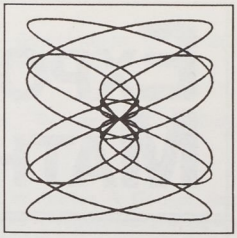
THE LONDON MATHEMATICAL SOCIETY NEWSLETTER



No. 131 **July 1986**

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Advertising: Susan Oakes, LMS Office, Burlington House, Piccadilly, London W1V 0NL. Tel: 01-437 5377.

The *Newsletter* is published monthly, except in August and September. Items for inclusion (with the exception of advertising material) should be sent to the Editor, to arrive before the tenth day of the month prior to publication. Advertisements, and general enquiries about the Society, should be addressed to Susan Oakes at the LMS Office.

Forthcoming Meetings

Friday 17 October 1986, Burlington House
(Meeting on Quasi-Crystals)
Friday 21 November 1986, Royal Society
(The President, J. R. Hubbuck)

TELEPHONE NUMBERS

The University of Sheffield telephone number has changed from 78555 to 768555.

The University of Newcastle upon Tyne telephone number has changed from 0632-328511 to 091-232 8511.

PROFESSOR RICHARD RADO

Professor Richard Rado, FRS is Emeritus Professor at the University of Reading.

The British Combinatorics Committee and the Department of Mathematics at Reading sponsored a 1-day Colloquium on Combinatorics at Reading University on 30 April. The occasion was also a celebration of Professor Richard Rado's 80th birthday. Lectures were given by Drs. A. G. Chetwynd, G. A. Jones, O. Pretzel, J. W. P. Hirschfeld, A. Thomason, D. J. A. Welsh and Professors D. Bressond and F. C. Pysier. There was a tea-party at which a gift was presented to Professor Rado. Finally Dr. B. Bollobas gave a lecture expounding some aspects of Rado's work.

Professor R. Rado was awarded the degree of Doctor of Mathematics Honoris Causa of the University of Waterloo in Canada on 31 May. It was awarded in absentia, with Professor W. T. Tutte receiving it on Profesor Rado's behalf.

EXPOSITIONES MATHEMATICAE

International Journal for Pure and Applied Mathematics

This is a new sort of journal – one whose chief aim is expository, a journal that would lighten the task of working and especially beginning research mathematicians of keeping abreast with the flood of new research.

Expositiones Mathematicae publishes high level research articles, surveys, expository essays and historical studies in all branches of contemporary mathematics. Our aims are to advance mathematical research and to be useful to those involved in graduate and post-graduate programmes.

Ask your library to subscribe today.

Many well-known authors have already contributed. Here are some of them: K.L. Chung, J. Dieudonné, F. Harary, H. Heyer, P.E.T. Jørgensen, S.G. Krantz, P. Lelong, T.L. Nicolas, E.H. Spanier, F. Toth, S.R.S. Varadhan.

Subscription Information
1986, Vol. 4 (4 issues): 234,– DM plus postage and handling.

Back Volumes
Vols. 1-3 (1983–1985): 198,– DM per volume plus postage and handling. Complete set: 594,– DM plus postage and handling.

Managing Editor
S. D. Chatterji, Lausanne.

Editorial Board
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For detailed information please write to:
Bibliographisches Institut, Postfach 311, D-6800 Mannheim 1, Germany
or phone (06 21) 39 01-3 89.

Cambridge University

Department of Pure Mathematics and Mathematical Statistics

Applications are invited for a University Lectureship in Mathematics for Computer Science which the Appointments Committee hopes soon to be in a position to fill, from 1 October 1986, or as soon as possible thereafter. Applications should work in a field of Pure Mathematics related to Computer Science and have experience of applications of their subject to Computer Science. Further information can be obtained from the Head of Department of Pure Mathematics and Mathematical Statistics, 16 Mill Lane, Cambridge CB2 1SB, telephone Cambridge 337996. The closing date for applications is 16 July 1986.

SERC AWARDS

Some recent Research Grant Announcements made by SERC include the following.

