THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 270

April 1999

FORTHCOMING SOCIETY MEETINGS
Friday-Sunday 14-16 May 1999 - Brussels

Joint meeting with the Belgian Mathematical Society
Friday 18 June 1999 - London

D. McDuff (Hardy Lecture), D Salamon
Friday-Saturday 15-16 October 1999 - London
New Applications of Twistor Theory

JOINT MEETING WITH THE BELGIAN MATHEMATICAL SOCIETY

Some limited funds are available to help research students working in UK universities to attend the meeting. The Society has also set aside funds to make contributions of up to £100 each towards the travel and subsistence expenses of members attending the meeting. There is no application form: applications for financial support should be made by letter, sent to Dr N.M.J. Woodhouse, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HP by 15 April

1999, giving details of anticipated expenditure. In the case of graduate students, the application should include a letter of support from the student's supervisor. In the case of other members, the application should include a brief CV and details of any other financial contributions. Grants will be paid retrospectively against receipts.

Full details of this meeting are given on pages 12 and 13.

VISIT OF DR MARK SHERESHEVSKY

Dr Mark Shereshevsky (Russia) is visiting Dr Thomas Ward at the University of East Anglia under a Scheme 5 LMS grant to work on ergodic properties of cellular automata. Dr Shereshevsky will be based at UEA for the period 22 March to 17 May. While in the UK he will be giving seminars at Warwick University on 27 April, Nottingham Trent University on 28 April and Queen Mary and Westfield on 11 May in addition to a short series of talks at UEA. Further details are available from Dr Ward(t.ward@uea.ac.uk).

VISIT OF PROFESSOR G.J. MURPHY

Professor G.J. Murphy, of University College Cork, will speak at the University of Edinburgh on 10th May (Toeplitz operators on generalised Hardy spaces), at the University of Leeds on 11 May (Crossed products of C*-algebras by endomorphisms), and at the University of Aberdeen on 13 May. For locations and times of the talks please contact Professor A.P. Carbery, Professor E.C. Lance and Professor R.J. Archbold respectively. This visit is receiving support from the LMS under a Scheme 2 grant.

SPITALFIELDS DAYS

In 1987, the London Mathematical Society instituted a series of occasional meetings called 'Spitalfields Days'. The name honours our predecessor the Spitalfields Mathematical Society, which flourished from 1717 to 1845.

A Spitalfields Day is usually associated with a long-term symposium on some specialist topic at a UK university. One of the symposium organizers is asked to arrange a one-day meeting at which selected participants, often distinguished experts from overseas, will give survey lectures on topics in the field of the symposium or other types of lecture accessible to a general mathematical audience. These meetings are publicized in the *Newsletter* and all members are invited to attend.

The Society offers a modest grant for the organization to cover administrative and other expenses, with the balance to be used at the discretion for purposes associated with the meeting (for example, a subsidized lunch). Funds are also made available to help research students attend the meeting.

Anyone involved in running a symposium who would be interested in organizing a Spitalfields Day is invited to write to Dr N.M.J. Woodhouse, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HP. The format need not be precisely as described, but should be in a similar spirit.

SCOTTISH ALGEBRA DAY 1999

SAD 99 will take place in the Mathematics Department of the University of Glasgow on Friday May 14th, supported by a grant from the London Mathematical Society. The talks will be given by Martin Bridson (Oxford), Claudio Procesi (Rome), Jan Saxl (Cambridge) and Caroline (Warwick), the first beginning at approximately 10.30. All interested are welcome to attend. Further details can be obtained from the organisers, Ken Brown (kab@maths.gla.ac.uk), Nick Gilbert (N.D.Gilbert@ma.hw.ac.uk), Jim Howie (J.Howie@ma.hw.ac.uk) or Tom Lenagan (tom@maths.ed.ac.uk), or from the University of Glasgow Mathematics Department web page (http://www.maths. gla.ac.uk/news/seminars.html).

INTERFACES IN MATHEMATICS Sir Michael Atiyah's 70th birthday

A two-day meeting to coincide with Sir Michael Atiyah's 70th birthday will be held on Wednesday 21st and Thursday 22nd April 1999 at The Royal Society, Carlton House Terrace, London SW1Y 5AG.

The speakers are:

E. Witten I.M. Singer D. Zagier J.-M. Bismut I.G. Macdonald N.S. Manton S.K. Donaldson P.B. Kronheimer

Those wishing to come to the meeting, or apply for graduate student support, should inform The Administrator, Mathematical Institute, 24-29 St Giles, Oxford OX1 3LB (drake@maths.ox.ac.uk). There will be a £25 registration fee (to include a light buffet lunch) payable on entry. Further details may be found on http://www.maths.ox.ac.uk/mfa70.

The meeting is supported by the London Mathematical Society and the Society has also made provision for funds to help graduate students attend the meeting.

All interested are welcome.

LONDON MATHEMATICAL SOCIETY 1999 HARDY LECTURE TOUR

It is proposed that the 1999 Hardy Lecturer, Professor Dusa McDuff (Stonybrook) will lecture in the following localities:

Monday 17 May, Cambridge - Professor W.B.R. Lickorish

Tuesday 18 May, Nottingham - Professor D. Applebaum (Nottingham Trent)

Thursday 20 May, York - Professor A. Sudbery

Friday 21 May, Durham - Dr J.R. Parker

Monday 24 May, Belfast - Professor T.B.M. McMaster (Queen's, Belfast)

Tuesday 25 May, Edinburgh - 'Women in Mathematics'

Wednesday 26 May, Edinburgh - Dr P. Heywood (Edinburgh Mathematical Society)

Monday 7 June, Bath - Dr F.E. Burstall

Wednesday 9 June, Warwick - Professor K.D. Elworthy

Friday 11 June, Bangor, Wales - Dr T. Porter

Monday 14 June, Manchester - Dr R. Sharp (Manchester)

Wednesday 16 June, London - Dr W. Harvey (King's, London)

Thursday 17 June, London - 'Women in Mathematics'

Friday 18 June, London - Hardy Lecture

This is a preliminary notice. The names given are the local organisers, from whom further information can be obtained. A fuller notice, including the titles of the lectures, will appear in the May Newsletter.

ISLAND I Second Announcement

A workshop on Integrable Systems: Linear and Nonlinear Dynamics will be held on the Scottish island of Islay (pronounced 'eyelah') between the 19th and 24th July 1999. The main focus of the meeting will be on Darboux transformations, the bilinear method and especially the interplay between them, but contributions in related areas will also be welcome. Because of the limited hotel accommodation on the island, the number of participants is restricted to 50. The workshop will be held at the Machrie Hotel near Port Ellen. All accommodation is at the hotel, some in the hotel building itself and others in self-contained chalets each holding 2 to 4 people. Accommodation for accompanying guests can also be arranged.

Islay has a small airport with flights (Loganair) from Glasgow. Participants may fly directly to Islay on Monday 19th (there are no flights on Sunday) or take a coach and ferry transfer from Glasgow (4-5 hours). The cost will be £280 including 5 nights accommodation and all meals at the

hotel, plus £50 registration fee. Islay is famous for its range of distinctive malt whiskies from the peaty, such as Laphroaig and Lagavulin, to the lighter tastes of Bruichladdich and Caol Ila, as well as for its secluded and peaceful location. During the course of the workshop participants will have the opportunity to experience the pleasure of both.

