# THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 293

May 2001

## FORTHCOMING SOCIETY MEETINGS

Friday 22 June - London Hardy Lecture - P. Diaconis Friday 6 July - Manchester Northern Regional Meeting Wednesday 12 September - Bristol South Western Regional Meeting Friday 23 November - London Annual General Meeting

## COUNCIL DIARY March 2001

The first major item of this month's Council meeting concerned the Presidency. Council greeted with acclaim the proposal that Peter Goddard be nominated as the next President of the Society.

Much of the discussion at the meeting concerned issues arising from the Retreat. We warmly welcomed a proposal to expand the *Newsletter*, which will include more accounts of Society activities, and general articles of mathematical interest, while retaining its popular physical format. A correspondence page is also to be a regular feature.

We continued our discussion of 'connectivity' with engineering, which had been considered at a recent meeting of the Council of Mathematical Sciences: all three societies (IMA, LMS and RSS) were enthusiastic about a proposal to organise a pilot programme of short courses in mathematics for engineers, with financial support from EPSRC. Council also agreed a proposal to introduce a scheme for 'connectivity grants', to facilitate new collaborations between mathematicians and engineers. Like other LMS small grant schemes this will be administered by Programme Committee, and details will appear in due course.

We received from the Treasurer our annual statement of the Society's investment portfolio. The society's ability to support mathematical activity relies to a large extent on its investments, and it is reassuring to know that despite recent market volatility we remain in a strong position.

The most significant item of business concerned the Society's publishing activities. Following an approach to the LMS by the Compositio Mathematica Foundation, an understanding has now been reached that, subject to formal agreement, the production of *Compositio Mathematica* will be transferred to the Society. One consequence of the transfer of the journal from a commercial publisher to the LMS will be a significant price cut. This is excellent news for the LMS and the community in general, and no small thanks are due to Susan Hezlet, the Society's Publisher, and Chris Lance, the Publications Secretary, for their skilful negotiations. A separate account appears below.

We had a lively debate on the Institute of Learning and Teaching. It was generally agreed that the Institute was now here to stay, and that the ILT accredited courses which many institutions require new lecturers to take are often of dubious value for mathematics teaching. It was agreed that we needed to make strongly the case that accredited courses for mathematics staff address the particular need of teaching mathematics, and that the activities of the ILT (whose present structure has little democratic accountability) need to be monitored.

Tony Scholl

## LETTERS PAGE

As a result of discussions at the recent Council Retreat, it has been agreed that, although the format will remain essentially the same, the *Newsletter* should develop further. In particular, we would like to introduce a letters page, where members can share their views. The Editors therefore invite letters for review to consider publishing in the *Newsletter*. Please bear in mind that the deadline for *Newsletter* material is the first day of the month before publication. Letters can be sent on paper or by e-mail (lms@lms.ac. uk). The Editors reserve the right to shorten letters that are accepted for publication.

Letters may be on any appropriate topic, and the Editors may also raise topics. For example, at the March Council meeting, the Institute for Learning and Teaching was discussed, and it would be interesting to learn of members' views on this.

The Editors would also welcome (for publication or not) members views on the *Newsletter* and how it might be improved.

Ben Garling Susan Oakes

## COMPOSITIO MATHEMATICA

The journal *Compositio Mathematica*, founded in 1934, publishes first class mathematical research papers in areas including algebra, number theory, topology, algebraic and analytic geometry and (geometric) analysis. Its Editor-in-Chief is Professor Gerard van der Geer (Amsterdam). *Compositio Mathematica* is owned by a Dutch Foundation of the same name, and is currently published by Kluwer under a contract which expires at the end of 2003.

The London Mathematical Society is very pleased to announce an agreement with the Compositio Mathematica Foundation under which the LMS will become the publishing partner of the Foundation from 2004. Under this agreement, the subscription price of *Compositio Mathematica* will be very substantially reduced.

We should very much like to build up a picture of who subscribes to *Compositio Mathematica*. If your university library takes this journal, please would you inform Susan Hezlet (hezlet@lms.ac.uk). If by any chance your library is contemplating cancelling the journal, please make them aware that it will become much cheaper as from 2004, while maintaining its present size and traditional high standards.

> Christopher Lance (Publications Secretary) Susan Hezlet (Publisher)

## BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

The London Mathematical Society is a member of the British Association for the Advancement of Science's Institutional Affiliate Scheme, and consequently LMS members can join the British Association for the Advancement of Science at a 20% discount (e-mail: baas@lancaster.ac.uk, tel: 020 7973 3500, fax: 020 7973 3051; web: http://www.britassoc.org.uk).

# LONDON MATHEMATICAL SOCIETY

# Friday 22 June 2001, London

## P. Diaconis (Stanford)

will give the 2001 Hardy Lecture at 5.00 pm

# G.H. Hardy and probability???

## Abstract

Despite a true antipathy to the subject Hardy contributed deeply to modern probability. His work with Ramanujan begat probabilistic number theory. He proved precursors to the law of the iterated logarithm; work on divergent series has a direct probabilistic flavour, and Hardy spaces and BMO are a mainstay of financial mathematics. I shall give a review of his accomplishments and prejudices.

There are limited funds available to help research students attend the meeting. Requests for support may be addressed to the Meetings & Membership Secretary, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS (e-mail: grants@lms.ac.uk).

A dinner will be held at Poons Restaurant, 50 Woburn Place, Russell Square, London WC1 at 7.15 pm. The cost will be £23 per person, inclusive of wine. Those wishing to attend should inform Miss Susan M. Oakes, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS, enclosing a cheque payable to 'The London Mathematical Society' to arrive no later than **Monday 18 June.** 

## VISIT OF DR R.J. LOY

Dr R.J. Loy (Australian National University, Canberra) will visit the UK under the aegis of a Scheme 2 grant of the LMS. He will give lectures as follows:

- Friday 22 June at 2 pm in Room 1015, David Bates Building, Queen's University, Belfast (contact: M.Mathieu, e-mail: m.m@qub.ac.uk);
- Tuesday 3 July at 3.30 pm in Room G, School of Mathematics, University of Leeds (contact: H.G.Dales, e-mail: pmt6hgd@amsta.leeds.ac.uk, tel: 0113 233 5143);
- Wednesday 11 July at 2.15pm in DPPMS, Wilberforce Road, Cambridge (contact: G.R.Allan, email: G.R.Allan@dpmms.cam.ac.uk).

The title of the talk in both Belfast and Cambridge is "Generalized notions of amenability", and the title in Leeds is "Weight sequences and compact multiplication". All members of the LMS are welcome to attend.

### VISIT OF PROFESSOR I. PROTASOV AND PROFESSOR Y. ZELENYUK

Professor Igor Protasov (Kiev) and Professor Yevhen Zelenyuk (Lviv) will be visiting the UK during the last three weeks of June under the LMS's International Short Visits Scheme. They work in combinatorial number theory and its relationships with topologies on, and compactifications of, the integers and other groups. More information can be obtained from Imre Leader (i.leader@ dpmms.cam.ac.uk) at Cambridge, John Pym (j.pym@shef.ac.uk) at Sheffield and Dona Strauss (d.strauss@hull.ac.uk) at Hull. They will in particular be speaking at Sheffield on 25 and 26 June.

