FORTHCOMING SOCIETY MEETINGS

Friday 21 June 1996, Linnean Society, London
C.J. Bushnell, R.L. Taylor
Friday 18 October 1996, Linnean Society, London
Cayley-Sylvester Centenary Meeting on Invariant Theory
W.P. Barth, C. de Concini, F.C. Kirwan, R. Howe
Friday 15 November 1996, Linnean Society, London
Annual General Meeting
E. Witten, N.J. Hitchin (Presidential Address)
Friday-Saturday 21-22 February 1997 - Oxford
Group Theory
Friday-Saturday 23-24 May 1997 - Liverpool

SCHOOL MATHEMATICS

Following the publication of the report "Tackling the Mathematics Problem", the LMS President wrote to the Secretary of State to press for the establishment of a committee with an overview of all of school mathematics. In her reply, Mrs Shephard said that she did not see the value of such a committee. This was not surprising; we know there is opposition to the idea in high places. Two things about her reply were surprising, however. The first was that she said she was writing to the heads of OFSTED, SCAA and the TTA for their views on the issues we had raised and that she was expecting their replies soon. This was the first official reaction that was openly in response to the report, rather than claiming to be something already in progress. The second was that she made her reply public as part of a press release, thus indicating the importance that she attaches to the issue.

The heads of the three agencies have now replied, and Mrs Shephard has copied their responses to Professor Hitchin.

There was not the same publicity this time, though she did make it clear that the contents are not confidential. The consensus of those who have seen the letters is that they contain nothing that suggests that the three agencies either accept the report's findings about school mathematics or are planning the sorts of measures that we believe are necessary. Professor Hitchin has written again to Mrs Shephard to put this view, and the Education Committee is preparing a memorandum dealing with the various points raised in the letters. It's hard to judge how things really stand. There are meetings taking place involving SCAA in which LMS members are cooperating, and SCAA has already announced several small changes. All we can do is to keep up sufficient pressure to make sure that the mathematics problem doesn't get pushed onto the back burner, while recognising that it is bound to be some time before we will see much happening.

P.T. Saunders

LMS 1996 HONORARY MEMBER

The election of Professor J.K. Moser of the ETH, Zürich, as an Honorary Member of the London Mathematical Society was confirmed at the Society Meeting on 10 May 1996. The citation drew attention to Professor Moser's work on dynamical systems, PDE theory, and Riemannian geometry, and also to his contributions to analytic aspects of complex, symplectic and differential geometry, and to mapping problems and the theory of local invariants in many complex variables.

LMS INVITED LECTURES 1996

This year's invited lecture series consisted of ten lectures on the methods of geometric measure theory given by Professor F.J. Almgren of Princeton University. Lectures were well attended with approximately forty colleagues from various parts of Europe present.

The lectures covered a fascinating variety of topics including minimal surfaces, crystal growth, soap bubbles and how geometric measure theory may be used to model these phenomena. Several lectures were spent developing the theory of integral currents (introduced by Federer and Fleming in 1960); these generalise the notions of smooth surfaces usually considered in elementary differential geometry.

One of the most exciting aspects of geometric measure theory is the large number of open problems which exist: many are simple to state and yet appear utterly intractable. For example, what is the stable configuration of three touching soap bubbles of equal volume? The apparent solution is readily found - a few minutes blowing bubbles quickly reveals it - but an analytical proof is still lacking. (The case for two bubbles has recently been solved but involved many delicate numerical integrations and it would be nice if a neater proof could be found.) Similarly there is no proof that the hexagonal partition of the plane (used by bees) is the optimal one (in the sense of least energy).

Almgren's presentation was clear and concise. He concentrated on presenting the key ideas in the proofs of the major theorems in a visually appealing and geometrically intuitive manner. His friendly and open manner made listening to the lectures a delight. His willingness to give informal seminars outside the official lecture timetable helped to clarify and resolve issues raised in the lectures.

By the end of the week I was left with an appreciation of the many beautiful ideas and techniques employed in this stimulating area of mathematics and I now have a new resolve to at last finish reading Federer's 1969 classic, 'Geometric Measure Theory'.

Toby O'Neil
St Andrews

EUROPEAN CONGRESS OF MATHEMATICS
LMS Reception

The London Mathematical Society will be holding a Meeting and Reception, for its members, during the 2nd European Congress of Mathematics at 6.30 pm on Wednesday 24 July at the Technical University, Budapest. Members who wish to attend should apply for their free ticket to the Administrator, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL (e-mail: lms@lms.ac.uk) no later than 10 July. The Society hopes to entertain as many as possible of its members who are attending the European Congress, but numbers are limited by the capacity of the room.