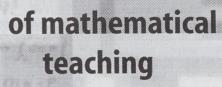
If you are interested in attending, a registration form is available from the organisers. Please send or fax it to the address given below. Alternatively you can fill in the same form online at the website. In addition, a (nonrefundable) deposit of £75 should be paid in order to reserve accommodation in the hotel. Organisers are: Chris Athorne, Chris Eilbeck, Claire Gilson, and Jon Nimmo. Postal address: ISLAND 1, Department of Mathematics, University of Glasgow, Glasgow G12 8QW (fax: +44 141 330 4111; voice: +44 141 330 5176; e-mail: island1@maths.gla. ac.uk; website: http://www.maths.gla.ac. uk/island). The workshop is supported by Glasgow University, the Royal Society of Edinburgh and the Edinburgh Mathematical Society.

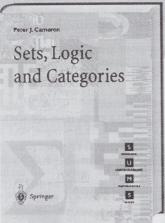
LMS HARDY FELLOWSHIP 2001

The Council of the LMS proposes to introduce a Hardy Fellowship in 2001 to replace the current Hardy Lectureship scheme. The Fellow will be a distinguished overseas mathematician who will make a significant contribution to the UK mathematical scene, and the word 'distinguished' is not intended to exclude those at an early stage of their careers. The Fellow should visit one (or possibly two) institutions in the UK for an extended period, but during that time should also visit several other places to explain ideas and to make wide mathematical contacts in the UK community. The Council has in mind a stay of about four months with around 8 to 10 lectures being given at a variety of other locations (one of which will be the Hardy Lecture in London), but at this early stage in the scheme it is prepared to be flexible and to consider other suggestions.

The LMS will pay all travel expenses for the Fellow together with initial and final travel expenses for a spouse, and will also offer a suitable honorarium. The department will be expected to provide office accommodation and the normal academic support offered to a distinguished visitor. Nominations should be made by letter through the head of department to the Council and General Secretary of the Society, Professor J. S. Pym, Department of Pure Mathematics, The University, Sheffield S3 7RH (j.pym@sheffield.ac.uk). Further information can be obtained from him or from the Meetings and Membership Secretary, Dr N.M.J. Woodhouse (nwoodh@maths.ox.ac.uk). The deadline for nominations for the 2001 Fellowship is 30 April 1999.

The SUMS





P.J. Cameron

Sets, Logic and Categories

1999. X, 180 pp. Softcover DM 59,- */ £ 18.95 ISBN 1-85233-056-2

The book is aimed at those who know some mathematics and want to know more about its building blocks. Set theory is first treated naively, an axiomatic treatment is given after the basics of first-order logic have been introduced. The discussion is supported by a wide range of exercises. The final chapter touches on philosophical issues. The book is supported by a World Wibe Web site containing a variety of supplementary material.

Please order from Springer-Verlag London Ltd. Fax: + 44 / 14 83 / 41 51 51 e-mail: sarah@svl.co.uk or through your bookseller P.P.G. Dyke

An Introduction to Laplace Transforms and Fourier Series

1999. Approx. 200 pp. Softcover DM 59,- */ £ 18.95 ISBN 1-85233-015-5

A self-contained introduction aimed at second year students in applied mathematics. The book may be used as a text or supplementary text for a course of study and should be of interest to physicists and engineers as supplementary material.

In preparation:

I.M. James

Topologies and Uniformities

1999. Approx. 225 pp. Softcover DM 59,- */ £ 18.95 ISBN 1-85233-061-9 Due April 1999

D. Marsh

Practical Geometry

With Applications to Computer Graphics

1999. Approx. 255 pp. Softcover DM 59,- */ £ 18.95 ISBN 1-85233-080-5 Due July 1999



^{*} This price applies in Germany/Austria/Switzerland and is a recommended retail price. Prices and other details are subject to change without notice. d&p • 5854/MNT/SF • Gha

MEETING OF THE SOCIETY

A meeting was held at Fairbairn House, University of Leeds, on Friday 12th and Saturday 13th February 1999, Professor E.C. Lance in the Chair. There were present about 50 members and visitors. Eleven people were elected to Ordinary Membership: Z. Coelho, S.D. Dover, C.M. Glennie, N.J. Jackson, D.A. Kilroy, V. Kuznetsov, N.J. Laustsen, N.J. Mackay, A. Moran, J.R. Parker, D. Stander; and two people were elected to Reciprocity Membership: P. Plechac, N. Virchenko (both of the American Mathematical Society). One member signed the book and was admitted to membership of the Society. The Chairman announced the award of the 1999 Naylor Prize to Professor S.W. Hawking and read a short version of the citation.

The following lectures were given: Professor G. Plotkin on 'Abstract syntax and variable-binding', Professor D. Normann on 'Computable objects in typed structures', Professor W. Pohlers on 'How does proof theory help us to understand the mathematical universe?', Professor H. Schwichtenberg on 'Programming with proofs', Professor P. Martin-Löf on 'The semantic significance of computing', and Professor P. Aczel on 'The logic of Lego'.

TOM WILLMORE 80th BIRTHDAY MEETING

There will be an afternoon of talks on differential geometry in Durham on 30th April 1999 to mark the 80th birthday of Professor Tom Willmore. The speakers for the meeting will be F. Burstall (Bath), B. Palmer (Durham), U. Pinkall (TU Berlin) and S. Salamon (Oxford). The talks will be accessible to a wide mathematical audience; they will be followed in the evening by a dinner in the College of St Hild and St Bede. For further information contact W.M. Oxbury (w.m.oxbury@durham.ac.uk) or J. Bolton (j.bolton@durham.ac.uk), or consult the web page (http://fourier.dur.ac.uk:8000/~dma0wmo/tjw.html).

2D INTEGRABLE MODELS, CONFORMAL FIELD THEORY AND RELATED TOPICS

This is the third in a series of meetings to bring together the UK community working on 2D integrable models, conformal field theories, and related areas (string theory, condensed matter...,). The meeting will take place on Thursday April 8th at Sheffield University. It is expected to have about 6 short talks of 45 minutes beginning at 11 am and ending before 6 pm. If you are interested in attending or talking, please let Niall MacKay know by e-mail as soon as possible (N.MacKay@ sheffield.ac.uk.

Through a grant from the LMS there will be some support for travel and accommodation, with priority given to speakers and students. There will be a nominal registration fee of £6, which will include coffee and lunch. Coffee (from 10.30) and a two-course hot lunch will be provided. Accommodation can be provided for those who wish to spend either the night before or after (or both), at Stephenson Hall, about a mile away.

NORTH BRITISH FUNCTIONAL ANALYSIS SEMINAR

A meeting of the North British Functional Analysis Seminar will be held at George Square of the University of Edinburgh, from 2.30 pm on Monday 31st May until 1 pm on Tuesday 1st June 1999, the Late Spring Bank Holiday. The speakers will be Professor Fritz Gesztesy (Missouri), Professor Cora Sadosky (Howard, Washington DC) on Monday, and Dr Marius Junge (Kiel) on Tuesday. For further information, please contact Dr G. Blower, Lancaster University (e-mail: g.blower@lancaster.ac.uk).

DEPARTMENTAL NEWS

University of Ulster Dr H.A. Donegan has been promoted to Reader in the School of Computing and Mathematical Sciences.