## VISIT OF PROFESSOR M. FECKAN

Professor M. Feckan from Comenius University, Slovakia, will visit the Department of Mathematical Sciences, University of Loughborough, for one month, mid May - mid June 2001. He works in the area of homoclinic bifurcations in nonlinear dynamical systems. His visit is supported by the London Mathematical Society under a Scheme 5 grant and by Loughborough University. It is anticipated that he will give seminars in the following UK institutions: Loughborough University, The University of Warwick (Mathematics Institute) and University of Surrey (Dept of Mathematics and Statistics). Professor Feckan will be involved in research activities of the Loughborough Nonlinear Complex Systems group. Further details of the visit can be obtained from Vassilis Rothos (V.M.Rothos@lboro.ac.uk).

## VISIT OF DR D.S. KALYUZHNIY-VERBOVETZKY

Dr Dmitri Kalyuzhniy-Verbovetzky, a senior lecturer at the Odessa State Academy of Civil Engineering and Architecture (Ukraine), is visiting the UK for a month during April and May, funded by a London Mathematical Scheme 5 grant. Society Dr Kalyuzhniy-Verbovetzky works on linear dissipative scattering systems and the related topics of operator and function theories in several variables. He will stay at the Universities of Leeds and Newcastle and visit the Universities of York and Southampton. Several talks about his recent results will be arranged at those Universities. Further details can be obtained from Dr V. Kisil, Leeds University (e-mail: kisilv@amsta. leeds.ac.uk) or from the website (http://amsta.leeds.ac.uk/~kisilv/ dmitri.html).

## HARDY FELLOW TIMETABLE

Professor Persi Diaconis, of Stanford University, will be visiting the UK as Hardy Fellow from May to August this year. During his stay, he will be visiting various Institutions, as in the table below. There has been more demand for visits than can be accommodated: it is hoped that Members of the Society will find the opportunity to hear Professor Diaconis when he is speaking at a neighbouring University. Further details about each talk can be obtained from the local host.

Date	Venue	Host	Lecture
Friday 11 May	Warwick	Dr L. Goldberg (leslie@dcs.warwick.ac.uk)	What do we know about the Metropolis Algorithm?
Friday 18	Cambridge	Professor W.B.R. Lickorish	What do we know about
May		(wbrl@dpmms.cam.ac.uk)	the Metropolis Algorithm?
Friday 25 May	Edinburgh Mathematical Society	Dr P. Heywood (philip@maths.ed.ac.uk)	An Introduction to Random Matrix Theory
Monday 28	Lancaster	Professor G.O. Roberts	A Bayesian Peek into
May		(g.o.roberts@lancaster.ac.uk)	Elementary Probability
Wednesday 30 May	Manchester	Professor M. Pollicott (mp@ma.man.ac.uk)	The Mathematics of card shuffling
Friday 8	Oxford	Professor J.M. Ball	An Introduction to
June		(ball@maths.ox.ac.uk)	Random Matrix Theory
Tuesday	Dublin	Professor D. Simms	What do we know about
12 June		(simms@maths.tcd.ie)	the Metropolis Algorithm?
Friday 22 June	London	London Mathematical Society (lms@lms.ac.uk)	G.H. Hardy and Probability??? [Hardy Lecture]
Wednesday	QMW,	Professor R.A. Bailey	An Introduction to
27 June	London	(r.a.bailey@qmw.ac.uk)	Random Matrix Theory
Between	Nottingham	Professor D.B. Applebaum	A Bayesian Peek into
2-5 July		(dba@maths.ntu.ac.uk)	Elementary Probability

# BRITISH LOGIC COLLOQUIUM 2001

The annual conference and meeting of the British Logic Colloquium will take place at the University of Manchester from the afternoon of Thursday 6 September to the morning of Saturday 8 September, with financial support from the LMS and the BLC.

The programme will include ten invited lectures covering a range of topics in mathematical, philosophical and computational logic aimed at a general audience. At present the following have agreed to speak:

- Sasha Borovik (UMIST)
- Oren Kolman
- Dugald Macpherson (Leeds)
- Faron Moller (Swansea)
- Michael Potter (Cambridge)
- Stan Wainer (Leeds)
- Philip Welch (Bristol/Vienna)
- Alex Wilkie (Oxford)
- Timothy Williamson (Oxford)

In addition there will be time for a number of short contributed talks, by research students and research associates. Some financial support for graduate students is available and they are encouraged to apply for it. The annual general meeting of the BLC will take place on Thursday evening. Further details and a registration form are available at the website (http:// www.ma.man.ac.uk/DeptWeb/Events/ blc.html) or from the organisers

- Peter Aczel (petera@cs.man.ac.uk)
- Jeff Paris (jeff@ma.man.ac.uk)
- Mike Prest (mprest@ma.man.ac.uk)
- George Wilmers (george@ma.man.ac.uk)
- Alena Vencovska (alena@maths.man.ac.uk)

at Department of Mathematics, University of Manchester, Manchester M13 9PL.

## WORKSHOP ON GEOMETRY AND INTEGRABLE SYSTEMS

A Workshop on Geometry and Integrable Systems will be held on 18-19 May 2001 at the University of Hull. This is a joint meeting of the Classical and Quantum Integrability and Yorkshire Differential Geometry Days seminars of the Universities of Hull, Leeds and York and is supported by an LMS Scheme 3 grant. The speakers are Sergei Agafonov (Loughborough), Jose Figueroa-O'Farrill (Edinburgh), Anatoly Fomenko (Moscow), Gary Gibbons (Cambridge), Sergej Natanzon (Moscow) and Janos Szenthe (Budapest). For further information please contact Jurgen Berndt, University of Hull, Department of Mathematics, Hull HU6 7RX (tel: 01482 465149, fax: 01482 466218, email: I.Berndt@maths.hull.ac.uk) or Ian Strachan (e-mail: I.A.Strachan@ maths.hull.ac.uk), or view the website (http://www.hull.ac.uk/maths/res earch/areas/ ydgd01a.html).

## ROLLO DAVIDSON TRUST

The Trustees of the Rollo Davidson Trust have awarded the Rollo Davidson Prize for 2001 to Richard Kenyon (Université Paris-Sud), in recognition of his achievements in the study of discrete lattice systems, for his proof of the scaling limit and conformal invariance of domino tilings and the uniform spanning tree in two dimensions.

## DEPARTMENTAL NEWS

Warwick University, Department of Mathematics New Professor: Gero Friesecke (Applied Analysis) and New Lecturers: Stavros Garoufalidis (Topology), Petr Plechac (Computational Mathematics), Florian Theil (Applied Analysis).



### J. Buchmann Introduction to Cryptography

Cryptography is the key technology in electronic key systems, used to keep data secret, digitally sign documents, permit access control, etc. This accessible book explains the basic methods of modern cryptography. It is written for readers with only basic mathematical knowledge.

