for applications is **15 December 1994**.

The University is an equal opportunities employer

BCME-3

The Joint Mathematical Council is promoting a 3rd British Congress of Mathematics Education to bring together all those teachers interested in mathematics and mathematics education. The aims of the congress will be:

- To provide a forum for views of mathematics education
- To provide an opportunity to share current practice in teaching and learning mathematics at all levels.
- To provide a forum for discussion of relevant issues.

The Congress will be built around four major themes:

- IT and mathematics
- Mathematics in and across the curriculum
- Innovation in mathematics teaching
- Social and political issues in mathematics

including keynote presentations with follow-up discussion, discussion groups, refereed research presentations and research workshops as well as hands-on workshops.

The Congress will be held at the Manchester Metropolitan University from 13 - 16 July 1995. It will be mainly residential and the cost is likely to be in the region of £195 with a special weekend rate for classroom teachers. Application forms will be available in the autumn from Frank Eade at the Centre for Mathematics Education, The Manchester Metropolitan University, Didsbury School of Education, 799 Wilmslow Road, Manchester M20 2RR. Application forms will also be circulated through Association Journals. If you would like to present or contribute to a presentation, please write to Michelle Selinger at the School of Education, Open University, Walton Hall, Milton Keynes MK7 6AA by 14th October 1994.

THE FERRAN SUNYER I BALAGUER PRIZE 1994

Each year to honour the memory of Ferran Sunyer i Balaguer, the Institut d'Estudis Catalans awards an international mathematical research prize bearing his name. This prize was awarded for the first time in April 1993. The competition is open to all mathematicians, subject to the following conditions:

1. The prize will be awarded for a mathematical monograph of an expository nature presenting the latest developments in an active area of research in Mathematics, in which the applicant has made important contributions.

2. The monograph must be original, written in English, and of at least 150 pages. In exceptional cases, manuscripts in other languages may be considered.

3. The prize, amounting to 12,000 ECUs, is provided by the Ferran Sunyer i Balaguer Foundation. The winning monograph will be published in Birkhauser Verlag's series Progress in Mathematics, subject to the usual regulations concerning copyright and author's rights.

4. The winner of the prize will be chosen by a Scientific Committee consisting of: Professor G. Frey (Universität Essen); Professor J. Cjirbau (Universität Autonomia de Barcelona); Professor P. Malliavin (Université de Paris VI); Professor J. Oesterli (Université de Paris VI); Professor A. Weinstein (University of California at Berkeley).

5. Monographs, preferably typeset in TEX, should be sent to the following address, and must arrive there before 15 January 1995 in order to be considered: Institut d'Estudis Catalans, Carme 47, 08001 Barcelona, Spain; e-mail: icrm0@cc.uab.es.

6. The name of the prize-winner will be announced in Barcelona in April 1995.

7. The submission of a monograph implies the acceptance of all of the above conditions.

EUROPEAN COMMUNITY

HUMAN CAPITAL AND MOBILITY PROGRAMME LEIBNIZ POST-DOCTORAL FELLOWSHIPS IN MATHEMATICS

Third Round

Applications are invited for a number of 1 year fellowships for research in any area of mathematics, to be held at any one of the institutions in the following network:

CRM, Institut d'Estudis Catalans, Barcelona
Max-Planck-Institut für Mathematik, Bonn
Department of Pure Mathematics & Mathematical Statistics or
Newton Institute, Cambridge
DMI, Ecole Normale Supérieure, Paris
Département de Mathématiques, Orsay, Paris

Conditions Applicants must be citizens of a member state of the European Community or resident in the Community, be under 33 and expect to have completed a PhD or equivalent degree by 1 October 1995. Applicants should propose at least 2 institutions at which they would accept appointment; each of which must be outside their country of citizenship or residence, and other than the institution at which their doctoral studies have been carried out. In all cases successful candidates will be expected to take up their fellowships on 1 October 1995. Holders of the fellowships will be encouraged to spend 3 months at a second network institution. Information concerning salaries and the main mathematical interests of the various institutions can be obtained from the coordinator (e-mail: leibniz@pmms.cam.ac.uk).