Announcing an important new journal from the **London Mathematical Society**



The LMS Journal of Computation and Mathematics

- is an all-electronic journal, refereed to the same high standard as the established LMS journals and currently free of charge to subscribers
- is a journal of record, carrying a commitment from the LMS to keep it archived into the indefinite future
- does not claim copyright from its authors
- has facilities for adding updates and discussions to papers, while the main text of each paper is guaranteed to remain unaltered
- ensures rapid publication after acceptance of the final version, in high-quality PDF
- provides hyperlinks for cross-references within and between papers

Honorary Editors and Scope

Professor I H Davenport (Editor-in-Chief), School of Mathematical Sciences, University of Bath

Dr Peter M Neumann, The Queen's College, Oxford

Dr L C Paulson, Computer Laboratory, University of Cambridge

Papers in any or all of the following categories are invited

- papers in mathematics which benefit from being electronic on grounds of their format
- computational aspects of mathematics
 - mathematical aspects of computation

The LMS ICM is now available from the following permanent URL:

http://www.lms.ac.uk/jcm

First papers published from mid-1998 include:

JH Conway, A Hulpke, J McKay

On Transitive Permutation Groups

CR Leedham-Green and Leonard H Soicher Symbolic Collection using Deep Thought

EB Davies

Spectral Enclosures and Complex Resonances for General Self-adjoint Operators

All enquiries are welcome and should be made in the first instance to the

Executive Editor, Sue Rodd: jcm@lms.ac.uk



London Mathematical Society Journal of Computation and Mathematics

ISSN 1461 - 1570 http://www.lms.ac.uk/jcm

LECTURESHIP IN MATHEMATICS

£16,655 - £21,815

Required from 1 September 1999 to teach students in the Institute of Mathematics and Statistics and provide ancillary teaching to other departments within the University. Preference will be given to a person with interests in computational algebra, group theory and representation theory.

You should either have a strong research record or have demonstrated substantial research potential in an area of Computational Pure Mathematics. A doctorate, or equivalent research experience is essential. You will be expected to contribute significantly towards the Mathematics group's research profile.

Informal enquiries are welcomed and should be directed to Professor Peter Fleischmann, Tel: +44 (0) 1227 823654 (direct line), Fax: +44 (0) 1227 827932, E-mail: P.Fleischmann@ukc.ac.uk Information at: http://www.ukc.ac.uk/ims/

Please telephone The Personnel Office for further particulars on 01227 827837 (24 hours) or 823674 (Minicom), quoting reference A99/65.

Closing date: 26 April 1999.



committed to Opportunities Policy.

UNIVERSITY OF KENT implementing its Equal AT CANTERBURY



Nomura Professorship of Mathematical Finance

The electors intend to proceed to an election to a new Professorship of Mathematical Finance for a fixed term of five years with effect from as early a date as may be arranged. This professorship has been created as a result of generous funding by Nomura International plc, the London-based European subsidiary of The Nomura Securities Co. Ltd., one of the world's largest investment banks.

The University attaches the greatest importance to the election to this professorship of a person of mathematical distinction who will be able to offer leadership in research, teaching, and academic policymaking. The University's Mathematical Institute currently contains one of the leading groups working on the modelling of financial applications using partial differential equations, as part of its Centre for Industrial and Applied Mathematics (OCIAM). The University welcomes applicants in any area of Mathematical Finance but the primary aim is to elect an outstanding mathematician whose work is relevant to that of the group based in OCIAM. It is expected that the successful applicant will have active research contacts with the financial practitioner community.

A non-stipendiary fellowship at Jesus College is attached to the professorship.

Applications (ten copies, or one only from overseas candidates), naming three persons who have agreed to act as referees on this occasion, should be received not later than 19th April 1999 by the Registrar, University Offices, Wellington Square, Oxford OX1 2JD, from who further particulars may be obtained. Further particulars may also be accessed on the Web (URL: http://www.admin.ox.ac.uk/fp/).

The University is an Equal Opportunity Employer

BANACH CENTER Call for Proposals of Scientific Meetings

The Institute of Mathematics of the Polish Academy of Sciences announces a competition for organizing scientific meetings in mathematics and applied mathematics in the International Mathematical Banach Center (Warsaw, Poland), for the years 2000 - 2001. Interdisciplinary meetings, related to mathematics, are particularly welcome. The meetings could take the form of semesters, mini semesters, conferences, workshops, and also intensive schools for graduate students. The Banach Center provides an essential financial support. Independently, there are many possibilities to obtain additional funds.

The deadline for applications is **16 April 1999**. At the beginning of May the Scientific Council of the Banach Center, chaired by Professor Friedrich Hirzebruch, will consider applications. The selected applications will be in the official programme of the Banach Center for the years

2000 - 2001.

Independently of the above meetings, the Banach Center organizes, the so-called, research groups, ie, smaller gatherings for 2 - 15 people. Applications for research groups are independent of bigger conferences/semesters, can be submitted at any time (preferably about 4 - 6 months in advance), and the acceptance procedure is much simplified.

Now at the age of electronic communication, practically all organizational work can be done via e-mail. Because of that, there are no restrictions on location of the organizers. Additional information, including application procedure, can be obtained from: The Secretary, Banach Center, Mokotowska 25, PO Box 137, 00-950 Warsaw, Poland (tel: (48 22) 628-0192; fax: (48 22) 622-5750; e-mail: office@banach. impan.gov.pl or rd@impan.gov.pl, web site: http://www.impan.gov.pl/BC).

Roman Dwilewicz Scientific Director Institute of Mathematics Polish Academy of Sciences

NEWS FROM EPSRC

Dr David Calderbank is one of the first recipients of the new Postdoctoral Research Fellowship (PDRF) introduced by the EPSRC to help talented younger scientists to reach independence soon after completing their PhD, at a stage when they are especially productive in their research careers. The fellowships provide a salary for up to three years together with an extra £8000 a year to be spent as the individual deems appropriate. researcher Calderbank completed his first degree in Mathematics from Cambridge and his PhD from Warwick obtained University. He is based at Edinburgh and is researching four-dimensional geometry relating to Einstein's theory of general relativity. He believes that the Fellowship will free him to concentrate on research and publishing papers. The opportunity for travel and interaction with other specialists in his field, both overseas and in the UK is a major attraction, together with learning how to handle a research budget.

Interested in Secondary Mathematics Teaching

as an alternative career?

3-session 'taster' course May/June 1999 including one day school observation fee £25.00

Details: Lyn Griffiths 0171-612-6589 e-mail l.griffiths@ioe.ac.uk

Institute of Education University of London

PROSPERING THROUGH SCIENCE

11 - 17 September 1999, Sheffield British Association Festival of Science

This year the British Association Festival of Science will be held in Sheffield. As in the past, the Festival will bring together many scientists, engineers and other professionals who will be reporting on some of the development at the frontiers of science and their possible applications. The Festival will also be attended by many interested members of the public, and the activities will be reported widely in newspapers, radio and television. Last year's Festival in Cardiff attracted some 7000 visitors, including many young people taking part in hands on activities.

This year's theme, Prospering Through Science, will focus attention on the opportunities created by scientific advances for improvements in the quality of life and for creating new wealth. Mathematics, which underpins science at the most fundamental level, naturally plays a key role in such a general scheme, and the Mathematical Sciences Section of the Festival has mounted a programme intended to be of broad popular interest which includes 'Mathematics and Finance' and 'Statistics of Sport'. There is also a joint venture with the Physics Section and the Particle Physics and Astronomy Research Council, under the title 'From the Big Bang to Eternity -Understanding the Cosmos'.