DEPARTMENTAL NEWS

Nottingham Trent University Dr Vassily Kolokoltsov, formerly of the Moscow Institute of Electronics and Mathematics and the Ruhr University, Bochum, has been appointed as a Reader in Mathematics. Dr M.J. Baxter has been awarded the title of Reader in Archaeostatistics.

LONDON MATHEMATICAL SOCIETY

FRIDAY 21 JUNE 1996

Professor R.L. Taylor, FRS (Oxford)
will speak at 3.30 pm on

Modular forms and Galois groups

Professor C.J. Bushnell (London)
will speak at 5.00 pm on

Representation theory of p-adic groups
- structural considerations
(1995 Senior Whitehead Prize Lecture)

Tea will be served at 4.30 pm

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

All interested are very welcome

VISIT OF PROFESSOR E.I. GORDON

Professor E.I. Gordon of Nizhny Novgorod State University will visit the UK in July-August under the LMS fSU scheme. He will participate in the International Workshop on Nonstandard Analysis and its Applications, being held at the ICMS Edinburgh from 14 July to 10 August, and also the International Symposium that follows it, 11 - 17 August. Professor Gordon's research interests include mathematical logic, Boolean-valued analysis, and he has made distinctive contributions to harmonic analysis on locally compact abelian groups using nonstandard analysis.

The Research Workshop, organised by N.J. Cutland (Hull), L. Arkeryd (Göteborg) and C.W. Henson (Illinois) will have periods of emphasis on the following topics: Probability, stochastic analysis and mathematical physics; Mathematical finance and economics; Functional analysis, differential equations, topology and foundations. Participants will include leading world experts in the use of nonstandard methods and also leading 'standard' experts, with the aim of increasing awareness of the potential of nonstandard methods and the range of problems of mathematics where they might be applicable. For information about participation, please contact Nigel Cutland (n.j.cutland@maths.hull.ac.uk; fax 01482 -466218).

RETIREMENT OF JOHN TAYLOR

A meeting is being held on Monday 17 June, to mark the retirement of Professor John Taylor. It will begin at 2 pm in the New Lecture Theatre, King's College London. There will be lectures by P. Bressloff (Loughborough), T. Clarkson (King's) and J. Polkinghorne (Cambridge). After tea, there will be a public lecture by W. Freeman (Berkeley). The topics will range from physics to consciousness. It would be appreciated if those planning to attend would contact Ms D. Khan at the Department of Mathematics, Kings College, London WC2R 2LS (e-mail: udah034@kcl.ac.uk) who can also supply further details.

VISIT OF PROFESSOR C. GREBOGI

Celso Grebogi (Mathematics Department, University of Maryland, USA) will tour various UK mathematics departments giving a series of lectures in late May and early June. The tour is funded by the North British Differential Equations Seminar (a consortium of UK Mathematics Departments) and by the LMS. The titles of his seminars are: (1) Chaos, strange attactors, and fractal basin boundaries in nonlinear dynamics, (2) Chaos: control and communication, (3) Group properties of shrimps and (4) Numerical trajectories of chaotic systems. The dates and venues in June are: Heriot-Watt (June 3), Dundee (June 4), St Andrews (June 5) and Strathclyde (June 6). All seminars are open to everyone interested, but please contact the local mathematics departments for details of the seminar title, time and exact location. More details (including abstracts) can be found on the WWW (http://www.ma.hw.ac.uk/nbdes/nbdes.html).

VISIT OF DR E.A. PECHERSKII

Dr E.A. Pecherskii (Moscow) will be visiting the UK from 1 to 20 June, supported by the LMS under its fSU scheme. He will be in Cambridge from 1 to 9 and from 15 to 20 June, and in Swansea/Bristol from 10 to 14 June. He will give talks in Cambridge, Swansea and Bristol. For further information, contact Dr Y.M. Suhov (Statistical Laboratory, DPMMS, University of Cambridge, 16 Mill Lane, Cambridge CB2 1SB; tel: 01223-337858), Professor A. Truman (Department of Mathematics, University College Swansea, Singleton Park, Swansea SA2 8PP; tel: 01792-295458) or Dr N. O'Connell (BRIMS, Hewlett-Packard Labs, Filton Road, Stoke Gifford, Bristol BS11 6QZ; tel: 0117-9228216).
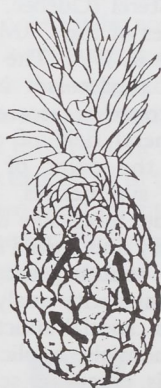
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LONDON MATHEMATICAL SOCIETY

1996 POPULAR LECTURES

Birmingham - Friday 14 June
Imperial College - Tuesday 18 June
Glasgow University- Thursday 20 June

Professor Peter Hilton
New Wine in Old Bottles

"Invented over 700 years ago, of great
importance in the study of plant growth,
the Fibonacci numbers continue to provide
a rich source of mathematical ideas."