2000. Approx. 230 pp. 7 figs. (Undergraduate Texts in Mathematics) Hardcover \* DM 69,-; £ 24,-; FF 260,-; Lit. 76.200 ISBN 0-387-95034-6

## J. Esmonde, M.R. Murty Problems in Algebraic Number Theory

1999. XIV, 314 pp. (Graduate Texts in Mathematics. Vol. 190) Hardcover \* DM 98,-; £ 34,-; FF 370,-; Lit. 108.230 ISBN 0-387-98617-0

Please order from Springer - Customer Service Haberstr. 7 69126 Heidelberg, Germany Tel: +49 (0) 6221 - 345 - 217/8 Fax: +49 (0) 6221 - 345 - 229 e-mail: orders@springer.de or through your bookseller

### Y. Felix, S. Halperin, J.-C. Thomas Rational Homotopy Theory

Rational homotopy theory is a subfield of algebraic topology. Written by authorities in the field, this book contains all the main theorems with complete proofs. As both notation and techniques of rational homotopy theory have been considerably simplified, the book presents modern elementary proofs for many results that were proved ten or fifteen years ago.

2001. XXXII, 535 pp. (Graduate Texts in Mathematics. Vol. 205) Hardcover \* DM 119,-; £ 41,-; FF 449,-; Lit. 131.420 ISBN 0-387-95068-0

#### M.R. Murty Problems in Analytic

Number Theory

This book is a collection of about 500 problems in analytic number theory with the singular purpose of training the researcher or beginning graduate student in some of its significant techniques.

2001. XVI, 452 pp. (Graduate Texts in Mathematics.Vol. 206) Hardcover \* DM 98,-; £ 34,-; FF 370,-; Lit. 108.230 ISBN 0-387-95143-1

## T.W. Gamelin Complex Analysis

The book provides an introduction to complex analysis for readers with some very basic familiarity with complex numbers. The sixteen chapters begin with the fundamentals at the undergraduate level, finishing with material designed to complete the coverage of all background necessary for passing PhD qualifying exams in complex analysis.

2001. Approx. 460 pp. 184 figs. (Undergraduate Texts in Mathematics) Softcover \* DM 69,-; £ 24,-; FF 260,-; Lit. 76.200 ISBN 0-387-95069-9

### D.R. Farenick Algebras of Linear Transformations

Algebras and linear transformations acting on finite-dimensional vector spaces over arbitrary fields are studied in this book. The goal is to present a balance of theory and example in order for readers to gain a firm understanding of the basic theory of finite-dimensional algebras and to provide a foundation for subsequent advanced study in a number of areas of mathematics.

2001. XI, 238 pp. (Universitext) Hardcover \* DM 98,-; £ 34,-; FF 370,-; Lit. 108.230 ISBN 0-387-95062-1

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## ONE-DAY COMBINATORICS COLLOQUIUM AT READING

On Wednesday 16 May there will be a One-Day Combinatorics Colloquium in the Mathematics Department at Reading University. The first talk will be at 10.30 am and the last talk will end at about 5.30 pm. Everyone interested is welcome to attend. The speakers will be:

- L.W. Beineke (Purdue) Efficient cycle destruction
- B. Gerards (Amsterdam) Branch-width and well-quasi-ordering in matroids and graphs
- T.S. Griggs (Open) Really the end of the anti-Pasch conjecture
- R.P. Lewis (Sussex) Partitions with designated summands
- A. Prince (Heriot-Watt) A search for a projective plane of order 20
- A. Scott (UCL) Judicious partitions of graphs and hypergraphs
- J. Siemons (East Anglia) Some reconstruction problems
- M. Skoviera (Bratislava) Cayley Snarks
- D.J.A. Welsh (Oxford) A graph polynomial from chromatic invariants of knots

This event is supported by the British Combinatorics Committee and the London Mathematical Society. Further details including the detailed programme and the abstracts will be available from Dr J.K. Dugdale at Reading (j.k.dugdale@reading. ac.uk).

## UNITED KINGDOM MATHEMATICS TRUST

There were 171,020 entries for this year's Intermediate Maths Challenge. Dr Alan Slomson of Leeds University, member of the UKMT Council, commented "It is good to see such a large increase in entries for the Intermediate Maths Challenge. The questions really challenge pupils to think mathematically, and they can only benefit by being encouraged to tackle them." The Intermediate Maths Challenge is the largest competition of its kind in the UK, and is one of a series organized by UKMT, a charitable organisation whose main aim is to advance the education of children and young people in mathematics. It also organizes a Junior Challenge and a Senior Challenge.

The top-scoring students taking part in the Intermediate Challenge will be invited to participate in one of two follow-on rounds: the International Invitational Intermediate Mathematical challenge and the European Kangaroo. The IIIMC results are used to choose a list of 60 students from all regions and all educational sectors who will be offered scholarships to attend the UKMT's Summer School.

The UKMT was established in 1996 as an independent charitable organisation to bring under one umbrella a number of existing competitions. It is supported by the Royal Institution (the 'Parent Body'), Royal Society, London Mathematical Society, Edinburgh Mathematical Society, Institute of Mathematics and Its Applications, Mathematical Association and the Association of Teachers of Mathematics.

For more information, please call Angela Gould, UKMT's Executive Director on 0113 233 1879, e-mail her at angela@amsta.leeds.ac.uk or visit the UKMT website (www.ukmt.org.uk).

## BOUNDARY INTEGRAL METHODS CONFERENCE

The third UK conference on Boundary Integral Methods will be held from 10-11 September 2001 at the School of Computing and Mathematical Sciences, University of Brighton. For further information contact the organizer Dr Paul Harris (e-mail ukbim@brighton. ac.uk, web: www.it.bton.ac.uk/cms /ukbim, tel: 01273 600900, fax: 01273 642405). Some help with travel expenses is available to postgraduate students. The conference is supported by an LMS conference grant.

# **EXECUTIVE SECRETARY**

The London Mathematical Society (LMS) will require an Executive Secretary, consequent upon the retirement of Dr D.J.H. Garling in September 2002. The LMS is the foremost British learned society for mathematics, and is a registered charity. It has over 2000 members worldwide. It is also a major mathematical publisher. The Executive Secretary runs the LMS under the direction of Council and its honorary officers. At present the Society has ten members of staff including the Administrator and Publisher.

Candidates should have thorough empathy with UK Mathematics Research, possibly having worked as an academic in a mathematics (or cognate subject) department at a British university or for one of the UK research councils, or a learned or professional society.

Administrative experience, such as being head of department or as an officer of a learned society, is essential. Computer literacy in standard office software is also essential, as is the ability to write minutes and reports.

The employment will initially be for a term of 5 years and subject to probation. Full-time employment is preferred, but applications will be considered from suitable candidates who can do only, say, four days per week. Salary will be negotiated according to experience; it is unlikely to be less (*pro rata*) than the professorial range, plus London Allowance.

The deadline for applications, which should include the names, addresses and e-mail addresses of two referees, is **Friday 25 May 2001**. Further particulars are available from the President, Professor J.T. Stuart, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS, e-mail t.stuart@ic.ac.uk), to whom candidates are encouraged to make informal enquiries. Information about the LMS is on the Society's web site (http://www.lms.ac.uk).

## LMS REGIONAL MEETING IN BIRMINGHAM

The first in the Society's new programme of Regional Meetings was held at Birmingham on 28 February 2001. It was well-attended with an estimated one hundred and twenty participants enjoying three contrasting lectures.