The previous President of the London Mathematical Society, Professor John Ball FRS, is the Mathematical Sciences Section President at the Festival, and the Society is lending support to the session on 'Mathematics and Material', at which Professor Ball (Oxford) will speak on 'Can mathematics help designing new material?' Other speakers in the session are Dr Jonathan Chapman (Oxford, LMS 1989) Junior Whitehead Prize winner) on 'Dislocations in elastic crystals', and Professor Colin Atkinson (Imperial College, London) on 'Problems in plastic surgery'.

Amongst the diverse range of sessions in all areas of science in the Festival are: 'Quantum Computing', 'Sheffield's Materials Industry', 'Mission impossible feeding the world', 'Designer foods'. 'Biology and crime' and 'Global environmental change - Armageddon in the next millennium?'. Over 300 distinguished speakers from all areas of science and engineering will take part, including Lord Robert Winston, Professor Ian Stewart. Professor Sir Martin Rees and Professor Sir Harry Kroto.

Special registration rates are available for British Association Members, students and OAPs. Student bursaries to attend the Festival are available through some universities. For further information contact: Sandra Koura 0171 973 3075 or see the British Association web site (www.britass oc.org.uk).

FLoC'99 WORKSHOP

Intuitionistic Modal Logic and **Applications**

Intuitionistic and modal logics are of foundational relevance to Computer Science and both have led to successful applications in the formal specification and verification of computer systems. The intuitionistic and the modal frameworks are usually investigated separately. However, a growing body of published work, stimulated by theoretical considerations and fed by various applications in Computer Science, shows that both paradigms may fruitfully be merged.

The one-day workshop will be held at Trento, Italy on 6 July 1999. The invited speaker is Frank Pfenning (Pittsburgh). For further information contact the organizers: Mauro Ferrari (Milan), Matt Fairtlough (Sheffield) or Michael Mendler (Passau). The workshop web page is http://www. dcs.shef.ac.uk/~matt/mendler/flocws.html and the FLoC'99 page is: http://www.cs.bell-labs.com/cm /cs/what/floc99/.

APPLYING MATHEMATICS

Two- and Three-Dimensional Patterns of the Face

Peter W. Hallinan, Gaile Gordon, A. L. Yuille, Peter Giblin, and David Mumford

1999; hardcover; ca. 300 pages; ISBN 1-56881-087-3; ca. \$48.00, ca. £34.00

The human face is perhaps the most familiar and easily recognized object in the world, yet both its three-dimensional shape and its two-dimensional images are complex and hard to characterize. This book develops the vocabulary of ridges and parabolic curves, of illumination eigenfaces and elastic warpings for describing the perceptually salient features of a face and its images. The authors apply these mathematical techniques to the computer vision problem of face recognition, using both optical and range images.

Wavelets: A Primer

Christian Blatter

1998; hardcover; 212 pages; ISBN 1-56881-095-4; \$32.00, £24.00

This book provides basic mathematics before moving on to a summary of wavelet techniques from the continuous wavelet transform to multi-resolution analysis and spline wavelets. It is an ideal book for self-study or a short course on a popular subject.

Discrete Algorithmic Mathematics: Second Edition

Stephen B. Maurer and Anthony Ralston

1998; hardcover; 910 pages; ISBN 1-56881-091-1; \$59.00, £44.00

Well-known and highly regarded, *Discrete Algorithmic Mathematics* is an outstanding text for a half- or full-year course in discrete mathematics. Written in a clear and lively style, the book's emphasis is on themes and ideas, making it more coherent and extensive than other discrete mathematics textbooks.

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JOINT MEETING OF THE LONDON MATHEMATICAL SO UNIVERSITÉ LIBRE DE BRID

FRIDAY MAY 14

PARALLEL SESSIONS

ALGEBRAIC GEOMETRY AND MATHEMATICAL LOGIC

Organizers: J. Denef (KU Leuven), W.A. Hodges (Queen Mary and Westfield College, London) and C. Michaux (UMH Mons).

14.00 D. Abramovitch (Boston Univ.) Moduli, families and stacks.

14.50 Z. Chatzidakis (CNRS - Paris 7): Model theory of difference fields.

15.40 Coffee.

16.10 A. Borovic (UMIST Manchester): Tame groups of finite Morley rank and even type.

17.00 M. Coppens (Katholieke hogeschool Kempen, Geel) Linear systems on general k-gonal curves.

COMBINATORICS AND FINITE GEOMETRIES

Organizers: P.J. Cameron (Queen Mary and Westfield College, London) and J.A. Thas (RU Gent).

14.00 H. Van Maldeghem (RU Gent) Generalized polygons.

14.50 A.E. Brouwer (TU Eindhoven) Designs in the classical association schemes.

15.40 Coffee.

16.10 G. Ziegler (Techn. Univ. Berlin) Coloring of Hamming graphs and the 0/1-Borsuk problem.

17.00 J.W.P. Hirschfeld (Sussex) Arcs and curves over a finite field.

DIFFERENTIAL GEOMETRY AND MATHEMATICAL PHYSICS

Organizers N.J. Hitchin (Oxford) and L. Lemaire (UL Bruxelles).

14.00 B. Driver (UC San Diego) Heat kernel analysis on loop groups.

14.50 R. Dijkgraaf (Amsterdam) Strings on Instanton Moduli Spaces.

15.40 Coffee.

16.10 J.-C. Alvarez (UC Louvain) Integral geometry on Finsler manifolds.

17.00 M. Gross (Warwick) Special Lagrangian fibrations and mirror symmetry.

STOCHASTIC MATHEMATICS

Organizers W. S. Kendall (Warwick) and N. Veraverbeke (L.U.C. Diepenbeek).

14.00 B. Driver (U.C. San Diego) Heat kernel analysis on loop groups.

14.50 P. Embrechts (E.T.H. Zurich) The mathematics of financial risk management.

15.40 Coffee.

16.10 J. Teugels (K.U. Leuven) Extremes in theory and applications.

17.00 D.O. Siegmund (Stanford-Cambridge) Searching for signals against a noisy background.

SATURDAY MAY 15

PLENARY LECTURES

09.30 W.T. Gowers (Cambridge) Random selections with dependences.

10.30 Coffee.

11.00 A. Macintyre (Edinburgh) Between Model Theory and Intersection Theory.

PARALLEL SESSIONS

ALGEBRAIC GEOMETRY AND MATHEMATICAL LOGIC

14.00 F. Loeser (Paris 6) Motives and p-adic integrals.

14.50 W. Veys (KU Leuven) Structure of open surfaces with non-positive Euler characteristic.

SCETY AND THE BELGIAN MATHEMATICAL SOCIETY RULLES MAY 14 - 16, 1999

15.40 Coffee.

16.10 T. Gardener (Oxford) Non-standard intersection theory.

17.00 T. Scanlon (Berkeley) Diophantine geometry and the model theory of difference fields in positive characteristic.

COMBINATORICS AND FINITE GEOMETRIES

14.00 D. Welsh (Oxford) Arrangements, channel assignments and related polynomials.

14.50 F. Buekenhout (UL Bruxelles) Incidence geometry and finite groups.

15.40 Coffee.

16.10 W. Haemers (KU Brabant, Tilburg) Graphs, eigenvalues and bicliques.

17.00 M. Aigner (Freie Univ. Berlin) The Penrose polynomial.

DIFFERENTIAL GEOMETRY AND MATHEMATICAL PHYSICS

14.00 D. Joyce (Oxford) Resolving Riemannian orbifolds with special holonomy.

14.50 A. Reznikov (Durham) Fundamental groups of complex projective varieties, property T and second cohomology.

15 40 Coffee.