8 ↗ ROWS   13 ↖ ROWS   21 ↗ ROWS

Professor Michael Sewell
Bubbles and Dinosaurs

"Simple ideas in mechanics, combined
with homely experiments, show how
mathematical thinking can tell us about
the equilibrium of bubbles and balloons,
and the motion of dinosaurs."
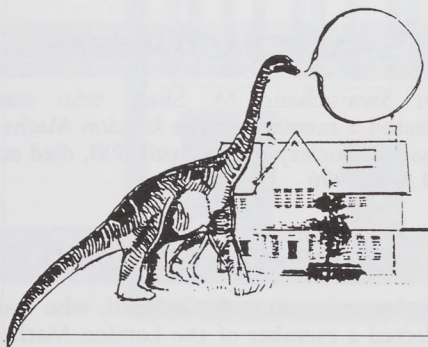
BIRMINGHAM UNIVERSITY Commences at 2.00 pm, 3.00-4.00 pm refreshments, ends at 5.00 pm. Haworth Lecture Theatre, Chemistry Building, University of Birmingham. Admission is free. Enquiries to Dr A.D. Gardiner, Department of Mathematics, University of Birmingham B15 2TT.

IMPERIAL COLLEGE LONDON Commences at 7.30 pm, 8.30 pm refreshments, ends at 10.00 pm. The Mechanical Engineering Building, Lecture Theatre Room 220, Imperial College, South Kensington, London SW7. Admission free, with ticket in advance. Apply by Friday 14 June to Miss S.M. Oakes, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL. A stamped addressed envelope would be appreciated.

GLASGOW UNIVERSITY Commences at 2.00 pm, 3.00 pm refreshments, ends at 4.30 pm. Western Infirmary Lecture Theatre, University Place, University of Glasgow. Admission is free. Enquires to Dr P. Heywood, Department of Mathematics & Statistics, James Clerk Maxwell Building, The King's Buildings, Edinburgh EH9 3JZ; e-mail: philip@maths.ed.ac.uk.

SYMMETRIES AND INTEGRABILITY OF DIFFERENCE EQUATIONS CONFERENCE

A meeting on Symmetries and Integrability of Difference Equations (SIDE II) will be held at the University of Kent at Canterbury from Monday 1st July to Friday 5th July 1996. This conference is the successor of the meeting on the same topics held in Estérel (Québec, Canada), under the auspices of the CRM (University of Montréal) in 1994. The proposed meeting, like its predecessor in Estérel, aims at bringing together researchers who work in the general field of difference equations from the point of view of integrability and symmetries. Topics to be covered include: integrable dynamical mappings, ordinary and partial difference equations, lattice solitons, discrete Painlevé equations, singularity analysis, symmetry reductions, special functions and orthogonal polynomials, applications to numerical analysis, computer science and physics. The meeting is meant to be of an interdisciplinary nature and serves as a source of contact between the different disciplines. Speakers include: M Ablowitz (Boulder, Colorado), A. Bobenko (Technische Universitaet Berlin), V. Dorodnitsyn (Keldysh Institute, Moscow), B. Grammaticos (Université Paris VII), J Hietarinta (Turku University), A. Its (Indiana University), M Kruskal (Rutgers University), A Magnus (Université Catholique de Louvain), V. Papageorgiou (Crete Technical University), O. Ragnisco (Rome III University), P. Santini (Catania University), L. Takhtajan (SUNY, Stony Brook), C. Viallet (Université Paris VI).

The meeting is supported by the LMS and the Institute of Mathematics and Statistics of the University of Kent. For further information contact Professor P.A. Clarkson, Institute of Mathematics & Statistics, University of Kent (e-mail: P.A. Clarkson@ukc.ac.uk), or Dr F.W. Nijhoff, Department of Applied Mathematical Studies, University of Leeds (e-mail: frank@amsta.leeds.ac.uk). Up-to-date information can also be found on http// www.ukc.ac.uk/IMS/maths/SIDE96/.