Applications These must include a c.v., list of publications, concise description of research interests and the names of 3 referees, and should reach the coordinator

Dr. C.B. Thomas
Leibniz Fellows
Department of Pure Mathematics & Mathematical Statistics
University of Cambridge
16 Mill Lane
Cambridge CB2 1SB
England
(fax: 44-223-337920)

by **30 October 1994**. Each candidate must ensure that his/her referees send their reports so as to reach the coordinator by the same date. A network committee will make an initial selection of the fellows soon thereafter.

INTERNATIONAL CONGRES

3-11 August 1994



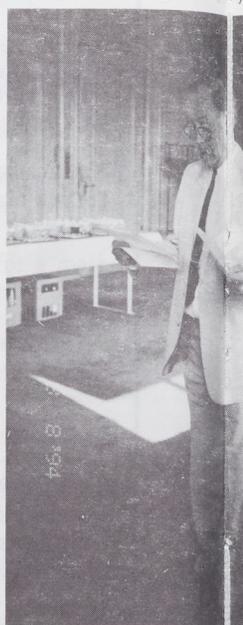
LMS President and Professor I.M. Gelfand



Paul Cohen and Walter Feit



A.A. Gonchar, Y.S. Ospioy, L.D. Faddeev



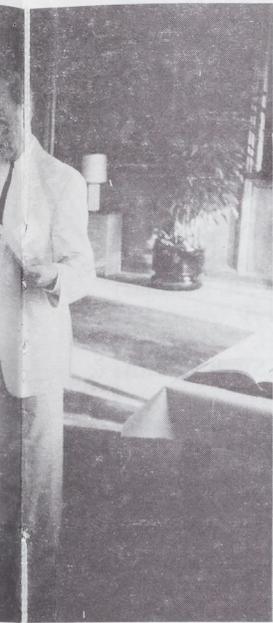
Professor J.R. R.
LMS re



Professor D.
LMS Publica

CONFERENCE OF MATHEMATICIANS 1994

1994, Zürich, Switzerland



Professor J.R. Ringrose, FRS
LMS President



Professor D.A. Brannan
Publications Secretary



LMS Book Exhibit

LINEAR ALGEBRA AND ITS APPLICATIONS CONFERENCE

This conference organized by the Institute of Mathematics & Its Applications in conjunction with the Manchester Centre for Computational Mathematics will be held from Monday 10 to Wednesday 12 July 1995 at the University of Manchester.

The conference aims to cover the latest developments in numerical linear algebra, matrix theory and applications of linear algebra. It immediately follows ICIAM 95 in Hamburg. The conference will consist of two and a half days of invited and contributed talks and posters, with an excursion on the Tuesday afternoon and a conference dinner on Tuesday evening. This notice is a call for papers. An application form to attend the conference will be available early in 1995.

The Invited Speakers and Provisional Titles include: 40 minute talks: R. Brualdi (Madison), 'Combinatoric matrix theory'; J.W. Demmel (Berkeley); G.H. Golub (Stanford); P.C. Hansen (UNIC, Denmark), 'Regularization of large-scale discrete ill-posed problems'; R.A. Horn (Utah), 'Hadamard products, unitarily invariant norms, and perturbation bounds for the polar decomposition'; G. Strang (MIT), 'Teaching of linear algebra'; H. van der Vorst (Utrecht); P. Van Dooren

(Urbana, Illinois); A.J. Wathen (Bristol), 'Iterative solution of large, sparse linear systems arising in PDEs'; M.H. Wright (AT&T Bell Labs), 'Linear algebra in optimization'; 30 minute talks: Z. Bai (Kentucky); A. Edelman (MIT); N.I.M. Gould (Rutherford Appleton Lab.) 'Linear algebra in optimization'; D.J. Higham (Dundee); N. Mackey (SUNY Buffalo), 'Convergence of Jacobi-like methods for the symmetric eigenproblem'; R. Mathias (College of William & Mary), 'Accurate eigenvalue computations'; H. Park (Minnesota); D. Ruiz (CERFACS); B. Smith (UCLA).