16.10 M. Cahen (UL Bruxelles) Variational principle and symplectic connexions.

17.00 B. Bowditch (Southampton) Planar groups and the Seifert conjecture.

STOCHASTIC MATHEMATICS

14.00 L. Devroye (McGill) Branching processes in computer science.

14.50 R. Griffiths (Oxford) Coalescent theory and stochastic distribution of gene trees.

15.40 Coffee.

16.10 G. Louchard (UL Bruxelles) The Brownian excursion multidimensional local time density.

17.00 G. P. Nason (Bristol) Time-scale analysis.

SUNDAY MAY 16

PLENARY LECTURES

09.30 H. Föllmer (Humboldt U. Berlin) Stochastics in finance.

10.30 Coffee.

11.00 M. Kontsevich (IHES) Noncommutative projective space.

Lecture rooms They are located on the Campus Plaine of the Université Libre de Bruxelles. The address is Campus Plaine, ULB, Boulevard du Triomphe, B-1050 Brussels, Belgium.

Accommodation Special rates for participants are available in some hotels located in central Brussels (near the Grand-Place) with direct bus and/or underground connection to the University Campus. Prices per night per room range from BEF 2,300 to BEF 2,600 for

a single room, and from BEF 2,700 to BEF 3,200 for a double room.

Registration For organization purposes, we kindly ask you, even if you do not need any hotel accommodation, to send or fax the registration form as soon as possible to Jules Leroy, Campus Plaine ULB, C P 218/01, Boulevard du Triomphe, B-1050 Brussels (e-mail leroy@@ulb.ac.be; tel (32) (2) 650 58 45, fax (32)(2) 650 58 67). An "electronic" registration form is available on the homepage of BLMS'99 (http://www.ulb.ac.be/assoc/bms/BLMS'99 html) where the information about the meeting will be regularly updated.

THERE WILL BE NO REGISTRATION FEE

THE OPEN UNIVERSITY FACULTY OF MATHEMATICS AND COMPUTING

Four Lectureships in Pure Mathematics

To celebrate 30 years of success The Open University is implementing a scheme of 'academic renewal' and is seeking to appoint enthusiastic staff who will contribute significantly to developments in high quality research and distance teaching.

These posts offer the opportunity to join a Pure Mathematics Department whose courses reach thousands of highly motivated students every year, and to play a role in shaping the future development of these courses. The successful applicants will have:

• a good research record, suitable for inclusion in future Research Assessment Exercises:

• the potential to write high quality distance learning materials in a team environment.

Three permanent Lectureships are available in Pure Mathematics. We are looking for academics with strong research interests in each of the following subjects:

Analysis, Discrete Mathematics and Theory of Computation and the ability to teach in a range of areas in the Department's teaching pro-

gramme that includes at least one of these areas.

In addition, one five-year Lectureship in Pure Mathematics is available, arising from existing staff moving to part-time arrangements. We are looking for someone with active teaching and research interests in any area appropriate to the Department's teaching programme, with preference being given to applicants with research interests in these three areas.

Appointment to the post will be made on either the Lecturer Grade A scale £16,045 - 21,016 or Lecturer Grade B scale £21,894 - 27,985, depend-

ing on qualifications and experience.

Informal enquiries about the posts may be made to Dr P.J. Rippon, Head of Department (01908-652331; p.j.rippon@open.ac.uk) or Professor D.A. Brannan, Dean of Faculty (01908-652892; d.a.brannan@open.ac.uk).

Application forms, further particulars, and access information for disabled applicants may be obtained from the recruitment secretary, Faculty of Mathematics and Computing, The Open University, Walton Hall, Milton Keynes, MK7 6AA (01908-654161; h.c.mansell@open.ac.uk). The closing date for applications is 16th April 1999.

The Open University is an Equal Opportunities Employer.

LONDON MATHEMATICAL SOCIETY BOOK SERIES REPORTS

Lecture Notes

The LMS Lecture Notes are published jointly by the Society and Cambridge University Press. Most volumes are short monographs giving an authoritative account of the present state of knowledge on a topic of general interest. The Series also accepts conference proceedings, especially those of an instructive nature, and other collective works with similar aims, though the inclusion of survey material is always encouraged in such volumes. In general the Series is relaxed and informal, but places importance on the quality of exposition. To date 254 volumes have appeared.

The current editor is Professor Nigel Hitchin. He is assisted by Dr Graham Allan, Professor Paul Cohn, Dr Martin

Hyland and Dr Charles Thomas.

Intending authors should contact Professor N.J. Hitchin (Mathematical Institute, 24-29 St Giles, Oxford OX1 3LB, e-mail hitchin@maths.ox.ac.uk) or Roger Astley at Cambridge University Press (e-mail rastley@cup.cam.ac.uk).

Nigel Hitchin Oxford University

Student Texts

The LMS Student Texts Series, established in 1983, complements the LMS Lecture Notes Series by publishing textbooks of an expository nature aimed at advanced undergraduates and beginning graduate students. The number of volumes in the series is now just over 40. The series aims to offer introductions to areas in which there is an absence of well-established and standardised exposition, providing students with access to new and exciting ideas as they emerge. Ideally, a Student Text should be accessible to a first year research student reading alone. Texts are frequently based on graduate courses given by the authors; translations of successful books at the right level and proceedings of suitable instructional conferences are also considered. Printing is usually done from

camera ready copy or Tex files produced by the author, providing a rapid and relatively informal and low cost mode of publication. Volumes appear in hardback and paperback and should be between 150 and 400

pages in length.

The editor is Carline Series (Warwick) and the editorial advisors are P. Diaconis (Harvard), E.G. Rees (Edinburgh), S. van Strien (Warwick) and D.M. Testerman (Switzerland). Manuscripts or proposals for consideration are always welcome and should be sent either to the editor or one of the advisers or to R. Astley at Cambridge University Press (rastley@cup.cam.ac.uk), any of whom will also be happy to answer enquiries about the series. As ever, I look forward to receiving more likely manuscripts and proposals from Newsletter readers.

Caroline Series University of Warwick

Monographs

The LMS Monographs are published for the Society by OUP and are edited by H.G. Dales (Leeds) and P.M. Neumann (Oxford); the advisers are J.H. Coates, S.K. Donaldson, A.J. Macintyre, J.F. Toland and W.S. Kendall. We are particularly pleased to welcome John Toland of Bath as a new adviser this year.

In 1999, we published the following vol-

umes:

 Metric number theory, G Harman (Cardiff), Vol. 18

 Profinite groups, J S Wilson (Birmingham), Vol. 19

We expect to publish five more volumes by the middle of 2000. The editors are always happy to receive proposals or suggestions about possible future Monographs; for details of what we hope for in a Monograph, please contact H.G. Dales (pmt6hgd@leeds.ac.uk).

Garth Dales University of Leeds History of Mathematics

The AMS and LMS jointly publish a History of Mathematics series which sets out to offer interesting historical perspectives on the people and communities that have profoundly influenced the development of mathematics. The most recent volumes to appear are:

 Sources of Hyperbolic Geometry, edited by John Stillwell, 1996, Vol. 10

• Poincaré and the Three Body Problem, by June Barrow-Green, 1997, Vol. 11

• The Way I Remember It, by Walter Rudin, 1997, Vol. 12

 Mathematics in Sweden before 1950, by Lars Gårding, 1998, Vol. 13

 Jacques Hadamard, A Universal Mathematician, by V. Maz'ya and T. Shaposhnikova, 1998, Vol. 14

Several other titles are in press or under contract. There will also be a sub-series of sources devoted to the publication of original works that deserve a new audience. The LMS editors (David Fowler, Warwick; Jeremy Gray, Open University; and Tom Körner, Cambridge) would like to hear from anyone with a manuscript or project they would like to have considered.