STATMECH-12

A one-day conference in Statistical Mechanics will be held at King's College, London on 20th June 1996. It will be similar in format to previous meetings of the series and will consist of short contributed talks, of about 20 minutes duration, together with three invited lectures, which this year will be given by Hans Fogedby (Aarhus), Ricardo Lima (Marseille) and Bernard Nienhuis (Amsterdam). There is a registration fee of £15 for this meeting. The organisers are grateful for financial support for this conference from the LMS Conference Fund. For further details contact: D.A. Lavis, Mathematics Department, King's College, Strand, London WC2R 2LS; tel: 0171-873-2240/2217; e-mail: maths@kcl.ac.uk, or see http://www.mth.kcl.ac.uk/statmech.html.

SWARUCHAND M. SHAH

Dr Swaruchand M. Shah, who was elected a member of the London Mathematical Society on 23 April 1931, died on 21 April 1996

LAURENCE S. GODDARD

Professor Laurence S. Goddard, who was elected a member of the London Mathematical Society on 21 May 1942, died on 26 February 1996.

LEVERHULME FELLOWSHIP

Professor I.M. James has been appointed to a Fellowship by the Leverhulme Foundation for research into the History of Topology.
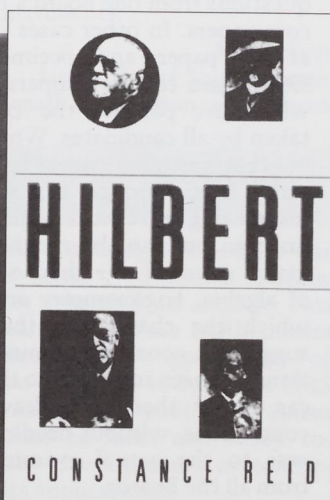
LMS@LMS.AC.UK

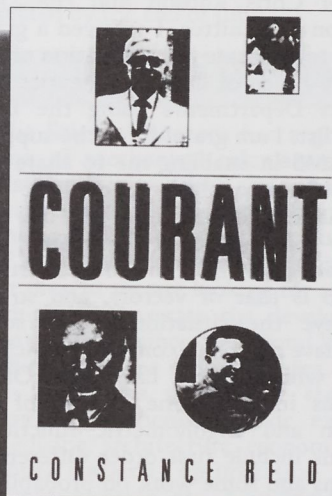The e-mail address of the London Mathematical Society has changed to lms@lms.ac.uk

CHANGES IN A-LEVEL MATHEMATICS FROM 1996

The A-level mathematics core, which has been in all syllabuses since the early 1980s, has now changed, and a revised core has been approved by SCAA, leading to new syllabuses which will lead to A-level awards this summer, so relating to the October 1996 intake of undergraduates. The LMS/IMA/RSS Committee, chaired by Professor Geoffrey Howson, referred to this in its report "Tackling the Mathematics Problem" which was published in October 1995.

In parallel with that report I have undertaken a more detailed analysis of the new A-level mathematics syllabuses and examinations, to provide information as a basis for the curriculum planning which mathematics departments will have to undertake. Through the good offices of Professor Chris Robson and the LMS Education Committee, I received a grant in order to facilitate the circulation of the report to heads of UK Mathematics and Statistics Departments using the LMS mailing list. I am grateful for the support of the LMS in enabling me to share the results of my analysis among the UK mathematical community. The old and the new cores are readily compared, and the report does this. The most startling omission is that of vectors, and so we now have the situation where some Boards have chosen to continue to include vectors whilst others have not. Other omissions include some aspects of integration and trigonometric functions. Additions include first order differential equations and some work on probability, with a reference to applications of mathematics. Most syllabuses are now in modular form, and a detailed description of the wide variety of structures is given. Together with syllabus variations, some might conclude that this is variety for its own sake, with little mathematical or curricular justification. Modularity has had the effect in some cases of shorter papers and fewer questions involving the synthesis of several steps into a reasoned mathematical argument. One factor which not all colleagues are aware of is the extensive nature of the present generation of formula booklets, and so some account of these is given in the report.

Looking at syllabus listings is one thing, but more direct evidence of what students have to do is obtained from examination questions. The largest section of the report is therefore devoted to a detailed comparison of examinations, with similar questions compared and contrasted. In one case there is a comparison between questions from one Board's 1994 and 1984 core papers. In other cases I have looked at 1994 papers and specimen papers for 1996, again taking comparable questions which are part of the core provision taken by all candidates. Whilst emphasising that specimen papers have not necessarily been through the same rigorous monitoring and checking that 'live' papers undergo, one can observe the reduction in many cases of the demands in respect of algebra, trigonometry and integration which the changes in the core might suggest. A considerable number of questions has been included, so that colleagues can study them and draw their own conclusions, without needing to have access to the actual examination papers from all the Boards.