Ian Stewart of Warwick University started the proceedings with a fascinating talk on 'Mathematics and Animal Locomotion'. He described the different modes of movement utilised by animals, such as the walking, trotting, cantering and galloping of horses. Early paintings demonstrate how poorly understood animal movement was until high-speed cameras resolved the matter. Indeed, we learnt how money changed hands over a bet as to whether or not a horse when cantering was always in contact with the ground. A theory was developed which classified all possible modes of movement, and an attempt has been made to match each mode to some living creature.

A presentation on 'Computer-based assessment' followed. This was delivered by Joe Kyle, assisted by Chris Sangwin, both of whom are partially seconded to the Learning and Teaching Network (LTSN) for Support Mathematics. Statistics and Operational Research (MSOR), the Mathematics division of which is based in Birmingham. We were treated to an impressive demonstration of the extent to which interactive computerised testing packages have advanced in recent years. It is one of the aims of the LTSN to keep the wider mathematical community informed of what software is available. and to assist interested parties in obtaining it.

The final talk was given by Michael Aschbacher of the California Institute of Technology, and was entitled 'Modern Permutation Group Theory'. Starting with the notion of a group acting on a category C, he explained the impact of the classification of the finite simple groups on permutation group theory and the theory of linear representations. To illustrate his point of view, he presented a statement of the Aschbacher-Scott Theorem which describes the structure of the primitive permutation groups and then went on to outline the modern strategy for studying the maximal subgroups of a simple group G. He illustrated the strategy by describing the structure theorem for the alternating groups (the O'Nan-Scott Theorem) and the famous division of the maximal subgroups of the classical groups into their Aschbacher classes. Broadening his talk, he then demonstrated how this modern view of permutation group theory can be used to study branched coverings of the Riemann sphere.

Graduate students attending the One-Day meeting had been invited to submit posters explaining their research. About twenty such posters were displayed throughout the Day and were judged by Michael Aschbacher, Peter Neumann and Trevor Stuart. The winner was Beth Holmes of the University of Birmingham for her poster on 'Previously unknown subgroups of the Monster'.

The Day was rounded off with a wine reception and around eighty participants then attended the Conference Dinner.

## GALWAY COLLOQUIUM ON GENERAL TOPOLOGY

The 5th Galway Colloquium on General Topology will be held at the University of Hull from 27 - 29 June 2001. The conference is designed to bring together mathematicians working in general topology, and to provide a forum for research students to talk about their work. A list of expected participants is on the web site (http://www.hull.ac.uk /maths/topology/index.htm). Those who have agreed to give talks include N. Hindman, C. Good, I. Protasov and Y. Zelenuk. For further information contact the organiser Dona Strauss (d.strauss @maths.hull.ac.uk). The colloquium is supported by an LMS conference grant.

## TOPOLOGICAL FLUID MECHANICS SUMMER SCHOOL

Fondazione CIME (International Mathematical Summer Center) of the Italian Mathematical Union announces a Summer School on "Topological Fluid Mechanics" to be held in Cetraro (Cosenza, Italy), from 2-10 June 2001. The Scientific Director is R.L. Ricca. The lectures will be given by: M.A. Berger, L.H. Kauffman, B. Khesin, H.K. Moffatt, R.L. Ricca, D.W. Sumners. Applications should be sent as soon as possible (e-mail: cime@math.unifi.it). Young participants are strongly encouraged to apply. Further information is available from Dr Renzo L. Ricca. Mathematics Department. University College London, Gower Street. WC1E London 6BT (e-mail: ricca@math.ucl.ac.uk. fax: 020 7383 5519) and from CIME URL web-site (http://www.math.unifi.it/cime/).

## NEW DEVELOPMENTS IN K-THEORY

A special K-theory Day will be held on Friday 22 and Saturday 23 June in Oxford to celebrate Dan Quillen's 60th birthday. It is now thirty years since Dan Quillen invented algebraic K-theory, and since then the subject has developed in many directions. The conference will bring together experts from different branches of mathematics to give an up-to-date perspective on the subject. Speakers will include among others J. Cuntz (Münster) and A. Connes (Paris).

There will be a conference dinner on the evening of Friday 22 June. For registration and accommodation please contact Ulrike Tillmann (tillmann@maths. ox.ac.uk). Further information will appear on the website of the Mathematical Institute when available (http://www.maths.ox.ac.uk).



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Publishers of the journal Experimental Mathematics

# The Honors Class\* Hilbert's Problems and Their Solvers

Ben Yandell Fall 2001; ISBN 1-56881-141-1 Hardcover; approx. 300 pp.; £25.00 (tent.)

With the support of many of the major players in the field, Ben Yandell has written a fascinating account of the achievements of this *Honors Class*, covering mathematical substance and biographical aspects.

"[This] book will be a great success; the historical comments are fascinating." —Peter Lax

Mathematicians who have solved or advanced the solutions to the problems posed by David Hilbert in his famous address given at the ICM in Paris in 1900. FIRST ANNOUNCEMENT

# GOLDMAN SACHS

8th International Mathematics Competition for University Students

19 July to 25 July 2001 Prague, Czech Republic http://www.imc-math.org/

The 8th IMC is being co-organized by University College London and Charles University, Prague. It is being sponsored by Goldman Sachs. It will extend over six days, rather that the five days in the previous IMCs, and take place in Prague.

Every participating university is invited to send several students and one teacher. Individual students are welcome. The competition is planned for students completing their first, second, third or fourth year of university education and will consist of 2 Sessions of 5 hours each. Problems will be from the fields of Algebra, Analysis (Real and Complex) and Combinatorics. The working language will be English.

#### Timetable

July 19 - arrival July 20 - meeting of the Jury July 21 - first session July 22 - meeting of the Jury July 23 - second session July 24 - announcement of the results and official dinner July 25 - departure

**Groups** Although this is an individual event, the Universities traditionally divide their participants into groups of four each. The number of students in the teams is, however, not fixed. The professor who accompanies the students is expected to be a member of the Jury. Over the previous seven competitions we have had students from sixty-one universities from twenty-five countries

Selection of the Problems The problems will be chosen at the Meeting of the Jury on July 20 from those received in advance by the President of the Jury, Professor John Jayne. The problems proposed should be precisely formulated and accompanied by a detailed solution. The problems should be in fields of Algebra, Analysis (Real and Complex) and Combinatorics. The problems given at the last seven Competitions can give a general idea of the level expected (see the IMC web site http://www.imc-math.org/). Additional topics may be also included.

**Evaluation** The students' work will be evaluated by Team Leaders and other Professors and Assistant Professors using criteria provided by the Jury.

**Necessary Information** Participants are invited to confirm their intention to participate by the end of 15 June 2001, providing the following information:

University; City; Country; Leader of the team (name, e-mail address); Students (number); Mailing address; e-mail address; Fax. Participants should register with Professor Jayne (e-mail: j.jayne@imc-math.org).

Visas The participants from some countries will need a visa to enter the Czech Republic. Please, contact your travel agent or the Czech Consulate in your country for details. If necessary, the organizers will post formal invitations for participation in the Competition.

Local Expenses The living expenses (room, board and local transportation, including spending money) and other costs have not yet been finalized. These will be sent out shortly in the Second Announcement.

**Support** The Competition is sponsored by Goldman Sachs. Teams and individuals wishing to apply for financial support should apply to the President of the IMC, Professor J E Jayne.