David Fowler University of Warwick david.fowler@warwick.ac.uk

CONFERENCE ON DIFFERENTIAL GEOMETRY

The Fourth Panhellenic Conference on Differential Geometry and its Applications (with international participation) will be held from 28 to 30 May 1999 at the University of Patras, Department of Mathematics, Patras, Greece. The aim of the conference is to bring together mathematicians working on various areas of Differential Geometry and other related fields. This year there will also be parallel sessions on the teaching of geometry in secondary and undergraduate level. For information contact: Papantoniou, tel.-fax. ++30-61-997138 (email: bipapant@math.upatras.gr) or A. Arvanitoyeorgos (e-mail: taarv@hol.gr).

WORKSHOP ON SINGULARITY THEORY (with emphasis on real singularity theory)

A workshop will be held at the Mathematics Research Institute, University of Warwick, Coventry, from Monday 21 to Friday 25 June 1999. The following have already accepted an invitation to speak: J.W. Bruce, A. Dimca, V.V. Goryunov, K. Houston, A. Parusinski, A.A. du Plessis, R. Rimanyi, D. van Straten, O. Viro. There will be time for several others to present their work. The first lecture will be at 2 pm on the Monday; most participants are expected to arrive on that day.

Participants will be accommodated on or near to the campus. Some places have been reserved at £7 per night (bed) and some at £20 per night (bed and breakfast). Funds are available to support the living accommodation of a number of participants, but no contribution towards travel costs (other than those of invited speakers) can be promised. A registration fee of £20 will be charged, but junior participants will be exempted. The workshop is funded by the residue of an ESN grant, with additional funding from the London Mathematical Society.

Those interested in coming should contact C.T.C. Wall as soon as possible (late applicants will not be turned away, but may have less convenient and more expensive accommodation), preferably by email. Please give name, nationality, position, home university, address and phone number, and say whether you might present a contribution.

Enquiries and applications will be acknowledged within a few days. A second circular with more detailed information will be sent to all who have expressed an interest. Organisers: C.T.C. Wall, Department of Mathematical Sciences, University of Liverpool, Liverpool L69 3BX (e-mail: ctcw@liv.ac.uk; office phone (+44) 151 794 4060; fax (+44) 151 794 4061) and D. Mond, Mathematical Institute, University of Warwick, Coventry CV4 7AL (e-mail: mond@maths. warwick.ac.uk).

UNIVERSITY OF CAMBRIDGE

KUWAIT PROFESSORSHIP OF NUMBER THEORY AND ALGEBRA

NOTICE

The Board of Electors to the Kuwait Professorship of Number Theory and Algebra invite applications for this Professorship, which will be newly established from 1 October 2000, following a generous benefaction from the Kuwait Foundation for the Advancement of Sciences. It is hope that the successful candidate will take up appointment on 1 October 2000 or as soon as possible thereafter.

The appointment will be subject to the Statutes and Ordinances of the University.

Candidates for the Professorship should send their applications, marked 'Confidential', together with the names of two referees to the Secretary General of the Faculties, from whom further information is available, at the University Offices, The Old Schools, Cambridge, CB2 1TT, so as to reach him no later than 31 May 1999.

Informal enquiries should be made to Professor John Coates (J.H.Coates@dpmms.cam.ac.uk, Tel +44 (0)1223 337994, Fax +44 (0)1223 337920).

The University follows an equal opportunity policy.

UNIVERSITO SCHOOL OF M

The School of Mathematics comprises three constituent departments are part of a major development, a series of new appointments is planned to teaching: in the recent QAA subjects

CHAIR OF STATISTICS

Applications are invited for a chair of statistics, linked with the future retirement of Professor K.V. Mardia. The post is available from 1 September, 1999 or a later date by mutual agreement.

The University wishes to appoint an individual with an outstanding and substantial record of research and leadership in any area of statistics. The successful candidate should also possess a proven commitment to development and innovation in

teaching.

The appointee will be encouraged to build a strong and distinctive team in his/her research field to complement the very successful research group in Image Analysis, which received flagged status in the RAE 1996. As a first step the new chairholder will be involved in the appointment of one lecturer.

Informal enquiries may be made to Professors John Kent (tel. 0113 2335101, e-mail: j.t.kent@leeds.ac.uk) or Professor Kanti Mardia (tel. 0113 2335100, e-mail:

stakvm@leeds.ac.uk).

Further particulars may be obtained from Miss Ann E. Milner, Chair Appointments Secretary, The University, Leeds LS2 9JT. tel: (+44) (0113 2335775); fax: (+44) (0113 2335779); e-mail: a.e.milner@leeds.ac.uk quoting reference number 051-059-002-001.

The closing date for receipt of applications is Friday 7 May 1999.

LECTURER IN PURE MATHEMATICS

Applications are invited from candidates with research interests in Differential Geometry for a permanent Lectureship in the Department of Pure Mathematics, tenable from 1 June 1999 or as soon as possible thereafter. The successful candidate will have a proven research record and will contribute to the high quality research and teaching of the Department, which was rated 5 in the last Research Assessment Exercise. The present interests of the Differential Geometry Group are in harmonic maps and morphisms, and curvature properties of submanifolds; preference may be given to candidates with interests in these areas.

Salary will be on the scale for Lecturer 'A' (£16,655-£21,815) according to qualifi-

cations and relevant experience.

Informal enquiries about this post may be made either to the Head of Department Professor S.S. Wainer (e-mail: s.s.wainer@leeds.ac.uk) or to Professor J.C. Wood (e-

Further details of all the School's activities Towards Equal p

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tsamely, Pure Mathematics, Applied Mathematics and Statistics. As the chaims to enhance the School's excellent reputation in research and encyview, it was awarded 22 points.

mail j.c.wood@leeds.ac.uk), Department of Pure Mathematics, University of Leeds, Leeds LS2 9JT. Departmental telephone (0)113 2335140, Fax (0)113 2335145.

Application forms and further particulars for the Lectureship may be obtained from Human Resources, The University of Leeds, Leeds LS2 9JT, tel. 0113 233 5771 (textphone for deaf applicants only: 0113 233 4353), e-mail: J.Byron@adm.leeds.ac.uk or from http://www.leeds.ac.uk/jobadverts/. Applications, including a CV, publications list and names of three referees, should be sent to Professor S.S. Wainer, Head of Department, Department of Pure Mathematics, University of Leeds. Leeds LS2 9JT by 23 April 1999.

LECTURERS IN APPLIED MATHEMATICS

Applications are invited for two permanent lectureships in the Department of Applied Mathematics, tenable from 1 June 1999 or as soon as possible thereafter. The Department was rated 5 in the last two Research Assessment Exercises with the second largest volume in the UK in 1996 Exercise. The Department has strong research groups in: Fluid Dynamics, including Astrophysical, Biological, Industrial and Non-Newtonian; Computational Mathematics and Design; Mathematical Biology and Nonlinear Systems. Candidates are sought with an excellent research record in one or more of these areas, with some preference for the branches of Fluid Dynamics listed above; and with a commitment to teaching.

Salary will be on the scale for Lecturer 'A' (£16,655-£21,815) according to qualifi-

cations and relevant experience.