The overall conclusion is that the trends which colleagues in mathematics, science and engineering departments have observed in their students' level of preparation are likely to continue. We shall in the future still be recruiting some students of high ability, but the courses they have experienced will not have prepared them in the same way that they did 20 years ago. On the other hand, with participation in Higher Education rocketing in recent years and with the trends away from science and technology, it is not unexpected that we should also be seeing less able students who would not have entered university in the past. The detailed statistics given in the report show that between 1985 and 1993 intakes through UCCA rose by 19.6% for mathematics, 14.4% for physical sciences and

13.2% for engineering, while A-level mathematics entries fell by about 40%. The reported view that standards have fallen is therefore hardly surprising, even were there no other factors present. We clearly cannot put the clock back, and we must provide a worthwhile mathematical education for the new generation of students. It is important to note that an early HMI report on the introduction of GCSE noted that the most able were not being stretched. We must not fall into that trap: we have to find solutions to our curriculum problems which cater for the whole spectrum of abilities we are now seeing in our students.

Keith Hirst
University of Southampton
e-mail: keh@soton.maths.ac.uk

EMS SUMMER SCHOOLS
Call for Proposals

The European Mathematical Society has launched its series of Summer Schools. The series is intended to include two schools a year, one in Pure Mathematics and one devoted to applications of Mathematics. With this activity the EMS wants to encourage young European mathematicians to meet and study together current developments in Mathematics and its applications.

The EMS, through its Summer School Committee, will examine proposals for summer schools fully organized by other institutions. To meet the EMS requirements, each school should be at a pre-doctoral level, last from 2 to 3 weeks, and have 100-120 participants, mainly graduate students or young mathematicians coming from several European countries. Costs of participation should be kept low and, if possible, grants should be available to people from countries which cannot afford any financial support. The EMS will guarantee its moral support to the selected schools, advertising within the European mathematical community and do its best to help the organizers to raise funds.

Topics, which may be single or composite, sites, and organisers of the schools will vary each year. The first two schools will take place in 1996: one on Algebraic Geometry in Eger, Hungary, 29 July - 9 August (for the announcement see EMS Newsletter, March 1996, p.19, or http://www.emis.de/newsletter/l9) and one on Analysis and Synthesis of Nonlinear Oscillatory Systems, Russian Academy of Sciences, 1 July.

The Society is now asking for proposals for the two 1997 summer schools. A proposal should in particular contain the topic (title and short description), names of lecturers, site, timing, costs, conditions for participants, name and address of the organizer. Proposals should be sent, if possible by 30 June to: Professor G. Monegato, Dipartimento di Matematica, Politecnico di Torino, Corso Duca degli Abruzzi 24, I-10129 Torino, Italia; fax: 39-11-564.7599; e-mail: monegato@polito.it. Decision can be expected by the end of July.

SCIENCE MUSEUM

The Science Museum has a good collection of mechanical calculators, drawing instruments, models and various other mathematical instruments from the 19th and early 20th century, but our holdings of more recent material need improving. At present we are looking for any objects which demonstrate the development of mathematics since the second World War. These could be models, notes, software, or any items that show the application of mathematics, for example in medicine, architecture, economics, operational research, optimization problems, communication etc. I apologise for not being specific, but at the moment we have very little and so any ideas or suggestions would be most welcome. There are no immediate plans for display, but we are hoping to create a temporary exhibition space in the Mathematics Gallery where these items could feature. I would be very grateful if you could contact me at the Science Museum, Exhibition Road, London SW7 2DD, or on 0171 938-8056, or by e-mail: jwess.@nmsi.ac.uk.

Ms Jane Wess
Curator of Mathematics

LMS SUPPORT FOR RESEARCH MEETINGS
A New Opportunity

The Society already supports many workshops, symposia and conferences through the Programme and Conference Fund (see the January Newsletter). Council has resolved to improve its support still further by providing a substantial level of funding for a small number of meetings each year. The format of such meetings is not prescribed, but one type might be a focused research workshop in a topical area, akin to a Durham Symposium but on a smaller scale. Another might be a longer meeting for a small number of participants with the LMS meeting half the costs. Proposals for meetings of an instructional nature will also be entertained. The Durham Symposia Committee has been asked to administer this new scheme and has been assigned £20,000 for the first year to cover this and its existing obligations. It envisages making grants in the range £5,000 to £11,000. Proposals should be in any area of pure or applied mathematics.

