

Forthcoming Society Meetings

2006

Friday 10 February

London
G. Segal
U. Tillmann
(Mary Cartwright
Lecture)

Monday 15 May

Leicester
Midlands Regional
Meeting
M. Bridson
N. Hitchin
H. Kraft
A. Zelevinsky

Friday 16 June

London
A. Rice
Yu Manin
(Hardy Lecture)

Friday 3 July

Leeds
Northern Regional
Meeting
U. Haagerup
N. Kalton

Monday 11 September

Bath
South West & South
Wales Regional
Meeting
P-L. Lions
T. Seppalainen

GRANTS FOR ATTENDING ICM 2006

The Council of the London Mathematical Society has set aside a sum of money to help UK mathematicians to attend the International Congress of Mathematicians in Madrid in August 2006. Applications for LMS grants may be made by three categories of people.

- (a) Those who have applied for Royal Society grants but were unsuccessful may simply submit copies of their Royal Society applications.
- (b) Anyone who has obtained a Royal Society grant but considers it very inadequate may submit a copy of the original application together with a case for the LMS supplementing it (but applicants should realise that neither the Royal Society nor the LMS grants are likely to cover the whole cost of attending the ICM).
- (c) Those who are ineligible for Royal Society grants may apply on forms obtainable from the address below, or from the Society's website (www.lms.ac.uk).

Applications should be sent to the Administrator at the London Mathematical Society

to arrive by **31 March 2006**. They will be considered by a Council Subcommittee and results should be known by 5 May 2006.

BOLOGNA AGREEMENT

The LMS Council and Education Committee are concerned at developments in some universities to question the future of their MMath and masters courses. These, it is thought, may be driven by needs to meet the requirements of the Bologna Agreement (on harmonisation of qualifications). The Society continues to hold that the MMath and masters qualifications are important elements in the provision of high-quality mathematics courses in the UK.

The CMS has a group looking at the issues emerging from the Bologna Agreement and members are invited to send their views and comments on the MMath and masters issues to the Chair of the CMS group, Dr Brian Stewart (email: brian.stewart@exeter.ox.ac.uk).

CONGRATULATIONS

Congratulations to John Ball who received a Knighthood in the New Year Honours List.

CRM-FIELDS-PIMS PRIZE

The Centre de Recherches Mathématiques (CRM) of l'Université de Montréal, the Fields Institute and the Pacific Institute for the Mathematical Sciences (PIMS) are pleased to announce the award of the CRM-Fields-PIMS Prize for 2006 to Professor Nicole Tomczak-Jaegermann of the University of Alberta in recognition of her exceptional achievements in functional analysis and geometric analysis.

Nicole Tomczak-Jaegermann, this year's recipient, is one of the world's leading mathematicians working in functional analysis. She has made outstanding contributions to infinite dimensional Banach space theory, asymptotic geometric analysis, and the interaction between these two streams of modern functional analysis. She holds a Canada Research Chair in Geometric Analysis at the University of Alberta. In 1998 she gave an invited lecture at the International Congress of Mathematicians, is a Fellow of the Royal Society of Canada, and received a Killam Research Fellowship, and the Krieger-Nelson Prize Lectureship of the Canadian Mathematical Society.

The prize was established in 1994 as the CRM-Fields prize to recognize exceptional research in the mathematical sciences. In 2005, PIMS became an equal partner and the name was changed to the CRM-Fields-PIMS prize. A committee appointed by the three institutes chooses the recipient.

Previous recipients of the prize are H.S.M. (Donald) Coxeter, George A. Elliott, James Arthur, Robert V. Moody, Stephen A. Cook, Israel Michael Sigal, William T. Tutte, John B. Friedlander, John McKay, Edwin Perkins, Donald A. Dawson and David Boyd. For more information visit www.pims.math.ca.

FINAL CALL FOR FACES COMPETITION

Have you discovered who is Number 14 yet? Have a look at www.lms.ac.uk/publications/facescomp.html for your last chance to play Spot the Mathematician. The deadline for the Faces Competition is fast approaching – entries should be sent to hezlet@lms.ac.uk before **15 February** and all will be acknowledged by email.

LONDON MATHEMATICAL SOCIETY

MARY CARTWRIGHT LECTURE

Friday 10 February 2006

Chemistry Auditorium, Christopher Ingold Building,
University College London, 20 Gordon Street,
London WC1

4.15 pm Graeme Segal (Oxford University)
Locality in quantum field theory

5.15 pm Tea

5.45 pm Mary Cartwright Lecture
Ulrike Tillmann (Oxford University)
*The topology of strings:
Mumford's conjecture and beyond*

A reception will be held at De Morgan House at 7.00pm with a dinner afterwards at Il Fornello Restaurant, 150 Southampton Row, London WC1 at 7.30 pm. The cost will be £20.00 per person, inclusive of wine. Those wishing to attend should inform Susan 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 6 February**.

There are limited funds available to contribute to the travel expenses of Society members or research students to attend the Society meeting. Requests for support, including an estimate of costs, may be addressed to Isabelle Robinson at the Society (robinson@lms.ac.uk).

LMS Newsletter

General Editor: Dr D.R.J. Chillingworth (D.R.J.Chillingworth@maths.soton.ac.uk)

Reports Editor: Dr S.A. Huggett (s.huggett@plymouth.ac.uk)

Reviews Editor: Professor M.P.F. du Sautoy (dusautoy@maths.ox.ac.uk)

Administrative Editor: Miss S.M. Oakes (oakes@lms.ac.uk)

Editorial office address: London Mathematical Society, De Morgan House,
57-58 Russell Square, London WC1B 4HS (tel: 020 7637 3686; fax: 020 7323 3655;
email: oakes@lms.ac.uk, web: www.lms.ac.uk)

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Charity registration number: 252660.

KING FAISAL PRIZE 2006

Simon Donaldson of Imperial College, London, and M.S. Narasimhan of the Tata Institute for Fundamental Research in Mumbai have been jointly awarded the 2006 King Faisal International Prize for Science. The prize, presented by the King Faisal Foundation, consists of a gold medal and a cash prize of US\$200,000, which the two recipients will share. Donaldson's early research revolutionized four-dimensional differential topology, revealing surprising new phenomena through the application of ideas from gauge theory. He has also made foundational contributions to complex and symplectic geometry and to global analysis of partial differential equations on manifolds. Narasimhan is a pioneer of the study of moduli spaces of holomorphic vector bundles on projective varieties. His work on projectively flat connections was the starting point for the development of the so-called Kobayashi-Hitchin correspondence linking the differential and algebraic geometry of vector bundles over complex manifolds.