Informal enquiries about these posts may be made to the Head of Department, Professor S.A.E.G. Falle (e-mail sam@amsta.leeds.ac.uk), Department of Applied Mathematics, University of Leeds, Leeds LS2 9JT. Departmental telephone (0) 113

2335110, fax (0)113 2429925.

Application forms and further particulars for the Lectureships may be obtained from Human Resources, The University of Leeds, Leeds, LS2 9JT, tel. 0113 233 5771 (textphone for deaf applicants only: 0113 233 4353), e-mail J.Byron@adm.leeds.ac.uk or from http://www.leeds.ac.uk/jobadverts/. Applications, including a CV, publications list and the names of three referees, should be sent to Professor S.A.E.G. Falle, Head of Department, Department of Applied Mathematics, University of Leeds, Leeds LS2 9JT by 23 April 1999.

iean be found on www.amsta.leeds.ac.uk.



University of Cambridge STATISTICAL LABORATORY

Professorship of Statistical Science

Applications are invited for the Chair of Statistical Science in the University of Cambridge. It is envisaged that the successful candidate's major interests will lie within theoretical statistics and/or applied statistics, and the person appointed will be expected to carry out his or her duties within the Statistical Laboratory.

The Statistical Laboratory is responsible for teaching courses in Probability, Statistics and the Mathematics of Operational Research within the University's Mathematical Tripos, and for teaching the M.Phil. in Statistical Science. There are over 200 students in each of the three undergraduate years of the Tripos; in addition there are usually about 12 graduate students following the M.Phil. and about 20 research students.

The new Professor will join a Laboratory of about twenty teaching and research staff. Interests cover the broad area of Applicable Mathematics, and currently include a number of fruitful collaborations with outside groups in industry and commerce, as well as other academic departments and research units. Links with these groups include applied projects for the M.Phil. and joint supervision of research students, as well as collaborative research.

The Department currently occupies a site in central Cambridge adjacent to the sister Department of Applied Mathematics and Theoretical Physics. There are excellent computing facilities, based largely on a network of PCs and HP workstations. It is planned that the Laboratory will move to new purpose-built accommodation in Clarkson Road, adjoining the Isaac Newton Institute, around Easter 2000, as part of the move of the entire Faculty of Mathematics to a new site. Information about the Laboratory may be obtained via http://www.statslab.cam.ac.uk.

Further information may be obtained from the Secretary General of the Faculties, The General Board Office, The Old Schools, Cambridge CB2 1TT, to whom applications should be sent, together with the names of two referees, so as to reach him not later than **7 May 1999**. Informal enquiries may be made to Professor Geoffrey Grimmett, Statistical Laboratory, 16 Mill Lane, Cambridge CB2 1SB (e-mail g.r.grimmett@statslab.cam.ac.uk, telephone +44 1223 337958).

TITCHMARSH CENTENARY MEETING

A meeting to mark the centenary of the birth of E. C. Titchmarsh will be held in the Mathematical Institute, 24-29 St Giles', Oxford OX1 3LB on Tuesday 1 June 1999. Professor N.J. Hitchin will preside.

Programme

- 2.30 R.J. Wilson (Open) The life and work of E C Titchmarsh
- 3.10 D.A. Edwards (Oxford) Titchmarsh and Fourier analysis
- 3.50 Tea
- 4.20 D.R. Heath-Brown (Oxford)
 Titchmarsh and the Riemann Zetafunction
- 5.00 W.N. Everitt (Birmingham) The Titchmarsh contribution to eigenfunctions, and subsequent developments

5.40 Reception

The London Mathematical Society has made a grant towards the expenses of the meeting. Thanks are also due to New College and Oxford University Press for financial and other support, and to the British Society for the History of Mathematics for help in the organization of the meeting. There are limited funds available to help research students to attend the meeting. Requests for support should be addressed to Dr D.A. Edwards (see below).

The meeting is open to all, but it would be of great assistance if those intending to come would kindly give notice not later than Monday, 24 May. All communications should be sent to Dr D.A. Edwards at the above address, or by e-mail to edwardsd@maths.ox.ac.uk. All interested will be very welcome.

WARWICK WORKSHOPS

The following workshops will take place at the Mathematics Research Institute, Warwick University. For further information contact Peta McAllister (peta@maths. warwick.ac.uk).

- Workshop on Singularities (with emphasis on real singularities)
 21 - 25 June 1999 (David Mond and C.T.C Wall)
- Workshop on Ergodic Theory & Dynamical Systems in honour of Bill Parry
 3 - 4 July 1999 (Peter Walters)
- Workshop on Computation in Group Theory and Geometry
 9 - 17 July 1999 (David Epstein and Derek Holt)
- Workshop on Modular Invariants, Operator Algebras and Quotient Singularities
 20 - 25 September 1999 (David E. Evans and Miles Reid)

CANADIAN NUMBER THEORY ASSOCIATION CONFERENCE

The sixth conference of the Canadian Number Theory Association (CNTA '99) will be held from June 20 to 24, 1999 at the Radisson Hotel, Winnipeg Downtown. The plenary speakers are: H. Darmon (McGill), J. Friedlander (Toronto), P. (Princeton), W. (Colorado), C. Skinner (Princeton) and T. Wooley (Michigan). The invited speakers are: M. Bennet (IAS), F. Beukers (Utrecht), A. Bremner (Arizona State), D. Bressoud (Macalester College, MN), J. Grantham (IDA/CCS), C. Greither (Laval), H. Kisilevsky (Concordia), M. Kolster (McMaster), A. Odlyzko (AT&T Labs, NJ), K. Ono (Penn State), B. Poonen (Berkeley), D. Roy (Ottawa), K. Soundararajan (Princeton), G. Stevens (Boston), S. Vanstone (Waterloo), V. Vatsal (UBC).

Information regarding registration, accommodation, contributed papers, financial assistance for Postdoctoral Fellows and graduate students, etc. can be found on the IIMS web page (www.iims. umanitoba.ca) or contact Dr H. Williams at the University of Manitoba IIMS (email: williams@cs.umanitoba.ca; tel: (204) 474 6724; fax: (204) 474 7602).

FOUNDATIONS OF COMPUTATIONAL MATHEMATICS CONFERENCE

Oxford University is hosting the Foundations of Computational Mathematics Conference (FoCM99) from 18-28 July 1999. The mission of the meeting is to establish a common agenda between computation, pure mathematics and computer science. While presenting plenary talks by foremost world authorities and maintaining the highest technical level in workshops, the emphasis will be on multidisciplinary interaction across subjects and disciplines, in an informal and friendly atmosphere.

The overall oversight of FoCM99 is the responsibility of the FoCM Executive Committee whose current Chair is Arieh Iserles (University of Cambridge). The conference is supported

by a grant from the London Mathematical Society.

Local Organising Committee:

John Ball (Oxford), Richard Brent (Oxford), Chris Budd (Bath), Mike Giles (Oxford), Nick Gould (Rutherford-Appleton Labs), Nick Higham (Manchester), Bill McColl (Oxford), Endre Suli (Chair, Oxford), Nick Trefethen (Oxford).