In addition to the invited talks, there will be poster sessions and 20 minute contributed talks. The deadline for receipt of abstracts is 31 December 1994. Contributed speakers are required to register for the conference and therefore must pay the conference fee, and, if required, the residential fee.

For further information about the conference or submission of an abstract, write to: Miss Pamela Irving, The Conference Officer, I.M.A., Catherine Richards House, 16 Nelson Street, Southend-on-Sea, Essex SS1 1EF, tel: 0702 354020, fax: 0702 354111.

ANNUAL DINNER

The 1994 Annual Dinner will be held after the Annual General Meeting on Friday 18 November at 6.30 pm for 7.00 pm at the Naval & Military Club, 94 Piccadilly, London W1. The Club requests that while on its premises, visitors should dress smartly and, in particular, gentlemen wear a jacket and tie. The cost is £26.00 per person and members may book places for guests. The booking form enclosed with this Newsletter should be returned together with payment to the London Mathematical Society office by Wednesday 9 November.

PUBLICATIONS PRICING POLICY

The London Mathematical Society has a pricing structure for its journals which allows individual members to purchase them at a substantial discount. These discounted prices are intended for personal use only and the journals should be kept among your personal belongings and not deposited, even temporarily, in a library, common room or other public area. Issues of the journals should be accessible to other mathematicians or students only with your permission, given individually in each instance.

FACULTY OF MATHEMATICAL STUDIES

LECTURESHIP IN PURE MATHEMATICS

Applications are invited for 2 Lectureships in Pure Mathematics in the Faculty of Mathematical Studies to commence on 1 September 1995.

Applicants should have a strong research record in Pure Mathematics. Preference may be given to candidates whose research interests would reinforce areas that are already strongly represented in the Faculty. In particular, it is hoped to make an appointment in or close to geometric group theory.

Salary will be on the University Lecturer Grade A Scale: £14,756 - £19,326 per annum.

Informal enquiries are welcome and should be addressed to Professor M. J. Dunwoody, Faculty of Mathematical Studies, University of Southampton, Southampton, SO17 1BJ (telephone: 0703 593659, fax 0703 593939, e-mail: mjd@uk.ac.soton.maths).

Further particulars are available from the Personnel Department (L), at the address below, (telephone: (0703) 592750), to whom a full curriculum vitae (7 copies from UK applicants, and 1 from overseas) including the names and addresses of three referees, should be sent by **7 November 1994**, quoting reference number L/34.

Working for equal opportunities



**University
of Southampton**

University of
Southampton
Highfield
Southampton SO17 1BJ

MATHEMATICAL SCIENCES ANNUAL 1995

This is the fifth issue of an annual publication containing the addresses, telephone and fax numbers of Departments of Mathematics, Statistics, Computer Science and kindred subjects at Universities and similar institutions in the United Kingdom. Copies are being distributed to all the Departments concerned

for further distribution to their members. Subject to availability additional copies can be obtained directly from Professor I.M. James, Mathematical Institute, 24-29 St. Giles, Oxford OX1 3LB (please enclose a stamped addressed envelope of the right size).

EUROPEAN CONGRESS OF MATHEMATICS 1996 Preliminary Announcement

The European Mathematical Society has decided that there should be a European Congress of Mathematics every fourth year. The second of this series will take place from July 21 (arrival) to 27 (departure) 1996 in Budapest. There will be 45 invited lectures (plenary addresses, parallel sessions) covering all fields of mathematics, posters sessions and round tables.

The first announcement with further

information will be sent in spring 1995. If you wish to be on the mailing list, please contact: János Bolyai Mathematical Society, H-1027 Budapest, Fő utca 68, Hungary, tel: (36-1) 201 7656; fax: (36-1) 201 6974; e-mail: h3341sza@ella.hu, supplying name, institution, mailing address, phone and e-mail.