HFSP CALL FOR GRANT APPLICATIONS

The Human Frontier Science Program (HFSP) is an international funding program, supported by Australia, Canada, France, Germany, Italy, Japan, Republic of Korea, Switzerland, UK, USA and the European Union. HFSP promotes international collaboration through a prestigious program of grants which support interdisciplinary research in the basic life sciences. The program is intended to bring teams of scientists from various fields such as physics, mathematics, chemistry, computer science and engineering together with biologists to open up new approaches to understanding complex biological systems.

Teams applying for research grants must first submit a letter of intent online. The next deadline is 30 March 2006 and potential applicants must pre-register by 20 March 2006 (see the HFSP web site at www.hfsp.org for further details).

ROYAL COMMISSION FOR THE EXHIBITION OF 1851 Research Fellowships

The scheme of 1851 Research Fellowships is intended to give a few young scientists or engineers of exceptional promise the opportunity for conducting research for a further period of two years. Approximately six awards are made each year.

Candidates in science subjects must normally be in possession of a PhD degree, or in the final stages of their PhD studies. Candidates offering engineering do not have to be in possession of a PhD, but must be of at least PhD standard. The Fellowships are open to candidates in any of the physical or biological sciences, in mathematics, in applied science, or in any branch of engineering.

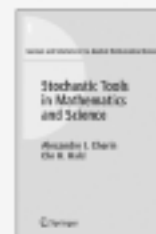
The Fellowship stipend payable in 2006 is £22,800 for the first year, and £24,000 for the second year. In addition a London Weighting of £2,134 per annum is payable in appropriate cases. A candidate must be British or a citizen of the British Commonwealth or of the Republics of Ireland or Pakistan, and should preferably be less than thirty years old on 1 March 2006.

Candidates must be recommended by Professors or Heads of Departments of Universities or other Institutions of equivalent status in the United Kingdom. Recommendations made on the prescribed forms must be received on or before **23 February 2006**. Appointments to the Fellowship will be made during June 2006. The full regulations and application form can be found at: www.royalcommission1851.org.uk/res_fellow.html.



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Textbooks from Springer



Stochastic Tools in Mathematics and Science

A. Chorin, O. H. Hald,
University of California,
Berkeley, CA, USA

Stochastic Tools in Mathematics and Science is an

introductory book on probability-based modeling. It covers basic stochastic tools used in physics, chemistry, engineering and the life sciences.

2006. VIII, 152 p. (Surveys and Tutorials in the Applied Mathematical Sciences, Vol. 1) Softcover
ISBN 0-387-28080-4 ► € 34,95 | £ 27,00

Idempotent Matrices over Complex Group Algebras

I. Emmanouil, University of Athens, Greece

2006. XIII, 276 p. (Universitext) Softcover
ISBN 3-540-27990-3 ► € 34,95 | £ 27,00

Complex Analysis

E. Freitag, R. Busam, University of Heidelberg,
Germany

This indispensable book provides an extensive description of classical complex analysis.

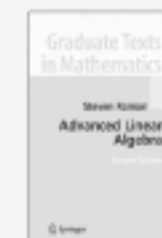
2005. X, 547 p. (Universitext) Softcover
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Introduction to Stochastic Integration

H.-H. Kuo, Louisiana State University, Baton Rouge, LA, USA

This textbook provides a concise introduction to the Itô calculus, and covers the constructions of Brownian motion, stochastic integrals for Brownian motion and martingales, the Itô formula, multiple Wiener-Itô integrals, stochastic differential equations, and applications to finance, filtering theory, and electric circuits.

2006. XIV, 279 p. (Universitext) Softcover
ISBN 0-387-28720-5 ► € 42,95 | £ 33,00



Advanced Linear Algebra

S. Roman, University of California, Irvine, CA, USA

From the reviews of the first edition ► *The book is very well written and has a good set of exercises.*

It is a suitable choice as a graduate textbook as well as a reference book.

► A. A. Jafarián for ZentralblattMATH

2nd ed. 2005. XVI, 504 p. 18 illus. (Graduate Texts in Mathematics, Vol. 135) Hardcover
ISBN 0-387-24766-1 ► € 54,95 | £ 42,50

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LONDON MATHEMATICAL SOCIETY

MIDLANDS REGIONAL MEETING

Department of Mathematics, University of Leicester

Monday 15 May 2006

Martin Bridson (Imperial College, London)

Nigel Hitchin (University of Oxford)

Hanspeter Kraft (University of Basel)

Andrei Zelevinsky (Northeastern University, Boston)

There are limited funds available to contribute in part to the expenses of members of the Society or research students to attend the Society meeting on Monday 15 May. Requests for support, including an estimate of expenses, may be addressed to the Programme Secretary at the Society (web: www.lms.ac.uk; email: grants@lms.ac.uk).

For further details and to reserve a place at the dinner, contact the organizers Frank Neumann (fn8@mcs.le.ac.uk) or Joshua Scott (js262@mcs.le.ac.uk) or visit the website (www.math.le.ac.uk).

This will be followed by a workshop from 16-18 May on *Teichmüller Theory and Cluster Algebras* exploring connections recently emerging between cluster algebras and the theory of decorated Teichmüller spaces and related moduli spaces. Visit www.math.le.ac.uk for further information.

LONDON MATHEMATICAL SOCIETY

HARDY LECTURER 2006

The 2006 Hardy Lecturer is Professor Yu Manin (Northwestern University). During his visit to the UK in June he will give lectures at the following places:

- **Friday 16 June** – The Hardy Lecture, LMS Meeting, University College London contact Susan Oakes (oakes@lms.ac.uk)
- **Monday 19 June** – Edinburgh University contact Tom Lenagan (tom@maths.ed.ac.uk)
- **Tuesday 27 June** – Bristol University contact S. Wiggins (S.Wiggins@bristol.ac.uk)

During Professor Manin's stay in the UK he will be based at Imperial College London. Contact Richard Thomas (richard.thomas@imperial.ac.uk) for further information.

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 March *Newsletter*. For general enquiries contact Stephen Huggett, LMS Programme Secretary.

RAMANUJAN PRIZE

Marcelo Viana (Instituto de Matemática Pura e Aplicada, Brazil) received the first ever Srinivasa Ramanujan Prize that carries a \$10,000 cash award donated by the Niels Henrik Abel Memorial Fund. The award ceremony took place on 15 December at the International Centre for Theoretical Physics (ICTP) in Trieste, Italy.

This new ICTP prize for young mathematicians from developing countries has been created in the name of the great Indian mathematician, Srinivasa Ramanujan. For more information about the prize visit: www.ictp.it/pages/mission/prizes.html.