Aberystwyth

N. G. Lloyd: Closed Orbits of Certain Dynamical Systems.

N. G. Lloyd, W. N. Everitt: Perturbation of Conservative Systems.

N. G. Lloyd, W. D. Evans: Third Gregynog Symposium on Differential Equations.

A. R. Davies, T. N. Phillips: The Development of Spectral Element Methods for The Numerical Treatment of Non-Newtonian Flows.

Bangor

R. Brown: Non Abelian Homotopical and Homological Algebra.

Bath

R. Sibson, W. Silverman: Regularisation Problems in Statistical Data Analysis.

J. F. Toland, A. Spence: Theoretical and Numverical Studies of Bifurcation of Capillary-Gravity Waves.

R. Sibson: Regularisation Problems in Statistical Data Analysis.

Birmingham

J. Gunson, W. N. Everitt: Instanton Solutions and Sobolev Type Inequalities Associated with Semilinear Partial Differential Equations.

Bristol:

M. B. Zaturska: Mathematical Modelling of Ignition in Combustible Systems.

D. H. Peregrine: Bifurcation of Liquid Bridges.

W. G. C. Boyd: Investigation into the Simultaneous Transport of Two Immiscible Fluids.

D. S. Riley: A Mathematical Study of Thermal Convection in Undulating Porous Layers.

Brunel

J. R. Whiteman: Finite Element Treatment of Singularities in 3D Boundary Value Problems with Applications to Fracture Mechanics.

P. C. Chatwin: The Interpretation and Modelling of Turbulent Diffusion Data Especially on Concentration Fluctuations.

Cambridge

C. T. Sparrow, N. O. Weiss: Nonlinear Dynamics.

N. O. Weiss, D. P. McKenzie, D. R. Moore: Numerical Investigation of Three-Dimensional Convection.

T. J. Pedley: A Theoretical and Experimental Study of the Unsteady Vortex Wave.

T. J. Pedley, J. M. Rallison: Co-operative Phenomena of Swimming Micro-Organisms.

S. W. Hawking: Quantum Gravity and Super Strings.

J. H. Conway: Computation of Modular Characters and related Topics.

City

P. G. Daniels: Convection in Finite Containers.

Durham

P. J. Higgins, R. W. Carter, S. Donkin: Representation Theory of Algebraic Groups and Related Finite Groups.

P. J. Higgins E. C. Lance, R. J. Plymen: Operator Algebra.

P. J. Higgins, M. F. Atiyah, E. F. Corrigan: Completely Solvable Systems in Field Theory.

P. J. Higgins, A. Baker, R. C. Mason: Transcendental Number Theory.

P. J. Higgins, R. J. Knops, A. A. Lacey: Non Classical Continuum Mechanics

P. J. Higgins: Multiple Category Structures in Homological and Homotopical Algebra.

Dundee

D. S. Jones: Inverse Scattering in Acoustics and Electromagnetism.

Edinburgh

P. R. Fisk, R. C. Duffy, D. R. Cox: Asymptotic Statistical Inference and its Applications.

M. Pollicott, E. G. Rees: Numbers and Dynamics.

T. J. Lyons: A Study of Diffusion Processes Arising From Elleptic Operators in Divergence Form.

Exeter

P. Hall: Taylor-Gortler Instabilities in Time Periodic Flows.

Glasgow

N. J. Young: Numerical Methods For Minimal Norm Interpolation By Analytic Matrix Functions.

D. M. Titterington, J. C. Brown, J. W. Kay: Comparison of Image Restoration Algorithms According To Various Criteria On a Variety of Real and Simulated Data.