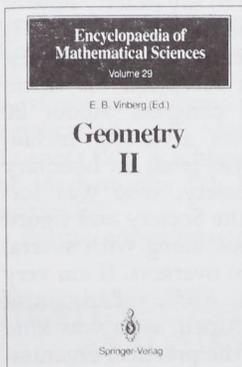
MERTON COLLEGE, OXFORD

RESEARCH FELLOWSHIP IN PURE MATHEMATICS

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

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

All you want to know about geometry



E.B. Vinberg (Ed.)

Geometry II Spaces of Constant Curvature

With contributions by D.V. Alekseevskij,
O.V. Shvartsman, A.S. Solodovnikov,
E.B. Vinberg

1993. IX, 254 pp. 87 figs. (Encyclopaedia
of Mathematical Sciences, Vol. 29)
Hardcover DM 144,- ISBN 3-540-52000-7

This book contains a systematic and comprehensive exposition of Lobachevskian geometry and the theory of discrete groups of motions in Euclidean space and Lobachevsky space. The authors give a very clear account of their subject describing it from the viewpoints of elementary geometry, Riemannian geometry and group theory. The result is a book which has no rival in the literature.

R.V. Gamkrelidze (Ed.)

Geometry I Basic Ideas and Concepts of Differential Geometry

With contributions by D.V. Alekseevskij,
V.V. Lychagin, A.M. Vinogradov

1991. V, 264 pp. 62 figs. (Encyclopaedia
of Mathematical Sciences, Vol. 28)
Hardcover DM 144,- ISBN 3-540-51999-8

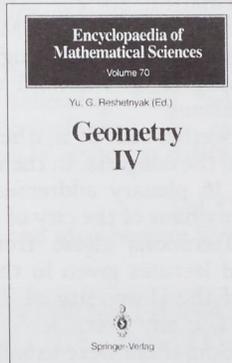
Since the early work of Gauss and Riemann, differential geometry has grown into a vast network of ideas and approaches, encompassing local considerations such as differential invariants and jets as well as global ideas, such as Morse theory and characteristic classes. In this volume, the authors give a tour of the principal areas and methods of modern differential geometry.

Y.D. Burago, V.A. Zalgaller (Eds.)

Geometry III Theory of Surfaces

1992. VIII, 256 pp. 80 figs.
(Encyclopaedia of Mathematical Sciences,
Vol. 48) Hardcover DM 144,-
ISBN 3-540-53377-X

The theory of surfaces in Euclidean spaces is remarkably rich in deep results and applications, e.g. in the theory of non-linear partial differential equations, physics and mechanics. This theory has great clarity and intrinsic beauty, and differs in many respects from the theory of multidimensional submanifolds, therefore a separate volume is devoted to surfaces.



Y.G. Reshetnyak (Ed.)

Geometry IV Non-regular Riemannian Geometry

With contributions by V.N. Berestovskij,
I.G. Nikolaev, Y.G. Reshetnyak

1993. VII, 250 pp. 58 figs. (Encyclopaedia
of Mathematical Sciences, Vol. 70)
Hardcover DM 144,- ISBN 3-540-54701-0

This book contains two surveys on modern research into non-regular Riemannian geometry. Its authors are well-known researchers in this area. They treat two-dimensional Riemannian manifolds of bounded curvature and metric spaces whose curvature lies between two given constants. The book will be immensely useful to graduate students and researchers in geometry, in particular Riemannian geometry.

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ICM'94 - ZÜRICH

A small delegation from the London Mathematical Society attended the International Congress of Mathematicians in Zürich from 3 - 11 August 1994. The following is an informal report on my impressions.

Altogether 2370 mathematicians attended the congress. In the mornings they heard 16 plenary addresses, held in the Kongresshaus of the city of Zürich, and in the afternoons chose from about 150 invited lectures given in the main buildings of the University of Zürich and the ETH. For any given lecture slot in the afternoon, there were usually six or seven different lectures to choose from, not to mention a poster session with up to 50 or more contributions. I certainly found a big congress like this intellectually and socially exhausting as one has to switch one's attention from topic to topic and from individual to individual.