GEORGE SZEKERES

The eminent Australian mathematician George Szekeres and his wife Esther died on 28 August 2005. An interesting account of their eventful lives can be found at www.austms.org.au/Gazette/2005/Sep05/Szekeres.pdf.

CHARLES THOMAS

Charles B. Thomas, Professor of Algebraic Topology in the University of Cambridge and member of the London Mathematical Society since 1976, died on 16 December 2005. Although some ill health had come his way, his death came as a shock, particularly to those who wished him well at his retirement dinner but nine days earlier. He was born on 17 August 1938 and educated at the Benedictines' Douai School near Reading. After two years' service in the Royal Air Force he entered Trinity College, Cambridge, in 1958. An initial intention to read physics was soon converted into a life-long commitment to the study of mathematics. He worked for his PhD initially at Trinity College under D.B.A. Epstein and then under A. Dold at Heidelberg (where he met his wife, Maria). He was a Research Associate at Cornell University (1965-1967), a Lecturer at the

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University of Hull (1967-1969) and a Lecturer at University College London (1969-1979). He returned to Cambridge as a University Lecturer and Fellow of Robinson College in 1979.

Charles Thomas' research concerned the interplay between algebra (in particular the intricacies of finite group theory), algebraic topology, number theory, the topology of manifolds and various structures in differential geometry. He studied finite group actions on spheres and homotopy spheres and worked on many aspects of the spherical space form problem. His study of 3-manifold groups and Poincaré complexes culminated in his book *Elliptic structures on 3-manifolds*. Work on characteristic classes, classifying spaces and the cohomology of finite groups led to another book; problems on the cohomology of a wide range of types of group were a continuing interest to him. In two papers in the 1970s Charles was one of the first to note the significance of contact structures on smooth manifolds. He returned to this topic with renewed vigour some twenty years later when contact and symplectic structures became fashionable. Aspects of his research led to his writing books on elliptic cohomology, on differential manifolds (written with D. Barden) and on representation theory. He edited the volumes of the proceedings of several meetings he had organised and was particularly proud to be co-editor of a selection of the works of J.F. Adams, whom he particularly admired.

Several of Charles' former PhD students now propagate his high standards to students of their own. Charles valued academic excellence. A list of his mathematical achievements gives only a limited impression of his intellect.

He spoke something of most of the main European languages and was fluent in French and German. He translated into English four mathematics books from German and one from French. He could converse on any academic subject but had a passion for medieval

European and Byzantine history. Whilst giving first priority to research, Charles did his share of university administration. Recently, he was Chairman of the Faculty Board and editor of the *Mathematical Proceedings of the Cambridge Philosophical Society*. His careful lecturing was illuminated by his immaculate handwriting on the blackboard and on duplicated notes; an occasional stutter allowed the student a moment to catch up. He planned in his retirement to continue his work partly in Cambridge, partly in California at Santa Cruz. His wife, two sons, a daughter and a very new grandson survive him.

Raymond Lickorish

VADIM KUZNETSOV

Dr Vadim B. Kuznetsov, a Reader in the School of Mathematics, University of Leeds, who was elected a member of the London Mathematical Society on 12 February 1999, died on 16 December 2005, aged 42.

Dr Kuznetsov was a mathematician of considerable distinction, whose current research held every promise of further innovative and exciting discoveries. A graduate of Leningrad University, he held appointments in Holland, Denmark and Canada before joining the Department of Applied Mathematics in Leeds in 1996, as a post doctoral research fellow on an EPSRC-funded project. The project proved very successful and in 1999 Dr Kuznetsov was awarded a prestigious 5-year Advanced Fellowship by the EPSRC in order to continue the work. He was also successful in his application for a University Research Fellowship, to run concurrently with the EPSRC award. In 2003 Dr Kuznetsov was promoted to Reader in Applied Analysis.

Dr Kuznetsov enjoyed a very strong international reputation in the field of integrable systems and was responsible for a number of fundamental contributions to the development of Separation of Variables techniques

by exploiting the methods of integrability. He published extensively in the leading journals and was frequently invited to speak at conferences and other universities; his clarity of exposition at such gatherings was much admired. Dr Kuznetsov was very well liked and respected within the School of Mathematics, where his loss will be very keenly felt – as, indeed, it will be by the international mathematics community as a whole. Dr Kuznetsov is survived by his wife Olga and son Simon.

RAOUL BOTT

Raoul Bott, Honorary Member of the London Mathematical Society (1976) and Hardy Lecturer (1985), died on 20 December 2005, aged 82.

He was born in Budapest and grew up in the Hungarian part of Slovakia. He emigrated in June 1939, first to England and then in July 1940 to Canada, where he went on to study Engineering at McGill University. After a PhD at the Carnegie Institute in Pittsburgh he was invited by Hermann Weyl to spend time at the Institute for Advanced Study in Princeton, after which he took a post at the University of Michigan at Ann Arbor. In 1960 he was appointed Professor at Harvard, where he remained for the rest of his working life, including a spell (together with his wife Phyllis) as Master of Dunster House.

Bott worked in the area between algebraic topology and analysis, starting with his application of Morse Theory to the topology of Lie groups. His most spectacular result was his discovery of the periodicity theorems for the stable homotopy of the classical groups. This had major repercussions and laid the foundations for the development of K-theory.

Raoul and I collaborated extensively over more than twenty years, publishing a dozen joint papers on a variety of topics, including an extension of the Lefschetz fixed point the-

orem to elliptic operators, lacunas for hyperbolic differential operators and moduli spaces for vector bundles over Riemann Surfaces.

He was a natural teacher who attracted a string of brilliant students, two of whom (Stephen Smale and Daniel Quillen) went on to win Fields Medals. By his research, his lectures and his personal encouragement he influenced a whole generation of geometers and topologists.

In recent years he took a keen interest in current developments in theoretical physics and devoted considerable effort to educate physicists in the relevant parts of geometry and topology.

Bott received many honours including the US National Medal of Science and the Wolf Prize. He was a member of the US National Academy of Sciences and a Foreign Member of the French Académie des Sciences.

Michael Atiyah

BAMC 06

The Registration and Call for Abstracts webpages for the British Applied Mathematics Colloquium (BAMC06), to be held at Keele between 24-27 April, are now open at www.keele.ac.uk/bamc06.

Registration can be processed as individuals or groups. The group registration is designed to cater for collections of standard participants from a given institution and allow for the submission of a single invoice to the appropriate finance source within that institution.