Heriot-Watt

J. M. Ball, J. Carr: Nonlinear Systems.

K. J. Brown, J. C. Eilbeck: Analytic and Computational Investigation of Reaction Diffusion Equations.

A. A. Lacey: Behaviour of Moving Free Boundaries.

Hull

D. B. Pearson: Spectral and Asymptotic Analysis of Schrodinger Operator in Quantum Theory.

N. J. Cutland: Applications of Nonstandard Methods To Random Fields.

Imperial College

D. A. Spence: Variational Methods in Contact Mechanics.

M. H. A. Davis: Stochastic Optimization for Non-Diffusion Models.

I. N. Baker, T. Kovari: Research Symposium on Complex Analysis.

J. T. Stuart, J. D. Gibson, D. I. Olive: Problems on Integrable and Chaotic Dynamics.

Y. N. Dowker, S. Alpen: Multiple Recurrence Theorems and Applications to Number Theory and Mixing Problems.

D. W. Moore, J. M. R. Graham: Numerical Simulation of Separated Flows By a Hybrid Navier Stokes Techniques.

R. B. Vinter, Optimal Non Linear Control.

K. S. Stelle, C. J. Isham: Hidden Symmetry in String and Kaluza-Klein Theories.

D. W. Moore: Numerical Simulation of Separated Flows By a Hybrid Navier Stokes Techniques.

Kent

J. S. R. Chisholm, A. K. Common: Clifford Algebras and Their Applciation in Mathematical Physics.

King's College

E. B. Davies: One-Parameter Semigroups in Probability and Analysis.

C. T. Sparrow, T. J. Bedford, J. W. Swift: Symposium on Theoretical and Numerical Problems in the Study of Chaotic Ordinary Differential Equations.

J. G. Taylor, P. R. Howe, P. C. West: Quantum Properties of Super-Symmetric Gauge Theories.

Leeds

J. Brindley, J. H. Merkin, P. Gray, S. K. Scott; Mathematical Models of Smouldering Combustion.

J. H. Merkin, J. Brindley, P. Gray, J. Griffiths: Mathematical Models of Isothermal Branched-Chain and Autocatalytic Reactions in Open and Closed Systems.

A. P. Fordy: Integrable Nonlinear Systems Associated with Symmetric Spaces.

D. G. Crighton: Studies of the Modified Burgers -Korteweg - De Vries Equation.

Liverpool

C. T. C. Wall: Singularities of Smooth Mappings: Topology and Applications.

Manchester

F. Ursell: Asymptotic Problems in the Linear Theory of Water Waves.

I. Gladwell: Visiting Fellowship for W. H. Enright, Canada: Analysis and Testing of Methods and Algorithms for Ordinary Differential Equations.