The opening ceremony was well attended with everyone waiting to hear the names of the Fields Medallists. My impression is that mathematicians are not usually very patient with ceremonial but I think all enjoyed an interesting address by the Swiss Federal Minister for Home Affairs, Mrs Ruth Dreifuss, on the importance of mathematics. The names of the Fields Medallists were finally announced as:

Jean Bourgain (Illinois/IHES),
Pierre-Louis Lions (Paris-Dauphine),
Jean-Christophe Yoccoz (Orsay),
Efim I. Zel'manov (Wisconsin)
and the winner of the Nevanlinna Prize was A. Wigderson (Jerusalem).

The final plenary address was given by Andrew Wiles. His lecture was warmly received and was devoted to a general account of his work in reducing the problem of showing that elliptic curves over the rationals are modular to an exact formula typical of many in number theory. My understanding of his comments on Fermat's Last Theorem is that while he believes that the approach via

elliptic curves will ultimately yield a proof, he is not able to say exactly how or when this will happen.

As is usual at International Congresses, the Society held a reception for members attending the congress. About 80 members and guests attended, including Professor I.M. Gel'fand, an honorary member of the Society, who was formally admitted to the Society and signed the membership book along with several other members from overseas. (I am very grateful to Professor Andrew Barbour, of the University of Zürich, who was kind enough to assist in the practical organisation of the reception.)

The LMS mounted and manned a stand as part of the book exhibition. This was a gruelling job on account of the heat - for most of the congress the temperatures were over 30°C (in the 90's Fahrenheit) and the exhibition took place in a large hall which had a glass roof! As usual, the Society's Administrator was equal to the task. Most of the exhibitors were commercial publishers but both the American Mathematical Society and the Société Mathématique de France also exhibited. Needless to say the AMS was there in force, with demonstrations of their electronic services. I also had a pleasant discussion with a representative of the SMF and learned a number of interesting things; for example CNRS, the French equivalent of EPSRC, employs two staff whom it makes available to the SMF.

Finally here are a few figures which give something of the flavour of the congress. Altogether 83 countries were represented at the congress. The biggest representations were: USA (443), Switzerland (229), Japan (228), Russia (194), Germany (191), France (162), Canada (82), UK (70), Ukraine (70), China (50).

The areas and numbers of the invited lectures were: Logic (4), Algebra (8), Number Theory (8), Geometry (12), Topology (10), Algebraic Geometry (7), Lie Groups and Representations (7), Real

and Complex Analysis (10), Operator Algebras and Functional Analysis (6), Probability and Statistics (10), Partial Differential Equations (13), Ordinary Differential Equations and Dynamical Systems (8), Mathematical Physics (10), Combinatorics (6), Mathematical Aspects of Computer Science (6), Numerical Analysis and Scientific Computing (6), Applications of Mathematics in the Sciences (10), Teaching and Popularisation of Mathematics (3), History of Mathematics (3).

Future congresses: the next European

Congress of Mathematicians will be held in Budapest, on 21 - 27 July 1996 and the 1998 ICM will be held in Berlin, 18 - 28 August 1998. Pre-registration details and information about Berlin are available via World Wide Web (WWW). Using any WWW Viewer, such as NCSA Mosaic, you can find the ICM'98 WWW-Server through the following URL address: <http://icm98.zib-berlin.de> - in case of problems, e-mail W. Dalitz at dalitz@zib-berlin.de

D.J. Collins

Meetings and Membership Secretary

NORTH BRITISH FUNCTIONAL ANALYSIS SEMINAR

A meeting of the North British Functional Analysis Seminar will be held at the University of Glasgow from 2.30 pm on Friday 28th October to midday on Saturday 29th October 1994. The speakers will be Professor N. Salinas (University of Kansas) and Professor P. de la Harpe (University of Geneva).