In keeping with tradition research students are especially invited to attend and present their work in front of an expert, yet sympathetic, audience. With the support of the London Mathematical Society the registration fee for research students is significantly reduced. As an additional incentive SIAM-UKIE are sponsoring prizes for the best three presentations and the best poster.

LMS RESEARCH MEETINGS COMMITTEE

LMS Durham Research Symposia

The LMS Research Meeting Committee is responsible for the planning of the LMS Durham Symposia, which have been running successfully each July/August since 1974, with over 80 symposia to date, in a wide range of mathematical disciplines. In 2006 there will be two Durham Symposia, both supported by EPSRC.

- 3-13 July: Dynamical Systems and Statistical Mechanics (organisers: C. Beck, C. Dettmann, M. Pollicott)
- 11-21 August: Methods of Integrable Systems in Geometry (organisers: F. Burstall, S. Dorfmeister, M. Guest, F. Pedit)

Further information on the first symposium may be obtained from c.beck@qmul.ac.uk, and on the second one from john.bolton@durham.ac.uk.

- The most recent symposia have been:
- 2005 Conformal field theory and string theory (P. Bowcock, P. Dorey, K. Wendland)
 - 2005 Operator theory and spectral analysis (B. Davies, Y. Safarov, E. Shargorodsky)
 - 2004 Mathematical genetics (R. Griffiths, G. McVean)
 - 2004 L-functions and Galois representations (D. Burns, K. Buzzard, J. Nekovář)
 - 2004 Topological solitons and their applications (L. Brizhik, R. Ward, W. Zakrzewski)

The Durham website (www.maths.dur.ac.uk/events/Meetings/LMS) contains information about all previous and forthcoming symposia including, in many cases, a list of participants, abstracts of talks, a symposium photograph, and, for more recent symposia, videos of the talks.

Detailed proposals for symposia are made at least two years ahead. For each symposium an application is made to EPSRC for a substantial research grant, to cover the subsistence costs of all invited participants, and some travel. Considerable assistance is available in preparing the scientific and financial

case for the proposals, and in the running of the symposium itself. More information about Durham Symposia is available on the LMS website (www.lms.ac.uk/activities/research_meet_com).

The LMS Research Meetings Committee welcomes ideas for symposia for 2008 and later, from potential organisers and others, who should contact the Chairman of the Committee, Professor A.J. Scholl (a.j.scholl@dpmms.cam.ac.uk).

Research Workshops

As well as the successful series of Durham Research Symposia the Research Meetings Committee supports research workshops. These may be held anywhere in the UK, and are an opportunity for a small group of active researchers to work together for a concentrated period on a specialised topic. Possible aims could include:

- to understand an important new piece of mathematics in an area where the participants hope to make further progress;
- to make progress on a particular problem;
- to combine expertise to shed new light on a specific area.

There is no prescribed format for an LMS workshop, but it is expected that the number of participants will be usually no more than 40, and could be as low as 10, meeting for a period of a week or more. All participants should be actively involved in the programme, and should be identified in the proposal; the participation of appropriate post-docs and graduate students is encouraged. Applications to support development of research in an area not ready for a larger-scale application (either to LMS or EPSRC) are welcomed. All proposals are refereed, and the Committee will offer support only if it believes that the benefits to UK mathematics are likely to be significant.

Requests for support (for travel and subsistence of participants, and reasonable associated costs) in the range £4k - £12k will be con-

sidered by the Committee. Applications for partial support for larger events will only exceptionally be supported. The primary purpose of the scheme is to support new research initiatives, and the Committee may take this into account in considering support for meetings which form part of an established series. Grant requests for conferences should be made to the Society's Programme Committee instead, which has funds for this purpose.

Applications should be sent by email to adminoff@lms.ac.uk; there is no application form. Proposals should contain a description of the research area, the aims and format of the workshop, a list of participants and a budget, as well as details of proposed location and timing. Applicants are advised to consult the Research Meetings Committee Chair, Professor A.J. Scholl (a.j.scholl@dpmms.cam.ac.uk), informally about their proposed programme and timescale before making an application.

INTERNATIONAL COUNCIL FOR SCIENCE

The 28th International Council for Science (ICSU) General Assembly, convened every three years, took place in Suzhou, China, on 18-21 October. It was attended by representatives from 63 National Members and 25 Scientific Unions and was superbly hosted by the China Association for Science and Technology (CAST).

The Assembly debated and unanimously approved ICSU's Strategic Plan 2006-2011. This ambitious plan, which is the culmination of an extensive series of international reviews and consultations over the past three years, is now available online and will be distributed in hard copy in January 2006.

Scientific highlights from the Assembly included:

- Establishment of the International Polar Year, 2007-2008.
- Planning for a new interdisciplinary programme on Natural and Human-induced

Environmental Hazards and Disasters.

- The development of a new Scientific Data and Information Forum (SciDIF) to help implement a more coordinated approach across different scientific disciplines and countries.
- ICSU will play a more proactive role in monitoring and advising on issues that influence the Universality of Science. A new policy Committee on Freedom and Responsibility in Conduct of Science will be established.

The General Assembly adopted three resolutions. The first recognises the importance of working more closely with social sciences in order to achieve ICSU's scientific goals. The second reaffirms its rejection of pseudo-science and endorses the teaching of evolution. ICSU takes a stand against the teaching of creationism and intelligent design as if they were scientific alternatives.

At the end of the meeting, Goverdhan Mehta (India) took over the presidency from Jane Lubchenco (USA) for the next three years, and Catherine Bréchnignac (France) was elected to take over as President in 2008. The General Assembly elected a new Executive Board, with Khotso Mokhele (South Africa) and Hernan Chaimovich (Brazil) serving as Vice-Presidents for the next three years. Ana Maria Cetto (Mexico) was re-elected Secretary General and Roger Elliott will serve another term as Treasurer.

New Members

International Scientific Union Members:

- International Union of Materials Research Societies (IUMRS)
- International Union of Forest Research Organizations (IUFRO)
- International Union for Quaternary Science (INQUA)

National Scientific Member:

- Mauritius Research Council

Scientific Associate:

- International Commission for Optics (ICO)



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Applications are invited for two Lectureships, which are available from 1 September 2006. One Lectureship will be at Lecturer A grade and the second from within Lecturer A/B grades depending upon qualifications and experience. Candidates must hold a PhD, should have research strengths in some branch of Pure Mathematics and be committed to high-quality teaching. The Division of Pure Mathematics has been given the highest numerical grade in every Research Assessment Exercise to date.

Each post attracts a special HEFCE-funded 'Golden Hello' to the value of £9K, subject to individuals satisfying the eligibility criteria.