All proposals will be refereed. Although proposers are encouraged to augment LMS funding from other sources it is not a pre-requisite to do so. There are no formal deadlines, but committee meetings are usually at the ends of September and March, and time should be allowed for refereeing. Expressions of interest, enquiries and proposals should be sent to the Chairman of the Durham Symposia Committee, currently Professor N.J. Young, Department of Mathematics and Statistics, Fylde College, Lancaster LA1 4YF (n.young@lancaster.ac.uk), telephone 01524 593964.

BIRTHDAY GREETING

Congratulations to Professor Cyril Offord, FRS, a member of the Society since 1930, who will celebrate his 90th birthday on 9 June. Professor Offord was a Member of Council and Proceedings Editor 1949-52.

HISTORY OF MATHEMATICS SERIES

The American and London Mathematical Societies jointly publish a series of books in the history of mathematics. The most recent volumes to appear are volume 8, K. Parshall and D.E. Rowe, *The Emergence of the American Mathematical Community, 1876-1900: J.J. Sylvester, Felix Klein, and E.H. Moore*, and volume 9, *Ramanujan, Letters and Commentary* (Bruce Berndt and R.A. Rankin, editors). The next volume will be June Barrow-Green's *Poincaré and the Three Body Problem*, which should appear very soon. Four or five more books are under active discussion at present. Books in the series are available in the usual way - take advantage of the generous members' discount!

The series is intended to produce scholarly books on the history of mathematics, focusing on modern mathematics, which will be of interest to mathematicians and historians of mathematics. The 20th Century has been enormously productive mathematically, and the growing historical interest in it is not yet matched by publications. The series aims to help meet that demand. Anyone with a manuscript or project they would like considered is invited to get in touch with one of the editors (David Fowler, Warwick; Jeremy Gray, Open University; Paddy Patterson, Göttingen).

Jeremy Gray

PRIX FERMAT DE RECHERCHE EN MATHEMATIQUES 1997

Le Prix Fermat récompensera les travaux de recherche de mathématiciens dans des domaines où les contributions de Pierre de Fermat ont été déterminantes:
- Enoncé de principes variationnels
- Fondements du calcul des probabilités et de la géométrie analytique
- Théorie des nombres

A l'intérieur de ces domaines, l'esprit du prix est de récompenser plutôt des résultats de recherche qui sont accessibles aux plus grand nombre de mathématiciens professionnels. D'un montant de 100,000 FF, attribués par Matra Marconi Space, le Prix Fermat est décerné tous les deux ans à Toulouse; la cinquième édition aura lieu au Printemps 1997. Le règlement du Prix, les modalites de dépôts de candidature, sont disponibles dès le 2ème trimestre 1996, auprés de: Prix Fermat de Recherche en Mathématiques, Service des Relations Publiques, Université Paul Sabatier, 118 route de Narbonne, 31062 Toulouse Cedex, France. Date limite de dèpôt des candidatures: **31 Janvier 1997**. Les candidats potentiels sont priés de se conformer aux modalités de dépôt préconisées dans le règlement.

EDUCATION COMMITTEE GRANTS

The LMS Education Committee would welcome requests for support for activities such as popular lectures, exhibitions, masterclasses, and competitions, that help to encourage joint ventures between universities and schools, or the development of projects that would improve the public image of mathematics. We would like LMS members to apply for grants themselves or to encourage other appropriate individuals to do so.

To make the job of the Committee as simple as possible, any application for support should contain a brief description of the proposed event or project, with an outline of the expected expenses and details of other sources of support. The Committee meets in September, January, and April, so please apply well before the event. Requests should be sent to: Dr S. Huggett, School of Mathematics and Statistics, University of Plymouth, Drake Circus, Plymouth PL4 8AA.

COMPLEX ANALYSIS MEETING

A complex analysis meeting in honour of Jim Clunie for his 70th Birthday will be held at the University of York, 24-25 June 1996. For further information contact S. Velani at Imperial College, London, tel: 0171 594 8550, e-mail: s.velani@ic.ac.uk.

THE FERRAN SUNYER I BALAGUER PRIZE 1996

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

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

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

3. The prize, amounting to 1.800.000 pta, is provided by the Ferran Sunyer i Balaguer Foundation. The winning monograph will be published in Birkhäuser Verlag's series "Progress in Mathematics", subject to the usual regulations concerning copyright and author's rights.