**Prizes** The first prize will be a one year scholarship to University College London valued at about US\$25,000. Students who have completed two years at their home universities may receive a BSc degree from University College London at the end of this one year. There will be other prizes of significant value.

Please send all confirmations of participation and arrival details to John Jayne at the e-mail address below. If you would like a copy of the competition poster, please sent your request with postal address to John Jayne, Department of Mathematics, University College London, Gower Street, London WC1E 6BT, (e-mail: j.jayne@imc-math.org, tel: 020 7679 7322, fax: 020 7419 2812).

# Professor in Applied Mathematics

at the Swiss Federal Institute of Technology Lausanne (EPFL)



The EPFL plans a substantial expansion in the basic sciences, including a significant reinforcement in mathematics, physics, and chemistry, and a major new effort in the life sciences.

As part of this broad program, the Mathematics Department has an opening at the full professor level. Applications for appointments at the Associate and Assistant Professor (tenure-track) levels will also be considered. We seek outstanding individuals in all areas of applied mathematics.



Applications in discrete mathematics and statistics are particularly encouraged. Successful candidates must develop an independent. internationally recognized program of scholarly research and must be willing to teach at both the undergraduate and graduate level. Substantial start-up resources will be provided. Women candidates are strongly encouraged to apply.

More information about EPFL and its Department of Mathematics at http://www.epfl.ch and http://dmawww.epfl.ch.

Applications, including CV, publication list, concise statement of research interests (3 pages or less) and three letters of reference, should be sent by August 31, 2001 to:

Professor Gerard Ben Arous Chairman of the Search Committee Department of Mathematics Ecole polytechnique fédérale de Lausanne (EPFL) CH-1015 Lausanne, Switzerland

## INTERNATIONAL CONFERENCES IN MATHEMATICS ON CRETE

The Foundation for Research and Technology-Hellas (Institute of Applied and Computational Mathematics) in collaboration with the University of Crete (Department of Mathematics) will continue in 2001 their series of international conferences in Mathematics as follows.

#### KINETIC THEORY 16-22 June 2001

Organizers: A. Bobylev (Moscow, Russia/Karlstad, Sweden), L. Arkeryd (Goeteborg, Sweden)

Main speakers: H. Andreasson (Goeteborg, Sweden), K. Aoki (Kyoto, Japan), L. Arkeryd (Goeteborg, Sweden), A. Bobylev (Karlstad, Sweden), P. Degond (Toulouse, France), S. Mischler (Versailles, France), M. Pulvirenti (Rome, Italy), A. Rendall (Potsdam, Germany), G. Toscani (Pavia, Italy), C. Villani (Lyon, France), B. Wennberg (Goeteborg, Sweden)

#### CONVEX GEOMETRIC ANALYSIS

18-24 August 2001

Coorganized by the University of the Aegean (Department of Mathematics)

Organizers: A. Giannopoulos (Crete, Greece), V. Milman (Tel Aviv, Israel), R. Schneider (Freiburg, Germany), S. Szarek (Case Western Reserve University, USA/Paris VI, France)

Main speakers: K. Ball (University College London, UK), I. Barany (Hungarian Academy of Sciences), P. Gruber (Wien, Austria), A. Koldobsky (University of Missouri, Columbia, USA), A. Pajor (Universite de Marne La Vallée, France), G. Schechtman (Weizmann Institute, Israel), S. Szarek (Case Western Reserve University, USA)

The conferences will take place at the Anogia Academic village, a conference center located at the traditional Cretan village of Anogia on the slopes of the mountain Ida. Anogia is located at an elevation of 750 m, about 45 minutes by car from Heraklion, the largest city of Crete, and about half an hour from the closest coast. The living expenses (accommodation plus meals) per day for a person are estimated at 34 Euro in a double room or 41 Euro in a single room. The registration fee amounts to 250 Euro.

There are some funds available to support (mainly young) participants. Support can cover (all or certain) travel, living and registration expenses. For additional information please contact the local co-ordinator: Susanna Papadopoulou, Department of Mathematics, University of Crete, 71409 Heraklion, Crete, Greece (fax: 81-393881, e-mail: souzana@math.uch.gr).

## EPSRC MASTERS LEVEL TRAINING PACKAGES

Departments are reminded that the closing date for submitting Proposals for Masters Level Training Packages is **11 May 2001**. The call for proposals is restricted to certain priority areas, including 'Modules providing transferable mathematical skills for engineering graduates' and 'Operational Research'. Further information is available on the EPSRC web site (http://www.epscrc.ac. uk).

### NORTH BRITISH FUNCTIONAL ANALYSIS SEMINAR

A meeting of the North British Functional Analysis Seminar will be held at Theatre A in the David Hume Tower, University of Edinburgh, from 2.30 pm on Monday 28 May until 12.00 am on Tuesday 29 May 2001. The speakers will be Professor Sean Dineen (University College Dublin) and Professor Rostislav Grigorchuk (Steklov Institute of Mathematics, Moscow). The meeting has financial support from the London Mathematical Society. For further information contact Dr Zinaida Lykova, Newcastle University (e-mail: Z.A.Lykova@ncl.ac.uk).

# LONDON MATHEMATICAL SOCIETY

## NOTICE OF GENERAL MEETING

There will be a General meeting of the Society on Friday 22 June 2001 at 5.00 pm in London to consider a proposal by the Council of the Society to delete the existing By-Law I.4 and to substitute the one printed below.

The effect of this change is to remove the restriction that a Vice-President may not hold office for more than two years consecutively.

#### Text of the proposed By-Law I.4

Officers of the Society shall be elected for one-year terms in accordance with Statute 24. If an Office becomes vacant during a year, Council shall take the advice of Nominating Committee before filling it in accordance with Statute 31 and By-Law II.4. No President shall hold that office for more than two years consecutively. None of the other Officers shall hold any Office or combination of Offices for more than ten years consecutively unless the extension beyond ten years is to permit the tenure of the Presidency. However, after a gap of one year anyone who has completed such a period of consecutive service may again stand for election.

J.S. Pym Council & General Secretary



The University is an Equal Opportunities Employer.

## THE SHORT INSTRUCTIONAL COURSES PROGRAMME

The following article appeared in the February 2001 issue of *Mathematics News*, the newsletter of the EPSRC Mathematics Programme, and is reprinted by kind permission of EPSRC.

PhD training in UK universities tends to be very specialised, especially when compared to that offered in Europe and North America. And as the number of taught MSc courses declined, so did the opportunities for postgraduates to receive formal instruction in fundamental core areas of mathematics. To fill the gap, EPSRC began working with the London Mathematical Society in the early 1990s to set up a programme of short instructional courses for postgraduates. In 1999, EPSRC awarded a contract to the LMS to run a programme covering the whole range of pure and applied mathematics. Since then five courses, attended by a total of 185 students, have been held at university departments around the UK. More are in the pipeline.

"The LMS is continuously monitoring the success of the courses and always considering whether there are any gaps that need filling", explains Dr Alan Pears, the facilitator for the LMS-EPSRC Short Courses. "Although the principal aim of the programme is to provide training for postgraduate students in fundamental core areas of mathematics, I believe the programme also plays another important role. Many research students, particularly in smaller departments, lead an isolated existence. These courses provide participants with a network of friends with a common interest." And judging by students' reactions to the courses, these benefits are very welcome.