Informal enquiries to Professor V.V. Goryunov, Head of Division of Pure Mathematics on 0151 794 4041, email: goryunov@liv.ac.uk Visit the Department's website www.liv.ac.uk/math

Quote Ref: B/641

Closing Date: 22 February 2006

Further particulars and details of the application procedure should be requested from the Director of Personnel, The University of Liverpool, Liverpool L69 3BX on 0151 794 2210 (24 hr answerphone), via email: jobs@liv.ac.uk or are available online at www.liv.ac.uk/university/jobs.html.

UNIVERSITY of GLASGOW

DEPARTMENT OF MATHEMATICS

Professor in Geometry or Topology – Thomas Muir Chair

You should have an outstanding record of academic achievement and publication in an area of Geometry or Topology. You will be expected to participate fully in the research, teaching and management of a dynamic and broad-based department, that scored 5 in both Pure and Applied Mathematics in the 2001 Research Assessment Exercise. In particular, you will be expected to play a key leadership role in the development of geometry and topology research in the department. This post is available from 1st July, 2006 and the starting date is negotiable.

Ref 11884/HRS/A1.

Potential candidates are encouraged to make informal enquiries to Professor Nick Hill (tel.0141 330 4258, email N.A.Hill@maths.gla.ac.uk) or Professor Ken Brown (tel.0141 330 5180, email K.A.Brown@maths.gla.ac.uk)

Lectureship/Senior Lectureship/Readership in Applied Mathematics

£24,352 – £36,959 (Lecturer) or £38,685 – £43,850 (Senior Lecturer/Reader)

You should have a commitment to enhancing the strong research profile of the Applied Mathematics Group in the Department. Preference may be given to those with research interests that will strengthen our activity in Elasticity, Fluid Dynamics & MHD, and Mathematical Biology.

You will participate fully in the research and teaching of a dynamic and broad-based department. **Ref 11883/HRJ/A1.**

Potential candidates are encouraged to make informal enquiries to Professor Nick Hill (tel.0141 330 4258, email N.A.Hill@maths.gla.ac.uk)

For further information about the Department, see our website at: <http://www.maths.gla.ac.uk>

For application packs, please see our website or write quoting appropriate reference to the Recruitment Section, Human Resources Department, University of Glasgow, Glasgow G12 8QQ.

Closing date for both positions: 3 March 2006.

The University is committed to equality of opportunity in employment.

www.gla.ac.uk



VISIT OF PROFESSOR A.I. SAKHANENKO

Professor A.I. Sakhanenko (Sobolev Institute of Mathematics, Novosibirsk, and Ugra State University, Russia) is visiting the School of Mathematical and Computer Sciences at Heriot-Watt University, Edinburgh, from 11-28 February. His visit is supported by a Scheme 2 LMS grant and a travel grant from the Edinburgh Mathematical Society. He will give lectures at Heriot-Watt, the University of Edinburgh and Strathclyde University. Professor Sakhanenko is a specialist in (functional) limit theorems of Probability Theory and Mathematical Statistics. For further information contact Dr Takis Konstantopoulos (takis@ma.hw.ac.uk).

14

CONFERENCE IN HONOUR OF J.A. GREEN

A short conference will take place at the Mathematical Institute of the University of Oxford on Friday and Saturday 3-4 March, to celebrate Sandy Green's 80th birthday. Speakers will be:

- Jon Alperin (Chicago)
- Bernd Fischer (Bielefeld)
- Ian Macdonald (Queen Mary)
- Claus Ringel (Bielefeld)
- John Thompson (Cambridge/Florida).

The organizers are: Michael Collins, Karin Erdmann and Anne Henke. For further information, contact Anne Henke (henke@maths.ox.ac.uk) or visit the website (www.maths.ox.ac.uk/arg/sandy.html).

OWL MEETING

The joint Oxford-Warwick-London (OWL) seminar on Combinatorics and Statistical Mechanics will meet in the Mathematical Institute, University of Oxford, on Tuesday 7 February. The speakers will be Mark

Jerrum (Edinburgh), Roman Kotecky (Warwick and Prague) and Alan Sokal (NYU and London). All are welcome, and we can provide some financial support for students to attend.

This event is part of an Oxford-Warwick-London Series supported by the London Mathematical Society and the British Combinatorial Committee. The first meeting of the series was at QMUL on Friday 12 November, and there will be another meeting in Warwick on Wednesday 3 May. For more information, contact Alex Scott (scott@maths.ox.ac.uk) or see the web page (www.maths.ox.ac.uk/combinatorics/owl.html).

POSTGRADUATE OPEN DAY Loughborough University

The Department of Mathematical Sciences of Loughborough University is holding an Open Day for all prospective MSc, MPhil and PhD students on Wednesday 22 March. Areas of possible supervision at Loughborough include various aspects of Nonlinear Waves, Diffraction Theory, Integrable Systems, Inverse Problems, Spectral Theory, Mathematical Biology, Hamiltonian Dynamical Systems, Materials Modelling, General Relativity, Algebraic Systems Theory, Differential Geometry, Stochastic Analysis and Mathematical Education. Taught MSc courses are also available in Industrial Mathematical Modelling, Mathematical Processes in Biology, Mathematical Processes in Finance and Mathematical Processes in the Environment.

All enquiries should be addressed to Dr E.V. Ferapontov, Department of Mathematical Sciences, Loughborough University (E.V.Ferapontov@lboro.ac.uk). Details can be found on the web (www.lboro.ac.uk/departments/ma/pginfo/openday.html).

POSTGRADUATE GROUP THEORY CONFERENCE

The School of Mathematics at the University of Southampton is holding the 8th Postgraduate Group Theory Conference from the 19-21 April 2006. Invited speakers:

- Derek Holt (Warwick)
- Peter Cameron (Queen Mary College)

The principal aim of the conference is to give a forum for postgraduate students currently researching group theory and related areas to present and discuss their research in a group of peers. It also serves as a means of introducing graduate students to unfamiliar topics within group theory, in the hope of catalysing future research. The conference provides a safe environment for those new to speaking at conferences, and helps to establish and preserve communication between different departments. We hope that our invited speakers will stimulate, inspire and provide some insight into their subject.

Registration and further details are available at the conference website: www.maths.soton.ac.uk/~cl1/PGTC2006. The organisers are: Cormac Long (Southampton), Richard Bayley (Queen Mary) and Graham Oliver (Leicester).