Newcastle Upon Tyne

N. C. Freeman: Nonlinear Evolution Equations and Their Solution.

P. C. W. Davies, I. J. Hoss, D. J. Toms: Quantum Gravity and the Very Early Universe.

C. A. Jones: Bifurcations in Taylor-Couette Flow.

Nottingham

R. L. Hudson, Applications of Quantum Stochastic Calculus.

D. F. Parker, Nonlinear Elastic and Piezo-Elastic Surface Waves.

Oxford

K. W. Morton: Proposal to Establish a Centre For Computational Fluid Dynamics At The University of Reading.

D. E. Blackwell, D. W. Sciama: The Interface Between Relativity and Quantum Field Theory.

K. W. Morton: Development of Numerical Methods of Fluid Flow Modelling.

A. B. Tayler: Oxford Study Groups With Industry.

P. M. Neumann: Visiting Fellowship For S. A. Adeleke, Nigeria. Some Infinite Permutation Groups.

M. J. Collins: Visiting Fellowship For G. Mason, California, USA. Character Theory and Modular Forms.

R. O. Gandy: Visiting Fellowship For S. D. Friedman: Coding, Admissible Sets and the Continuum.

R. O. Gandy: Visiting Fellowship For W. Mitchell, USA: Constructability and Large Cardinals.

Queen Mary College

M. A. H. MacCullum: Uses of Algebraic Computing in General Relativity.

F. W. Wright: Applications of Computer Algebra in Catastrophe Theory.

W. A. Hodges: Permutation Groups Applied To Model Theory.

I. C. Percival, F. Vivaldi: Long-Time Predictions in Hamiltonian Systems With More Than Two Degrees of Freedom.

M. A. H. MacCullum: Applications of Algebraic Computing, Especially in General Relativity.

D. R. Hughes: Visiting Fellowship For J. Rotman, USA: Graphs, Schemes and Designs.

S. Donkin: Visiting Fellowship For S. Musili, India: Global Sections of Line Bundles of Schubert Varieties.

D. R. Hughes: Visiting Fellowship For E. Bannai, USA: Algebraic Combinatorics.

Reading

M. J. Baines: Proposal To Establish a Centre For Computational Fluid Dynamics At the University of Reading.

J. Wright: Jordan Operator Algebras.

Southampton

R. C. King: Representations of the Lie Superalgebras Spl(m,n) and Osp(m,n).

C. J. Clarke, Classical Limit of Super-

Symmetric Fields.

R. A. D'Inverno: Construction and Maintenance of a Computer Database of Exact Solutions in General Relativity.

St. Andrews

A. D. D. Craik, A. W. Wood, I. M. Moroz: Non Linear Evolution Equations of Fluid Dynamics.

Strathclyde

J. S. Cramley, D. M. Sloan: Numerical Solution of the Navier-Stokes Equations for Viscous Pulsatile Flow in a Branching Channel.

R. M. Nisbet, W. S. C. Gurney: Phase Locking in Models of Stage-Structured Populations.

Sussex

C. M. Goldie: Visiting Fellowship for S. I. Resnick, Colorado: Order Statistics Records and Additive Processes From Multivariate and Drifting Populations.

UMIST

P. J. Rowley: Parabolic Geometries For Finite Simple Groups.

University College London

S. N. Brown: Further Stability of Swirling Flows.

F. T. Smith: Three Dimensional Transition in Boundary Layers.

F. T. Smith: Dynamic Stall.

D. G. Larman: Visiting Fellowship For I Barany, Budapest: Geometric Problems and Computation.

C. A. Rogers, J. E. Jayne: Visiting Fellowship For I. Namioka, Washington: Geometry of Banach Spaces and Functional Analysis.