## **RECORDS OF PROCEEDINGS AT MEETINGS**

## **REGIONAL ORDINARY MEETING**

held on Wednesday 28 February 2001 at the University of Birmingham. About 120 members and visitors were present for all or part of the meeting.

The meeting began at 2:30 pm, with Professor T.J. LYONS, Vice-President, in the Chair. Nine people were elected to Ordinary Membership: A.J. Croft, S.G. Foss, D.A. Friedman, B.M. Hambly, T.G. Honary, J. Kellendonk, E.M. McFarlane, I. Melbourne, R. Pantilie.

J.S. Wilson introduced a lecture given by I.N. Stewart on 'Mathematical Patterns in Animal Locomotion'.

J.R. Blake introduced a lecture given by J. Kyle on 'Recent Developments in Web Based Assessment'.

After tea, six people signed the book and were admitted to the Society.

R.T. Curtis introduced a lecture given by M. Aschbacher on 'Modern Permutation Group Theory'.

A reception was held in the Physics Bridge, during which a prize was awarded to Beth Holmes for the best Postgraduate Poster.

# GEOMETRIC ASPECTS OF GROUP THEORY

## LMS/EPSRC Short Course

### University of Bath, 3 - 7 September 2001

## Organisers: M.R. Bridson, W.J. Harvey and G.C. Smith

Geometric group theory involves the study of discrete groups as geometric objects. It also involves constructing and studying actions of groups on metric and topological spaces in order to elucidate the structure of both the group and the space on which it is acting. An important motivating example is the classical modular group SL(2,Z) and its action on the hyperbolic plane.

The lecturers at this short course will present an introduction to major themes in geometric group theory, illustrating them by a detailed study of several specific types of group - these examples are chosen because geometry has crucially guided their study and because of their broad applicability in key research areas, including topology, algebraic geometry, complex dynamics and quantum physics.

The topics to be presented are representative of a wide range of manifestations of discrete group theory in mathematics. The aim is to make this area, which is of great contemporary interest and activity, accessible to beginning graduate students presupposing only a thorough knowledge of undergraduate material (linear algebra, elementary complex analysis, geometry of surfaces and some topology). By concentrating on key examples with broad applicability, the lecturers aim to provide a clear and convincing account of the influence that this type of geometric insight has on contemporary mathematical research in algebra and topology.

The course is intended to attract not just group theorists but also students from areas such as geometric and algebraic topology, complex analysis, differential geometry and topological dynamics. The lecturers and course titles are:

• Geometric group theory: M.R. Bridson (Oxford University)

• The mapping class group: W.J. Harvey (King's College London)

• The ubiquitous Thompson groups: V. Sergiescu (Inst. Fourier, Grenoble)

Each course comprises six lectures; supplementary worksheets and exercises will be supplied, to be discussed with post-doctoral tutors in afternoon sessions. Suggestions for background reading will be available at www.maths.ox.ac/~brid son/shortcourse.

The registration fee is £60 which for UK-based research students includes the cost of course accommodation and meals. Participants must pay their own travel costs. EPSRC-supported students can expect that their registration fees and travel costs will be met by their departments from the EPSRC Research Training and Support Grant that is paid to universities with each studentship award.

Application forms may be obtained from: Frances Spoor, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS (e-mail: spoor@lms.ac.uk) or from the LMS website (http://www.lms.ac.uk/activities/research meet\_com/short\_course/07\_app.html).

Numbers will be limited and those interested are advised to make an early application. The closing date for applications will be **22 June 2001**.

# LMS PROGRAMME AND CONFERENCE FUND

Programme Committee has awarded grants to support the following conferences and meetings. If you wish to attend, or would like more information, please contact the organiser.

organiser. Date/Venue	Title	Organizer/e-mail
	One Day Combinatorics	A.J. W Hilton
16 May 2001 Reading	Conference	a.j.w.hilton@reading.ac.uk
16-19 May 2001 Queen's University of Belfast	All Ireland Algebra Days 2001 (AIAD 2001)	M. Mathieu m.m@qub.ac.uk
19 May 2001 King's College London	Informal UK Meetings on 2D Integrable Models and Conformal Field Theory	G. Watts gmtw@mth.kcl.ac.uk
21-23 May 2001 Gregynog Hall, Powys	University of Wales Mathematics Colloquium 2001	M.V. Lawson m.v.lawson@bangor.ac.uk G.W. Roberts g.w.roberts@bangor.ac.uk
23-29 May 2001 Warwick	Infinite Dimensional Models in Mathematical Finance	K.D. Elworthy kde@maths.warwick.ac.uk
2-5 June 2001 Gregynog Hall, Powys	The Heritage of I. Schur's 1901 Dissertation	A.O. Morris aom25@newton.cam.ac.uk
8-10 June 2001 Bristol	Nonlinear Dynamics and Chaos: Where do we go from here?	S.J. Hogan s.j.hogan@bristol.ac.uk
14-16 June 2001 Imperial College London	Conference in honour of Walter Hayman's 75th Birthday - Function Theory	M.W. Liebeck m.liebeck@ic.ac.uk
25-28 June 2001 Newcastle	Banach Algebras and Cohomology: Conference in honour of Barry Johnson	N.J. Young n.j.young@ncl.ac.uk
27-29 June 2001 Hull	5th Galway Colloquium on General Topology	D. Strauss d.strauss@maths.hull.ac.uk
1-6 July 2001 Sussex	18th British Combinatorial Conference	P. Rowlinson p.rowlinson@stirling.ac.uk
19-21 July 2001 Oxford	Applied Nonlinear Analysis and Differential Equations	S.D. Howison howison@maths.ox.ac.uk
6 September 2001 Royal Society of Edinburgh	The Impact of Mathematics on Science and Technology and vice versa	A.A. Lacey a.a.lacey@ma.hw.ac.uk
6-8 September 2001 Manchester	British Logic Colloquium	J.B. Paris jeff@maths.man.ac.uk

Date/Venue	Title	Organizer/e-mail
10-11 September 2001 Brighton	3rd UK Conference on Boundary Integral Methods	P.J. Harris p.j.harris@brighton.ac.uk
10-14 September 2001 QUB	10th UK Conference on the Foundations of Physics	M.A.B. Whitaker a.whitaker@qub.ac.uk
11-15 September 2001 Warwick	Kleinian Groups and Hyperbolic 3-Manifolds	C. Series cms@maths.warwick.ac.uk
22-23 September 2001 Oxford	History of Mathematical Table Making	R. Flood raymond.flood@conted. ox.ac.uk
3-5 December 2001 Leeds	Pattern Formation by Swimming Micro- Organisms and Cells (INI satellite meeting)	N.A. Hill n.a.hill@leeds.ac.uk
11 January 2002 Cambridge	Conference in honour of Stephen Hawking's 60th Birthday - The Future of Theoretical Physics & Cosmology	G.W. Gibbons g.w.gibbons@damtp. cam.ac.uk
17-21 June 2002 Peebles	15th Householder Symposium on Numerical Algebra	N.J. Higham higham@ma.man.ac.uk
26-27 July 2002 Gregynog Hall, Powys	Conference to mark the 65th Birthday of Professor M.S.P. Eastham	B.M. Brown malcolm@cs.cf.ac.uk W.D. Evans evanswd@cf.ac.uk
7-10 April 2003 Birmingham	British Mathematical Colloquium 2003	R.A. Wilson r.a.wilson@bham.ac.uk

## WORKSHOP ON INFINITE DIMENSIONAL MODELS IN MATHEMATICAL FINANCE

A workshop on Infinite Dimensional Models in Mathematical Finance will be held at the University of Warwick between 23 and 29 May and include a period of seminars on 24 - 26 May. This LMS funded workshop is one of the activities in the Warwick symposium year on Stochastic Partial Differential Equations and Related topics. It is led by Professor Jerzy Zabczyk, who is the visiting Leverhulme Professor at Warwick. Topics may include: HJM and BGM models; consistency problems and stochastic invariance; stochastic PDE models for forward curve dynamics; pricing derivatives in infinite dimensional markets.