ATLANTIC ASSOCIATION FOR RESEARCH IN THE MATHEMATICAL SCIENCES

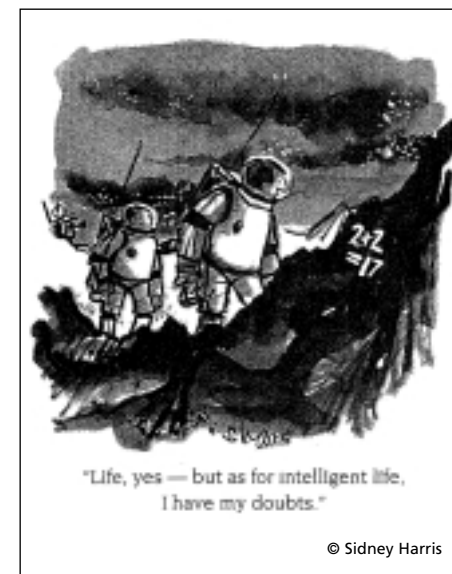
The fifth annual Summer School sponsored by the Atlantic Association for Research in the Mathematical Sciences (AARMS) will take place at Dalhousie University in Halifax, Nova Scotia, from 16 July – 12 August 2006. The School, which annually offers courses in the mathematical sciences and their applications, is intended for graduate students and promising undergraduate students from all parts of the world.

Each participant is expected to register for two courses. Each course will consist of five ninety-minute lectures per week. These are Dalhousie graduate courses and we will facilitate transfer of credits to the extent possible. For 2006 the following courses are planned:

- *Elliptic curve cryptography* Mark Bauer (University of Calgary)
- *Massive networks and internet mathematics* Anthony Bonato (Sir Wilfrid Laurier University)
- *Introduction to algebraic geometry* Rick Miranda (Colorado State University)
- *Introduction to wavelet theory and numerical applications* Anita Tabacco (Politecnico di Torino)

For more information, or to express interest in attending, send e-mail to Professor Tony Thompson (tony@mathstat.dal.ca) and/or visit the school's web site: www.mathstat.dal.ca/~aarms/summerschools.

15



INTERNATIONAL MATHEMATICS COMPETITION

The 13th International Mathematics Competition (IMC) for university students is being co-organized by University College London and the Odessa I.I. Mechnikov National University, Ukraine, and will take place from 20-26 July 2006. Every participating university is invited to send several students and one teacher. Individual students are welcome. The competition is aimed at students completing their first, second, third or fourth year of university education and will consist of two 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

- 20 July Arrival and registration
- 21 July Opening ceremony, additional registration, meeting of the jury
- 22 July First exam day
- 23 July Second exam day
- 24 July Meeting of the jury
- 25 July Closing ceremony, final dinner
- 26 July 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 twelve competitions we have had participants from one hundred and thirty-nine universities in thirty-five countries.

Selection of the Problems The problems will be chosen at the meeting of the Jury on 21 July 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 eleven competitions can give a general idea of the level expected (see the IMC website www.imc-math.org.uk). 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, either by on-line registration or by email, by the end of May 2006, providing the following information: University: City, Country: Leader of the team (name, email address): Students (number): Mailing address: e-mail address: Fax.

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

Local expenses The competition fee, which will include accommodation and meals from dinner on 20 July to breakfast on 26 July, has not yet been finalized.

Please send all confirmations of participation and arrival details to John Jayne, IMC President, Department of Mathematics, University College London, Gower Street, London WC1E 6BT (j.jayne@imc-math.org). If you would like a copy of the competition poster, please send your request with postal address. For further information visit the website www.imc-math.org.uk.

[Ed. Note: This competition is separate from the IMO – see pp 18-19, Dec '05 Newsletter.]




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Department of Mathematics Chair in Pure Mathematics

Imperial College
London

Applications are invited for a Chair in Pure Mathematics, with effect from 1 October 2006, or as soon as possible thereafter. Preference will be given to the field of Analysis.

The Pure Mathematics section was one of only two in the UK to gain the top 5* rating in both of the two most recent Research Assessment Exercises. Further information about the department can be found at the website www.ma.imperial.ac.uk.

Salaries for professorial positions are by negotiation.

Further particulars of the post together with application details are available from: www.imperial.ac.uk/employment/academic/index.htm.

Please contact Professor Martin Liebeck, Head of the Pure Mathematics Section, if you would like to discuss this post informally. Phone: +44 (0)20 7594 8490, email: m.liebeck@imperial.ac.uk.

Closing date: 1 March 2006

Valuing diversity and committed to equality of opportunity.

THE FIELDS INSTITUTE

Holomorphic Dynamics, Laminations, and Hyperbolic Geometry

4 January – 30 June 2006: Organizers: Bruce Kleiner (Michigan), Mikhail Lyubich (Toronto and SUNY Stony Brook), Yair Minsky (Yale), Mike Shub and Michael Yampolsky (Toronto)

Coxeter Lecture Series

Yair Minsky, Yale University, 27-29 March

Workshops:

- *Holomorphic dynamics* 7-11 March
- *Hyperbolic geometry* 23-27 May

Cryptography

1 July – 31 December: Organizers: Ian F. Blake (Toronto), Alfred Menezes (Waterloo), Michele Mosca (Waterloo and Perimeter Institute), Kumar Murty (Toronto), Andreas Stein (Wyoming), Renate Scheidler (Calgary), Ramarathnam Venkatesan (Microsoft), Hugh Williams (Calgary).

Workshops:

- *Cryptography summer school* 19 June – 11 July (University of Wyoming)
- *Algebraic curves in cryptography* (The 10th Workshop on Elliptic Curve Cryptography) 18-20 September
- *Quantum cryptography and computing* 2-6 October
- *Computational challenges arising in algorithmic number theory and cryptography* 30 October – 3 November
- *Cryptography: underlying mathematics, provability and foundations* 27 November – 1 December

Nonprogrammatic workshops:

(at the Fields Institute unless otherwise indicated)

- *Mathematical aspects of quantum adiabatic approximation* 9-11 February (Perimeter Institute)

- *Lie algebras* 24-26 March (University of Ottawa)
- *Numerical, mathematical and modeling analysis related to fluid dynamics in hydrogen fuel cells* 10-12 May (University of Ottawa)
- *Ottawa-Carleton discrete mathematics* 12-13 May (Carleton University)
- *Covering arrays* 14-16 May (Carleton University)
- *Probabilistic symmetries and their applications* 15-17 May (University of Ottawa)
- *Random walks in random environments* 15-20 May
- *Actuarial research day* 1 June (University of Western Ontario)
- *Applied probability* 1-3 June (Carleton University)
- *Xenakis legacies symposium* 8 June (University of Guelph, Perimeter Institute, and the Fields Institute)
- *Digital mathematical performance* 8-11 June (University of Western Ontario)
- *Mathematical modeling of infectious diseases summer school* 10-20 June 2006 (York University)
- *Valuation theory and integral closures in commutative algebra* 3-22 July (University of Ottawa)
- *Computational commutative algebra* 24 July – 4 August
- *Modeling and optimization: theory and applications* (MOPTA 06) 24-27 July (University of Waterloo)
- *Canadian computational geometry conference* (CCCCG) 14-16 August (Queen's University)
- *Geometric methods in group theory* 16-19 August (Carleton University)
- *Lorenz-Gini type asymptotic methods in statistics* 31 August – 2 September (Carleton University)

Visit www.fields.utoronto.ca for details and application procedures.