4. The winner of the prize will be chosen by a Scientific Committee consisting of: Professor Friedrich Hirzebruch (Max-Planck Institute), Professor Paul Malliavin (Université de Paris VI), Professor Joseph Oesterlé (Université de Paris VI), Professor Joan Solà Morales (Universitat Politécnica de Catalunya), Professor Alan Weinstein (University of California at Berkeley).

5. Monographs must be preferably typeset in TeX. Authors should send before 15 December 1996 a hard copy and two disks with the DVI and PS (PostScript) files together with the submission letter to the following address: Institut d'Estudis Catalans, Apartat 50, 08 193 Bellaterra, Spain; e-mail: crm@crm.es.

The name of the prize-winner will be announced in Barcelona in April 1997. The 1995 prize was awarded to V.K. Murty and M.R. Murty for their monograph entitled *Non-vanishing of L-functions*.

GÖDEL PRIZE

The Gödel Prize, awarded by the European Association for Theoretical Computer Science and the Special Interest Group on Algorithms and Computation Theory of the Association for Computing Machinery, has been presented to Mark Jerrum (University of Edinburgh) and Alistair Sinclair (University of California at Berkeley, formerly at the University of Edinburgh), for their work in theoretical computer science. The prize is awarded annually for a paper or series of papers published within the preceding six calendar years. It is named in honour of Kurt Gödel, in recognition of his major contributions to mathematical logic and of his interest, recently discovered, in what has become known as the "P versus NP" question.

INTERNATIONAL MATHEMATICS COMPETITION

The third International Competition for University Students in Mathematics will take place in Plovdiv, Bulgaria, from 31 July - 5 August 1996. The aim of the competition is to compare undergraduate education levels in different European universities and provide an opportunity for university students of mathematics from across Europe to meet one another. This year's competition is being jointly organized by Sofia University and University College London. Every University is invited to send several students and one teacher. The competition is planned for students completing their first, second, third or fourth year of education and will consist of 2 sessions of 4-5 hours each. Problems will be from the fields of Algebra and Analysis (Real and Complex). The working language will be English. For additional information, please contact: Professor J.E. Jayne, Department of Mathematics, University College London, Gower Street, London WC1E 6BT; e-mail: jej@math.ucl.ac.uk; tel. 0171 380 7322.

GEOMETRIC GROUP THEORY

The Spring 1996 London-Sussex-Southampton Topology Seminar will meet at the University of Southampton on 28 - 29 June. The theme is Geometric Group Theory and the list of speakers includes Noel Brady, Tom Brady, Warren Dicks, and Jim Howie. There are also 30 and 45 minute slots available, and postgraduates are encouraged to speak. Those wishing to do so should submit a short abstract to one of the organizers, Graham Niblo (gan@maths.soton.ac.uk) or Jim Anderson (jwa@maths.soton.ac.uk), by 1 June. Details concerning overnight accommodation, the list of speakers and the Friday night banquet will be made available in the second announcement, as will the level of fees. If you wish to be included on the e-mail list to receive the announcements, please contact one of the organizers. The conference is supported in part by the LMS, and the funds will be used to subsidize participation by graduate students. Those wishing to be considered for funds should contact one of the organizers by 15 June.

GRADUATE SCHOOL IN DIFFERENTIAL GEOMETRY

The Graduate School will be held at the University of Durham from 4 - 11 September 1996 with accommodation in St. Mary's College. The programme, which is intended primarily for graduate students, will consist of taught courses given by invited speakers together with discussion sessions and some social activities. The following have agreed to speak: Dr J. Berndt (Cologne) Grassmannians; Dr J. Bolton (Durham) The Exceptional Group G2; Professor J.-P. Bourguignon (Ecole Polytechnique and IHES) Spin Geometry; Professor S. Donaldson (Oxford) Gauge Theory and Vortex Equations; Professor M. Guest (Rochester, NY) Morse Theory; Professor F. Pedit (Amherst) Spinors and Surface Theory; Professor G. Thorbergsson (Cologne) Isoparametric Hypersurfaces; Professor F. Urbano (Granada) Hypersur-

faces of Euclidean Space; and Dr L. Woodward (Durham) Connections, Curvature and Characteristic Classes.