Plenary Speakers:

- John Ball (Oxford)
- Ingrid Daubechies (Princeton)
- Jean Pierre Dedieu (Toulouse)
- Alan Edelman (MIT)
- Joos Heintz (Buenos Aires)
- Nick Higham (Manchester)
- Robert McLachlan (Massey)
- Jorge Nocedal (Northwestern)
- Erich Novak (Erlangen)

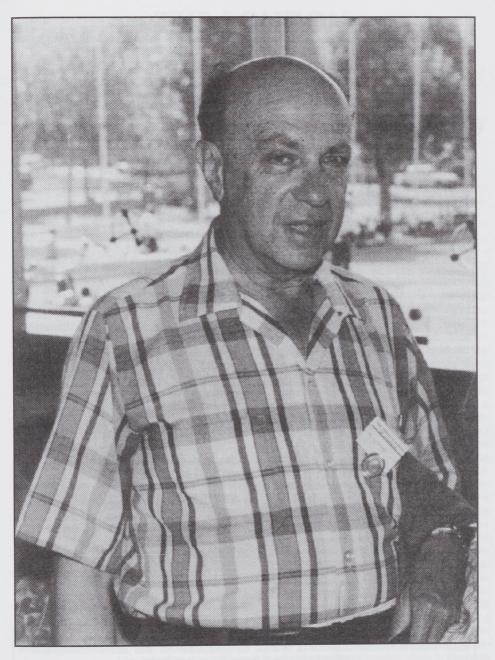
- Peter Olver (Minnesota)
- Bjorn Poonen (Berkeley)
- Rolf Rannacher (Heidelberg)
- Guillermo Sapiro (Minnesota)
- Andrew Stuart (Stanford)
- Denis Talay (INRIA)
- William Thurston (Davis)
- Leslie Valiant (Harvard)
- Shing-Tung Yau (Harvard)

Workshops and their Organisers:

- Analysis and approximation of infinite-dimensional problems: John Ball (Oxford) and Endre Suli (Oxford)
- Approximation theory: Ron DeVore (South Carolina) and Allan Pinkus (Haifa)
- Complexity theory, real machines and homotopy: Jean-Pierre Dedieu (Toulouse) and Pascal Koiran (Lyon)
- Computational dynamics: John Guckenheimer (Cornell) and Robert MacKay (Cambridge)
- Computational geometry and topology: David Epstein (Warwick) and David Gabai (Caltech)
- Computational number theory: Richard Brent (Oxford) and Henri Cohen (Bordeaux)
- Geometric integration and computation on manifolds: Chris Budd (Bath) and Hans Munthe-Kaas (Bergen)
- Information-based complexity: Stefan Heinrich (Keiserslautern) and Erich Novak (Erlangen)
- Multiresolution, computer vision and PDEs: Vicent Caselles (UIB, Palma) and Wolfgang Dahmen (Aachen)
- Numerical linear algebra: Alan Edelman (MIT) and Nick Higham (Manchester)
- Optimization: Nick Gould (RAL) and Mike Todd (Cornell)
- Relations to computer science: Laszlo Lovasz (Yale) and Bill McColl (Oxford)
- Stochastic computation: Peter Kloeden (Berlin) and Dominique Picard (Paris-VII)
- Symbolic algebra and computational algebraic geometry: James Davenport (Bath) and Elizabeth Mansfield (Canterbury)

Contact Information

For further information e-mail FoCM99@comlab.ox.ac.uk or see: $\label{local_html} http://www.damtp.cam. ac.uk/user/na/FoCM/Oxford.html.$



R. BRAUER Honorary Member 1963

DIARY

The diary lists Society meetings and other events publicized in the Newsletter. For further information. refer to the figure in brackets, which is a cross reference to the LMS Newsletter number.

APRII. 1999

6-8 British Topology Meeting, University of Wales Swansea (267)

6-9 LMS Invited Lectures - Professor A. Mielke, University of Bath (262)

6-10 Homological Algebra, EPSRC-LMS Short Course, Edinburgh (266)

6-15 Analysis on Lie Groups and Partial Differential Equations ICMS Instructional Conference, Edinburgh (265)

11-16 Ramification Theory on Arithmetic Schemes, CIRM Luminy, France (269)

12-15 British Applied Mathematics Colloquium 1999, Bath University (266)

14-15 Combinatorics and Communications

Applications, EPSRC/LMS MathFit Workshop, Royal Holloway University (268)

14-16 British Colloquium for Theoretical Computer Science, Keele University (269)

21-22 Interfaces in Mathematics Meeting, Mathematical Institute, Oxford University (269)

29 Non-Secret Encryption and Public Key Cryptography Lecture, University College, London (268)

MAY 1999

7 Edinburgh Mathematical Society Meeting, Stirling

14-16 Belgian Mathematical Society and London Mathematical Society Joint Meeting, Université de Bruxelles (260)(261)(268)

16-22 Model Theory of Henselian Valued Fields, ICMS Workshop, Edinburgh (269)

21-22 Groups in Galway Conference, National University of Ireland, Galway (269)

23 - 4 Jun Hamiltonian Mechanics and Small Divisors in PDEs, ICMS Workshop, Edinburgh (269) **JUNE 1999**

1 Titchmarsh Centenary Meeting, Mathematical Institute, Oxford University (269) 4 Edinburgh Mathematical Society Meeting,

Aberdeen (263)

18 LMS Meeting, Hardy Lecture, London

22-25 Mathematics of Finite Elements and

Applications Conference, Brunel University (269) 28 - 2 July Nonlinear Partial Differential Equations Conference, Besançon, France (268)

29 - 9 July Stochastic Analysis LMS Durham Symposia, Durham University (268)

JULY 1999

5-9 International Congress of Industrial and Applied

Mathematics (ICIAM 99), Edinburgh University

5 - 9 Quadratic Forms and Their Applications Conference, University College, Dublin (268)

12-13 Skew-Products and Synchronization of Coupled Systems Workshop, Surrey University (269)

12-16 British Combinatorial Conference, Kent University (254)(268)

12-16 American Mathematical Society and Australian Mathematical Society Joint Meeting, Melbourne University (260)

12-16 System Modelling and Optimization Conference, IFIP TC7, Cambridge (267)

17 Computation in Group Theory and Geometry Workshop, Warwick University (269)

19 - 24 Representation of Algebras Conference, Sao Paulo University (269)

19 - 29 Quantum Groups LMS Durham Symposia, Durham University (268)

25 - 7 Aug Banach Algebras International Conference, Pomona College, California (268)

26 - 6 Aug Integrable Systems Seminar, University of Montreal (267)

26 - 6 Aug Structure Formation in the Universe, Isaac Newton Institute, Cambridge (268)

AUGUST 1999

16-27 Connecting Fundamental Physics and Cosmology, E.C. Summer School, Isaac Newton Institute, Cambridge (269) 22-29 Hall Algebras Summer School, Hesselberg, Germany (263)

OCTOBER 1999

15-16 Two-day LMS Meeting, New Applications of Twistor Theory, London

NOVEMBER 1999

19 LMS Meeting - Annual General Meeting APRIL 2000

17-20 British Mathematical Colloquium, Leeds University

IULY 2000

3-7 Functional Analysis Meeting, Technical University, Valencia, Spain (265)

10 - 14 3rd European Congress of Mathematics, Barcelona, Spain

17-22 International Congress of Mathematical Physics, Imperial College, London (257)

APRIL 2001 9-12 British Mathematical Colloquium, Glasgow

The Newsletter is published monthly except in August. Items and advertisements for inclusion in the Newsletter should be sent to the Editor, Susan Oakes, by e-mail, fax or post to the LMS office (addresses below), to arrive before the first day of the month prior to publication.

University

The London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HP Tel: 0171-291 9977 fax: 0171-323 3655, e-mail: lms@lms.ac.uk. World Wide Web: http://www.lms.ac.uk/

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