The Return Campaign

The UK Resource Centre for Women in Science, Engineering and Technology (SET) has recently launched the Return campaign. We hope to help up to 1000 women return to careers in SET over the next three years by connecting them to a host of free services and support, including training, courses, mentoring schemes and networking organisations.

As part of the Return Campaign, the Open University is offering a free on-line course called *Science, Engineering and Technology: A Course for Women Returners* (T160).

The course starts in October and February and will run until 2007. It will help women plan their return and update skills. The course also provides opportunities to attend networking events and meet potential employers, role models and mentors.

To find out more about how you could benefit from Return services contact the UK Resource Centre for Women in Science, Engineering and Technology today and ask about Return.

Tel: National Helpline: 01274 436485
Email: setwomenresource@bilk.ac.uk
Web: www.setwomenresource.org.uk

WOMEN IN MATHEMATICS DAY 2006

The next Women in Mathematics Day will be held on 28 April at De Morgan House. While the event is an occasion particularly for women active in mathematics to get together, men are certainly not excluded. Sessions will include talks by practising women mathematicians in a variety of appointments and at different career stages.

One aim of this meeting is to provide encouragement to women approaching the various interfaces – undergraduate/postgraduate, PhD/Postdoctoral and so on – to stay in mathematics; we hope that an opportunity to see women who are active and successful in mathematics and to meet them informally will have a positive effect on this problem. Feedback from previous meetings has shown

that this is one of the aspects of the Women in Mathematics Days that participants say has made a difference to them.

The organisers would be very grateful if all members could encourage women mathematicians, particularly students (including final year undergraduates) and those at an early stage in their career, to attend this meeting. Anyone interested in giving a postgraduate talk should contact Malwina Luczak (m.j.luczak@lse.ac.uk).

Limited funds are available to help with the travel costs of postgraduates attending the event. Further details are available from Isabelle Robinson at the Society (contact details below).

For further information about the event, or to register to attend, please contact Isabelle Robinson (email:robinson@lms.ac.uk, tel: 020 7929 9979).

LONDON MATHEMATICAL SOCIETY

Cecil King Travel Scholarship

The London Mathematical Society annually awards a Cecil King Travel Scholarship in Mathematics to the value of £5000 to a young mathematician of outstanding promise, to support a period of study or research abroad for a typical period of three months. Many mathematicians have found that such a visit has benefited both their mathematics and their career; the Society urges young mathematicians and their supervisors seriously to consider this opportunity.

The award is competitive and based on a written proposal describing the intended programme of study or research abroad and the benefits to be gained from such a visit.

Applicants should normally be nationals of the UK or Republic of Ireland, under the age of 25 years, either registered for or having recently completed a doctoral degree at a UK University.

The initial application should include:

- a completed application form;
- a short proposal (4 pages maximum) indicating the proposed programme of study abroad, the benefit of such an opportunity in advancing the candidate's studies, and the Institution that the candidate wishes to visit;
- a letter of support from the applicant's Head of Department, or from his or her Research Supervisor.

Candidates selected for interview will be asked to approach the intended research institution or research leader to be visited, to confirm that a visit would indeed be welcomed if an award were made.

At the end of the Scholarship, the student will be expected to write a short report indicating the activities and benefits gained from the visit.

The Cecil King Travel Scholarship was established in 2001 by the Cecil King Memorial Fund. The award is made by the Council of the London Mathematical Society on the recommendation of the Cecil King Prize Committee, nominated by the Society's Education Committee.

Application forms for the 2006 Scholarship are available on the Society's website (www.lms.ac.uk/activities/cecil_king/index.html) or from Isabelle Robinson at the Society (robinson@lms.ac.uk). The closing date for applications is **Friday 10 February 2006**.

ISAAC NEWTON INSTITUTE FOR MATHEMATICAL SCIENCES CONSTRAINTS AND VERIFICATION

8 – 12 May 2006

in association with the Newton Institute programme entitled
Logic and Algorithms (16 January – 7 July 2006)

Organisers: Andreas Podelski (MPI, Saarbrücken) and Moshe Vardi (Rice).

Theme of workshop: In recent years there has been an increasing interest in the application of constraint-programming and constraint-solving technology to the verification of hardware and software systems. Constraint solvers for Boolean (SAT) and arithmetic domains (Presburger, polyhedra, linear constraints) are widely used as subprocedures of various model checkers. Constraint solving is also used for computing static analysis of programs with numerical data variables and concurrent systems. Constraints are also used extensively in automated test generation. The aim of this workshop is to bring together researchers working in constraints and verification and to investigate the theoretical foundations, new applications, and future developments in this area.

Speakers: Ed Clarke (CMU), Patrick Cousot (ENS), Enrico Giunchiglia (U. Genoa), Ziyad Hanna (Intel), Marta Kwiatkowska (Birmingham U.), Zohar Manna (Stanford), Ken McMillan (Cadence), Yehudah Naveh (IBM), Jean-Francois Puget (ILOG) and Pierre Wolper (U. Liège).

Location and cost: The conference will take place at the Newton Institute and accommodation for participants will be provided in single study bedrooms with en suite bathroom at New Hall. The conference package, costing £485, includes accommodation and breakfast from Sunday 7 May to lunch on Friday 12 May, and refreshments during the days that lectures take place. Participants who wish to attend but do not require the Conference Package will be charged a registration fee of £85. Self-supporting participants are very welcome to apply.

Further information and application forms are available from the web at: www.newton.cam.ac.uk/programmes/LAA/laaw05.html. Completed application forms should be sent to Tracey Andrew, Programme & Conference Secretary, Isaac Newton Institute, 20 Clarkson Road, Cambridge CB3 0EH or via email to: t.andrew@newton.cam.ac.uk.

Closing date for the receipt of applications is **24 February 2006**.

ISAAC NEWTON INSTITUTE FOR MATHEMATICAL SCIENCES

GAMES AND VERIFICATION

Annual Workshop of the Research Training Network
Games and Automata for Synthesis and Validation.