Confirmed overseas participants include: Rama Cont (CNRS Ecole Polytechnique), Damir Filipovic (ETH Zurich), Dariusz Gatarek (Warsaw), Yuri Kabanov (Besançon), Michael Kohlmann (Konstanz), Bernt Oksendal (Oslo), Josef Teichmann (TU Wien).

To participate in the workshop contact Peta McAllister (tel 024 7652 4403 peta@maths.warwick.ac.uk). The organisers thank the London Mathematical Society for financial support. In particular there is funding available for suitably qualified graduate students at UK universities.

## NEW DIRECTIONS IN DYNAMICAL SYSTEMS 2002 (ICM 2002 Satellite Conference)

The conference will consist of two parts: The first week is mainly formed by series of lectures on selected topics. This will be held at Ryukoku University, Fukakusa campus (south part of Kyoto city) from 5-9 August 2002. The second week is formed by invited and contributed talks including short communications, which will be held at Kyoto University (north-east part of Kyoto city) from 11-15 August 2002.

The objective of the conference is to stimulate the exchange of new ideas in various fields of dynamical systems. Any field of dynamical systems theory will be treated in NDDS2002, with special emphasis on new directions of research for future development. The topics include: smooth dynamical systems, complex dynamical systems and foliations, ergodic theory, Hamiltonian systems, low-dimensional dynamics, topological methods, rigidity, bifurcation theory,....

The organizing committee intends to select such new topics and invite the most suitable speakers possible. Every participant will have the opportunity to give a contributed presentation. Young researchers and students are therefore particularly welcome to take part in the conference. Invited speakers include:

Series of lectures during first week:

- M. Lyubich (SUNY Stony Brook)
- L.-S. Young\* (Courant Institute)
- E. R. Pujals (UFRJ)
- J. Xia (Northwestern University)

Plenary lectures:

- V. Baladi (Université de Paris-Sud)
- V. Y. Kaloshin (Princeton University)
- C. McMullen (Harvard University)
- J. Palis (IMPA)
- M. Shub (IBM Watson)
- M. Viana (IMPA)
- J.-C. Yoccoz\* (College de France)
- J. Yorke (University of Maryland)

(\* to be confirmed)

For more information visit the web site (http://ndds.math.h.kyoto-u.ac.jp/). Detailed information will be announced later on the conference web page. To receive the Second Announcement, write to: ndds@math.h.kyoto-u.ac.jp with Subject: request 2nd Announcement.

## SYMMETRY IN NONLINEAR MATHEMATICAL PHYSICS

The Fourth International Conference on Symmetry in Nonlinear Mathematical Physics will be held from 9-15 July in Kyiv, Ukraine.

The topics will include:

- Classical, Nonclassical, Conditional and Approximate Symmetry of Equations of Mathematical Physics
- Symmetry in Nonlinear Quantum Mechanics, Quantum Fields, Gravity, Fluid Mechanics, Mathematical Biology, Mathematical Economics
- Representation Theory
- q-Algebras and Quantum Groups
- Symbolic Computations in Symmetry Analysis
- Dynamical Systems, Solitons and Integrability
- Supersymmetry and Parasupersymmetry

The Organizing Committee are: A. Nikitin (Co-Chairman, Ukraine); A. Samoilenko (Co-Chairman, Ukraine); J. Beckers (Belgium); G. Bluman (Canada); P. Clarkson (UK); N. Debergh (Belgium); H.-D. Doebner (Germany); G. Goldin (USA); B.K. Harrison (USA); N. Ibragimov (Sweden); M. Lakshmanan (India); J. Niederle (Czech Republic); M. Tajiri (Japan); P. Winternitz (Canada); A. Klimyk, M. Shkil, I. Skrypnyk, I. Yehorchenko, R. Zhdanov (Ukraine).

Further information contact Anatoly Nikitin ( e-mail: appmath@imath.kiev. ua; fax: +38 044 235 20 10; tel: +38 044 224 63 22, +38 044 250 08 96, web site (http://www.imath.kiev.ua/ ~appmath/ conf.html). LONDON MATHEMATICAL SOCIETY

# **INVITED LECTURE SERIES**

## 18-23 June 2001

## Professor T. GOODWILLIE (Brown University, USA)

## CALCULUS OF FUNCTORS

Professor Goodwillie is a leading expert on the interplay between the topology of high dimensional manifolds and the algebra associated with theories such as algebraic K-theory and cyclic homology. While thinking of the relationship between the geometry and the algebra, he conceived his celebrated theory known as "Calculus of functors". In a nutshell, the theory says that one may study functors that arise in topology in a way analogous to the way functions are studied in ordinary differential calculus. This theory, both very general and remarkably powerful, has already had a profound impact on several areas of topology. Aside from applications to algebraic K-theory, it had rather spectacular applications in mainstream homotopy theory and in the study of fundamental spaces of geometric topology.

Professor Goodwillie will deliver two lectures each morning. An associated afternoon programme will be arranged by Drs G. Arone and M. Weiss.

Participants should arrive in Aberdeen on Monday 18 June. The lectures will begin on Tuesday 19 June and end at 12 noon on Saturday 23 June.

Accommodation will be available for the nights of Monday 18 June to Friday 22 June (and Saturday 23 June if requested) in Crombie Hall, King's College, Aberdeen University, Old Aberdeen. The costs are not finalised but in 2000 they would have been: Bed and Breakfast £12.76 per night, Dinner, bed and breakfast £20.85 per night. There will be a registration fee of £30 to cover other costs.

Some financial support is available for those who have difficulty in meeting the expenses, particularly for PhD students and young mathematicians based in the UK. Those requesting this support should tell the organizers as soon as possible and provide an estimate of the amount to be requested.

Those wishing to be put on the mailing list for information, should tell The Organizers, LMS Invited Lectures, Department of Mathematical Sciences, King's College, Aberdeen University, Aberdeen AB24 3UE (lms.lectures@maths.abdn.ac. uk).

Further details will be provided later, and will be posted at http://www.maths.abdn.ac.uk/~lmslec/index.html

# LONDON MATHEMATICAL SOCIETY

# **POPULAR LECTURES 2001**

Strathclyde University - Thursday 14th June Leeds University - Friday 22nd June Institute of Education, London University - Tuesday 3rd July

## Professor Peter Cameron Codes

'From catching out a liar, to sequencing the human genome, or designing a quantum computer - there's a code that does the job.'