All interested are most welcome to attend. For further information contact Dr Gordon Blower, NBFAS Secretary, Department of Mathematics and Statistics, Lancaster University. tel: 0524-593962; fax: 0524-841710; e-mail: maa008@uk.ac.lancs.centl.

EULER INTERNATIONAL MATHEMATICAL INSTITUTE

The London Mathematical Society was recently awarded 35,000 ECU by INTAS (The International Association for the Promotion of Cooperation with Scientists from the Independent States of the former Soviet Union) to send 13 mathematicians to the Euler Institute in St Petersburg over the next 18 months. The Scientific Director of the Institute is Academician Ludwig Faddeev, and the Institute itself is based in a beautiful old mansion on the banks of the River Neva.

David A. Brannan

Publications Secretary

MARGARET HAYMAN

Mrs Margaret Hayman died on 26 July 1994. She was a former President of the Mathematical Association and served on the Council of the Institute of Mathematics and its Applications.

EDWARD S.D. MEDLICOTT

Mr Edward S.D. Medlicott, who was elected a member of the London Mathematical Society on 15 November 1973, died on 29 July 1994.

DEPARTMENTAL NEWS

University College London Dr W.T. Oughton and Michael Whitlock (joint with Genetics) have been appointed to Gowers has been promoted to Reader, Drs Richard Hill, Robb McDonald, Sean lecturerships.



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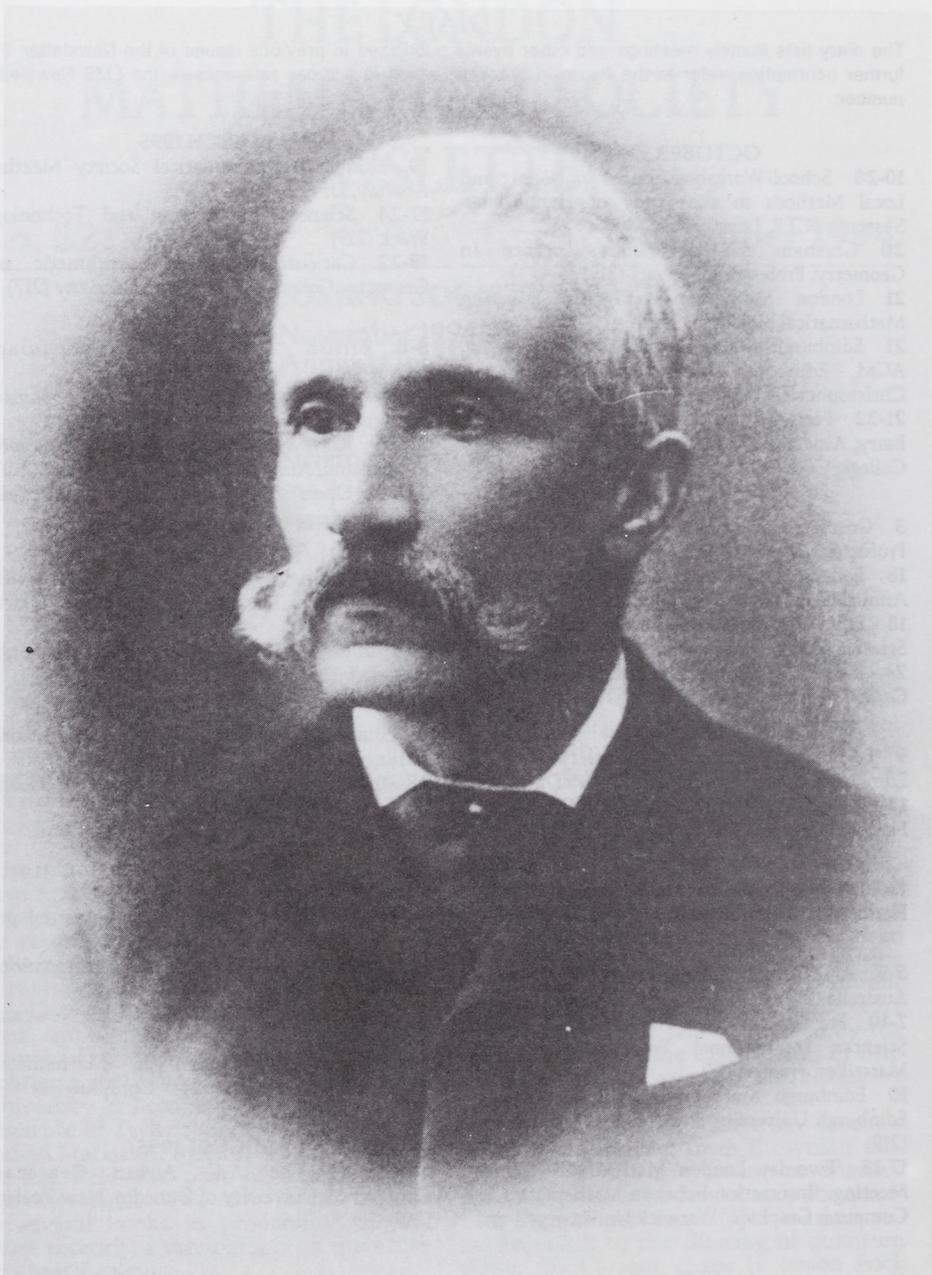
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F. BRIOSHI
Honorary Member 1878