3 – 7 July 2006

in association with the Newton Institute programme entitled
Logic and Algorithms (16 January – 7 July 2006)

Organisers: E. Graedel (Aachen), C-H.L. Ong (Oxford) and C.P. Stirling (Edinburgh).

Theme of conference: Games are pervasive in the theory of computation. Traditionally, they have been used as tools for understanding definability in logic. For example, in the case of finite model theory they provide a mechanism for showing that certain properties are not definable in enrichments of first-order logic that are computationally interesting. A second role is that important algorithmic questions can be couched in terms of games. For instance, model checking properties expressible in modal logic with fixed points is equivalent to deciding which player has a winning strategy in a simple two-player game, the parity game. The exact complexity of this model checking problem is a long standing open problem, and games may help to solve it. In fact more generally, games are useful, as alternating automata, for solving a variety of algorithmic questions about finite and infinite state systems (such as reachability and liveness properties). A third, and much more recent, use of games is the semantics of programming languages. The idea is that the meaning of a program is defined in terms of winning strategies. What is particularly exciting about this approach is that such a semantics is exact in the sense that it is fully abstract.

The aim of the conference is to bring together researchers who work in these different areas. In one direction, there is strong interest amongst the semanticists in understanding algorithmic properties of games in the semantics of programming languages. Researchers have examined fragments of Idealized Algol and shown that program equivalence is decidable by reducing it to equivalent decidable automata theoretic problems. In the opposite direction, there is also strong interest amongst the model checking community to be able to cope with more realistic models of programs than classical automata. The meeting will begin with a number of invited tutorials covering the relevant areas before the more specialist contributed talks.

The conference is also the final annual meeting of GAMES, a research training network funded by the European Community under the Fifth Framework Programme.

Invited speakers: Rajeev Alur (U. of Pennsylvania), Johan van Benthem (U. of Amsterdam), Didier Caucal (IRISA-CNRS), Georg Gottlob (U. of Oxford), Dov Monderer (Technion), Moshe Vardi (Rice U).

Location and cost: The conference will take place at the Newton Institute and accommodation for participants will be provided in single study bedrooms with shared bathroom at Wolfson Court. The conference package, costing £485, includes accommodation, breakfast and dinner from dinner on Sunday 2 July to breakfast on Saturday 8 July, and lunch and refreshments during the days that lectures take place. Participants who wish to attend but do not require the conference package will be charged a registration fee of £40. Self-supporting participants are very welcome to apply.

Further information and application forms are available from the web at: www.newton.cam.ac.uk/programmes/LAA/laaw06.html. Completed application forms should be sent to Tracey Andrew, Programme & Conference Secretary, Isaac Newton Institute, 20 Clarkson Road, Cambridge CB3 0EH or via email to: t.andrew@newton.cam.ac.uk.

Closing date for the receipt of applications is **31 March 2006**.

CALENDAR OF EVENTS

This calendar lists Society meetings and other events publicised 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 on the Society's website (www.lms.ac.uk/meetings/calendar.html).

FEBRUARY 2006

- 1 Gresham College Geometry Lecture, London (343)
- 3 Kolmogorov Lecture, Royal Holloway, University of London (344)
- 7 OWL Meeting, Combinatorics and Statistical Mechanics, Oxford (345)
- 10 LMS Meeting, Mary Cartwright Lecture, London (345)
- 17 Postgraduate Open Day, King's College London (344)
- 17 Edinburgh Mathematical Society Meeting, Edinburgh (341)
- 22 Gresham College Geometry Lecture, London (343)
- 26-31 Mar Random Matrix Theory, Singapore (344)

MARCH 2006

- 3-4 Conference in Honour of J.A. Green, Oxford (345)
- 13-17 3-manifolds after Perelman ICMS Workshop, Edinburgh (342)
- 17 Edinburgh Mathematical Society Meeting, Dundee (341)
- 22 Postgraduate Open Day, Loughborough University (345)
- 27-31 Mathematical Population Genetics ICMS Workshop, Edinburgh (342)
- 27-7 Apr Non Equilibrium Dynamics of Interacting Particle Systems School, INI, Cambridge (341)

APRIL 2006

- 3-7 Number Theory & Polynomials Workshop, Bristol (344)

- 3-7 Jordan Structures in Analysis & Geometry Conference, Taiwan (342)
- 10-13 BMC, Newcastle University (344)
- 10-13 New Directions in Proof Complexity Workshop, INI, Cambridge (343)
- 11-13 Mathematical Education of Engineers IMA Conference, Loughborough (342)
- 24-27 BAMC, Keele University (345)
- 28 Women in Mathematics Day, De Morgan House, London (345)
- 28 Edinburgh Mathematical Society Meeting, Aberdeen (341)

MAY 2006

- 1-30 Jun Random Graphs and Large Scale Real World Networks, Singapore (343)
- 2 Gresham College Geometry Lecture, City of London School, London (343)
- 8-12 Constraints and Verification Conference, INI, Cambridge (345)
- 8-19 Combinatorics, Automata & Number Theory Conference, Liège, Belgium (339)
- 15 LMS Midlands Regional Meeting, Leicester (345)
- 26 Edinburgh Mathematical Society Meeting, St Andrews (341)

JUNE 2006

- 1-30 Jul Algorithmic Biology, Singapore (344)
- 6-30 First Passage & Extreme Value Problems in Random Processes Conference, INI, Cambridge (340)
- 13-16 Mathematics of Finite Elements & Applications Conference, Brunel University (336)
- 14-17 SING 2 & IMGTA, Foggia, Italy (342)
- 16 LMS Meeting, London
- 19-23 Quantile Regression ICMS Workshop, Edinburgh (342)
- 19-30 Combinatorial Optimization SMS NATO Summer School, Canada (343)
- 25-2 Jul Junior Mathematical Congress 2006, Romania (340)
- 26-30 Applied Asymptotics & Modelling ICMS Workshop, Edinburgh (342)

KLAUS FRIEDRICH ROTH
DE MORGAN MEDALLIST
1983



Based on the citation: An irrational number a can be relatively well approximated by rational numbers. There exist rational p/q with q as large as we please such that $|a - p/q| < 1/q^2$. Roth showed in 1955 that if a is algebraic then no essentially better approximation is possible. This was the culmination of a long series of results going back to Liouville

in 1844. For this achievement Roth was awarded a Fields Medal at the Edinburgh International Congress of Mathematics in 1958, the first British mathematician to be so honoured. Roth has obtained a number of other notable results. C.L. Siegel wrote: 'As long as men do mathematics the name of Roth will be remembered.'