## Professor Chris Budd Simulating the world

'How maths helps us to: drive a supersonic racing car, make dinosaurs live again, or leave the solar system, without moving from our desks.'

STRATHCLYDE Commences at 2.00 pm, refreshments at 3.00 pm, ends at 4.30 pm. Admission is free. Enquiries to Professor A. McBride or Dr A. Ramage, Department of Mathematics, Strathclyde University, Livingstone Tower, 26 Richmond Street, Glasgow G1 1XH (tel: 0141 548 3647/3801, e-mails: a.c.mcbride@strath.ac.uk, a.ramage@strath.ac.uk).

LEEDS Commences at 6.30 pm, refreshments at 7.30 pm, ends at 9.00 pm. Admission is free. Enquires to Dr R.B.J.T Allenby, School of Mathematics, University of Leeds, Leeds LS2 9JT (tel: 0113 233 5122, e-mail: pmt6ra@leeds.ac.uk).

LONDON Commences at 7.00 pm, refreshments at 8.00 pm, ends at 9.30 pm. Admission is free, with ticket. Apply by June 29th to Miss L Taylor, London Mathematical Society, 57-58 Russell Square, London WC1B 4HS (e-mail: taylor@lms.ac.uk). A stamped addressed envelope would be appreciated.



# L. CARLESON HONORARY MEMBER 1982

## DIARY

The diary lists Society meetings and other events publicized in the Newsletter. Further information can be obtained from the appropriate LMS Newsletter whose number is given in brackets. A fuller list of meetings and events is given in the Society's web site (http://www.lms.ac.uk/meetings/diary.html). 9-13 Stochastic Processes and their Applications Conference, MAY 2001 4 Edinburgh Mathematical Society Meeting, Stirling Cambridge (275) 9-13 Progress in Partial Differential Equations, ICMS Edinburgh University (285) 9 Today's PDEs, Spitalfields Day, King's College London (291) (288)9-13 Algebraic Graph Theory Workshop, ICMS Edinburgh (288) 6-13 Symmetry and Perturbation Theory Workshop (SPT2001), 9-13 Singapore-Warwick Workshop in Geometry and Topology. Sardinia (284) National University of Singapore (291) 9-15 Symmetry in Nonlinear Mathematical Physics, Kyiv, 16 Symposium in Honour of Sir John Kingman, Bristol University (292) 16 One-Day Combinatorics Colloquium, Reading University Ukraine (293) 9-20 Modern Methods in Scientific Computing and (293)Applications Seminar, Université de Montréal, Canada (287) 16-19 All Ireland Algebra Days 2001, Queen's University Belfast 15-20 Algorithms for Approximation IV Symposium, (2.92) Huddersfield University (286) 18-19 Geometry and Integrable Systems Workshop, Hull 16-26 Groups, Geometry and Combinatorics LMS Durham University (293) 23-29 Infinite Dimensional Models in Mathematical Finance Symposium, Durham University (291) 16-27 Stochastic Partial Differential Equations Workshop, Workshop, Warwick University (293) Warwick University (287) 25-26 Groups in Galway 2001, National University of Ireland, 17-20 AMS-SMF First Joint International Meeting, École Galway (291) Normale Supérieure, Lyon (292) 28 North British Functional Analysis Seminar, Edinburgh 19-25 Goldman Sachs International Mathematics Competition, University (293) 28 -1 June Harmonic Morphisms and Harmonic Maps Prague (293) 24-31 Nonlinear Evolution Equations and Dynamical Systems Conference, CIRM, Luminy, France (284) EuroConference, Isaac Newton Institute, Cambridge (290) **IUNE 2001** 1 Edinburgh Mathematical Society Meeting, St Andrews 29-2 Aug Teaching of Mathematical Modelling and Applications (ICTMA 10), Tsinghua University, China (284) University (285) 30 - 9 Aug Special Structures in Differential Geometry LMS 2-5 The Heritage of I. Schur's 1901 Dissertation, Gregynog Hall, Durham Symposium, Durham University (291) Powvs (290) AUGUST 2001 2-10 Topological Fluid Mechanics CIME Summer School, 5-18 Groups-St Andrews, Oxford University (289) Cosenza, Italy (293) 12-19 Homological Conjectures for Finite-Dimensional Algebras 3-7 Geometric Aspects of Group Theory, LMS/EPSRC Short Course, Bath University (293) Summer School, Nordfjordeid, Norway (275) 18-24 Convex Geometric Analysis Conference, Anogia, Crete 3-8 Mathematical Population Dynamics Conference, Marrakech (288 SEPTEMBER 2001 8-10 Belgian Mathematical Society/Deutsche Mathematiker 1-6 Number Theory and Arithmetical Geometry EURESCO Vereinigung joint meeting, Liège University, Belgium (284) Conference, Italy (292) 16-22 Kinetic Theory Conference, Anogia, Crete (293) 3-7 Geometric Aspects of Group Theory, LMS/EPSRC Short 19-22 Computational Intelligence: Methods and Applications Congress (CIMA 2001) University of Wales, Bangor (283) Course, Bath University (293) 2-6 Applied Mathematics in our Changing World, Berlin, 19-23 Calculus of Functors, T. Goodwillie, LMS Invited Lectures, Aberdeen University (286) Germany (292) 3-14 Discrete System and Integrability EuroWorkshop, INI, 22 Hardy Lecture, LMS Meeting, London (292) Cambridge (292) 22-23 New Developments in K-theory Conference, Oxford 5-7 Domain Decomposition Methods in Fluid Mechanics LMS University (293) 25-28 Banach Algebras and Cohomology Conference, Newcastle Workshop, Greenwich University (292) 6-8 British Logic Colloquium 2001, Manchester University University (288) (293)25-29 Variational Problems with Singularities Workshop, Isaac Newton Institute, Cambridge (290) 10-11 Boundary Integral Methods Conference, Brighton University (293) 27-29 Galway Colloquium on General Topology, Hull 12 South Western Regional Meeting, Bristol University (292) University (293) 22-23 History of Mathematical Table Making Conference, **JULY 2001** Kellogg College, Oxford (291) 24-28 Vertical Integration in Biology Workshop, Isaac Newton 1-6 British Combinatorial Conference, Sussex University (276) 2-6 Nonlinear Elliptic Equations and Transition Phenomena EuroConference, Isaac Newton Institute, Cambridge (290) Institute, Cambridge (291) **IUNE 2002** 2-6 Singapore International Symposium on Topology and Geometry, National University of Singapore (291) 4-6 Uncertainty in Geometric Computations MathFIT 24-28 Analytic Number Theory Workshop, Max Plank Institute, Bonn (288) APRIL 2002 Workshop, Sheffield University (287) 5-7 British Congress of Mathematics Education, Keele 7-12 Joint BMC/BAMC, Warwick University AUGUST 2002 University (286) 5-15 New Directions in Dynamical Systems, Ryukoku and 5-14 Combustion Theory LMS Durham Symposium, Durham Kyoto Universities (293) University (291) 6 Northern Regional Meeting, Manchester University (292) 20-28 ICM2002, Beijing, China (272) 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. The London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS Tel: 020 7291 9977 fax: 020 7323 3655, e-mail: lms@lms.ac.uk. World Wide Web: http://www.lms.ac.uk/

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Printed by Armstrong Press Ltd, Southampton 023 8033 3132