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.

OCTOBER 1994

- 10-28 School/Workshop on Variational and Local Methods in the Study of Hamiltonian Systems, ICTP, Trieste, Italy (207)
20 Gresham College Public Lecture in Geometry, Professor I. Stewart (219)
21 London Mathematical Society Meeting Mathematical Biology, London
21 Edinburgh Mathematical Society Meeting, AGM, Edinburgh University, Professor Sir Christopher Zeeman (219)
21-22 Festschrift in Honour of Professor P.D. Barry, Aspects of Analysis Conference, University College, Cork (218)

NOVEMBER

- 3 Gresham College Public Lecture in Geometry, Professor I. Stewart (219)
18 London Mathematical Society Meeting, Annual General Meeting, London
18 Edinburgh Mathematical Society Meeting, Strathclyde University, Dr. J.N.Elgin (219)
24 Gresham College Public Lecture in Geometry, Professor I. Stewart (219)

DECEMBER 1994

- 9 Edinburgh Mathematical Society Meeting, Edinburgh University, Professor D. McDuff (219)
12-17 Pacific Rim Geometry Conference, National University of Singapore (214)

JANUARY 1995

- 13 Edinburgh Mathematical Society Meeting, Heriot-Watt University, Dr H. Ockendon (219)

FEBRUARY 1995

- 5-9 ANZIAM'95, University of Western Australia (219)
7-10 Fractals in the Natural and Applied Sciences International Working Conference, Marseilles, France (217)
10 Edinburgh Mathematical Society Meeting, Edinburgh University, Professor M.J. Dunwoody (219)
17-18 Two-day London Mathematical Society Meeting, 'Interaction between Mathematics and Computer Graphics,' Warwick University

MARCH 1995

- 10 Edinburgh Mathematical Society Meeting, Abertay, Dr A.D.Wood (219)
17-24 Sciences, Engineering and Technology Week (219)
19-22 Carolus Magnus on Arithmetic and Geometry Colloquium, Aachen, Germany (217)

APRIL 1995

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

MAY 1995

- 12-13 Two-day London Mathematical Society Meeting, '100 years of Analysis', Oxford University.
29-1 June Mathematical Modelling Conference, University of Brunei Darussalam (214)

JUNE 1995

- 2 Edinburgh Mathematical Society Meeting, Stirling University, Dr. C.J.H. McDiarmid (219)
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)
3-7 International Congress on Industrial and Applied Mathematics, Hamburg (213)
11-14 Finite Fields & Applications International Conference, University of Glasgow (219)
17-28 Banach Algebras Conference, Newcastle University (217)
24-29 European Women in Mathematics Conference, Universidad Complutense de Madrid, Spain (219)

AUGUST 1995

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

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