The School will be open to all, but the number of participants will be restricted to 60 and preference will be given to graduate students. The School is supported by funding from EPSRC, the London Mathematical Society, the EU and the University of Durham. Funds from EPSRC are available to support UK registered EPSRC students. Further details, including application forms, appear on the World Wide Web (http://fourier. dur.ac.uk:8000/~dma0lmw/graduate_school). Enquiries by e-mail should be sent to the organiser, Lyndon Woodward (Maths.GradSchool@uk.ac.durham).

UNIVERSIDADE DE COIMBRA

The Mathematics Department of Coimbra University invites applications for a position of visiting professor for the 1st and/or 2nd semesters of 1996/97 in Pure or Applied Mathematics. Applicants should submit a detailed cv to: Professor Paula Oliveira, Departamento de Matematica, Universidade de Coimbra, 3000 Coimbra, Portugal, to whom enquires may also be made (e-mail: poliveir@mat.uc.pt).

PAUL ERDOS NATIONAL AWARD

One of the two awards which the World Federation of National Mathematics Competitions makes from time to time is the "Paul Erdos National Award", established to recognise those whose contributions "have played a significant role in the development of mathematical challenges at the national level and which have been a stimulus for the enrichment of mathematics learning". It was announced recently that the award for 1995 has been made to Dr Tony Gardiner (Birmingham). The award will be presented at the International Congress on Mathematical Education in Seville this coming July.

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The Geometry of Topological Stability
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DIARY

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

JUNE 1996

1 South of England Algebraic Number Theory Seminar, Oxford (238)

14 LMS Popular Lectures, Birmingham University (238)

15-19 Hyperbolic Problems, Theory, Numerics and Applications Conference, Hong Kong (233)

18 LMS Popular Lectures, Imperial College London (238)

20 LMS Popular Lectures, Glasgow University (238)

21 London Mathematical Society Meeting, Linnean Society, London

22 Ali Fröhlich's 80th Birthday Meeting, Robinson College, Cambridge (230)(236)

24-28 Dynamics of Complex Fluids, Cavendish Labaratory, Cambridge (237)

24-4 July Partial Differential Equations and Spectral Theory, LMS Durham Symposium, Durham University (232)

25-28 Ordinary and Partial Differential Equations Conference, Dundee University (234)

25-29 Geometric Issues in the Foundations of Science Symposium, St John's College, Oxford (234)

25-29 European Consortium for Mathematics in Industry Conference, Denmark (235)

26-28 Homotopy Theory Mini-Conference, Mathematical Institute, Oxford (230)(236)

30-6 July Different Approaches to Population Dynamics Conference, Crete, Greece (235)

JULY 1996

1-5 Grid Adaptation in Computational PDEs, ICMS, Edinburgh (237)

1-12 Graph Symmetry: Algebraic Methods and Applications, Université de Montréal, Québec, Canada (233)

1-13 NATO ASI, Edinburgh (233)

8-9 Finite Model Theory, MathFit Instructional Workshop, Swansea (236)

8-19 Galois Representations in Arithmetic Algebraic Geometry, LMS Durham Symposium, Durham University (232)

13-20 Edinburgh Mathematical Society's St Andrews Colloquium 1996, St Andrews University(233)

14-19 Computational Techniques in Spectral Theory and Related Topics Workshop, Gregynog Hall, University of Wales (230)

18-20 Croatian Mathematical Congress, Zagreb, Croatia (233)

18-20 Analytic and Elementary Number Theory Conference, Vienna, Austria (233)

19-21 Mathematical Models of Concurrency, Communication and Distribution, MathFit Instructional Workshop, Kent University (236)

21-25 Affine Geometry of Convex Sets Conference, Dalhousie University, Canada (232)

21-1 Aug Model Theory of Fields, LMS Durham Symposium, Durham University (232)

22-26 2nd European Congress of Mathematics, Budapest, Hungary (235)

28-3 Aug Brazilian Algebra Meeting, IMPA, Rio de Janeiro, Brazil (233)

AUGUST 1996

1-13 Nonstandard Analysis and its Applications Symposium, Edinburgh University (233)

11-17 Nonstandard Analysis and its Applications Symposium, Edinburgh University (233)

12-30 School on Algebraic Groups & Arithmetic Groups, ICTP Trieste (230)

18-28 Aegean Conference on Operator Algebras and Applications, Samos, Greece (237)

19-23 Rendezvous Search Workshop, London School of Economics (238)

19-24 C.T.C. Wall's 60th Birthday Meeting, Liverpool University (237)

19-30 Algebraic Model Theory NATO ASI, Fields Institute, Toronto, Canada (236)