Warwick

D. E. Evans: Operator Algebras and Applications.

R. W. Carter: Investigations in the Theory of Algebraic Groups.

D. A. Rand, R. S. MacKay: Nonlinear?

K. D. Elworthy, Diffusion Processes and Schrodinger Semigroups - Semiclassical and Long Term Behaviour.

I. N. Stewart: Symmetry-Braking Bifurcations.

R. W. Carter: Extensions in the Bernstein-Gelfand-Galfand Category o, with Particular Reference to Verma Modules.

A. O'Hagan: Warwick Symposium on Applied Bayesian Statistics.

M. Reid, Algebraic Geometrical Aspects of Completely Integrable Hamiltonian Systems.

D. E. Evans: Symposium on Operator Algebras and Applications.

M. West: Bayesian Forecasting.

J. H. Rawnsley: A. Group Theoretical Approach to Quantization.

P. Walters: Visiting Fellowship For F. Przytycki, Poland: Ergodic Properties of Smooth Maps.

York

C. J. S. Clarke: Gravitational Radiation From Strongly Gravitating Bodies.

M. M. Dodson, J. A. G. Vickers: Resonance, Near-Resonance and Stability in Non-Linear Systems.

SALEM PRIZE

The Salem Prize for 1986 was awarded to Dr. N. G. Makarov of the Steklov Institute (LOMI) of Leningrad, for his work on the Hausdorff dimension of the support of the harmonic measure (in the case of general Jordan domains.) The Prize established in 1968, is given every year to a young mathematician who is judged to have done an outstanding work in the field of interest of Salem, primarily on Fourier series and related topics. The recipient was Dr. Nicholas Varopoulos in 1968, Dr. Richard Hunt in 1969, Dr. Yves Meyer in 1970, Dr. Charles Fefferman in 1971, Dr. Thomas Körner in 1972, Dr. E. M. Nikisin in 1973, Dr. Hugh Montgomery in 1974, Dr. William Beckner in 1975, Dr. M. R. Herman in 1976, Dr. S. B. Bockarëv in 1977, Dr. Björn E. Dahlberg in 1978, Dr. Gilles Pisier in 1979, Dr. Stylianos Pichorides in 1980, Dr Peter Jones in 1981, Dr. Alexei B. Aleksandrov in 1982, Dr. Jean Bourgain in 1983, Dr. Carlos Kenig in 1984 and Dr. Th. H. Wolff in 1985. The jury consisted of Professor L. Carleson, Professor Y. Katznelson, Professor Y. Meyer and Professor E. M. Stein.

MEETING IN AUSTRALIA

The twenty-seventh Summer Research Institute of the Australian Mathematical Society will be held from 19 - 30 January 1987 at the University of New England, Armidale, N.S.W., Australia. Speakers will include I. Ekelund, M. Golubitsky and A. Coppel. Further information may be obtained from E. N. Dancer or B. Sims, Department of Mathematics, Statistics and Computing Science, Univeristy of New England, Armidale, N.S.W. 2351, Australia.

GROUPS - KOREA 1988

There will be an international conference on the theory of groups: Groups-Korea 1988, at Pusan, Republic of Korea, from 20 - 26 August 1988. For further details contact Professor A. C. Kim, Department of mathematics, the Busan National University, Pusan 607, Republic of Korea.

LMS HONORARY MEMBERS HONOURED

The Wolf Prize in Mathematics for 1985-86 is to be shared by Professor Samuel Eilenberg of Columbia University, New York and Professor Atle Selberg of the Institute of Advanced Studies, Princeton. Both Professor Eilenberg and Professor Selberg are Honorary Members of the Society. The Wolf Prize in Mathematics is awarded annually by the Wolf Foundation, and is valued at $100,000.

Professor Eilenberg is honoured for his fundamental work in algebraic topology and homological algebra, and Professor Selberg for his profound and original work on number theory and on discrete groups and automorphic forms.

THEORETICAL COMPUTER SCIENCE

LMS members who are working in the area may be intersted to know that the Society's journals are now accepting articles in Theoretical Computer Science. Articles for consideration should be sent to Professor R. Milner, Department of Computer Science, University of Edinburgh, who is the Editorial Adviser in this area.

DATA PROTECTION ACT, 1984

An application for registration under the Data protection Act, 1984 has been made by the Society, seeking to register the kinds of personal data held by the Society, the sources from which it is obtained, the purposes for which it is used, and the persons to whom it may be disclosed. Those who are involved with offices within the Society which may include the handling of personal data have been contacted to establish their position in respect of the registration of the Society, and procedures are being established to ensure that the handling of personal data within the Society conforms with the obligations placed upon it by the Act. Anyone within the Society who is concerned that they might have been omitted from these preparations, or who would otherwise wish to know how the Society is affected by the Act, is asked to contact Dr. C. J. Mulvey, Council and General Secretary.

London Mathematical Society Conference

INEQUALITIES: FIFTY YEARS ON FROM HARDY, LITTLEWOOD AND POLYA

University of Brimingham, England: 13 to 17 July 1987

On behalf of the London Mathematical Society the Department of Mathematics of the University of Birmingham will organise this Conference in JULY 1987.

Invitations have been accepted by the following named mathematicians to give plenary lectures in the areas specified; many of these areas are associated with individual chapters in the book *Inequalities* by Hardy, Littlewood and Polya which was first published by Cambridge University Press in 1934.

C. D. Ahlbrandt (Comumbia, United States of America)	-	Variational inequalities
J. M. Anderson (London, Great Britain)	-	Inequalities in complex function theory
W. D. Evans (Cardiff, Great Britain)	-	Spectral inequalities for ordinary and partial differential operators.
W. N. Everitt (Birmingham, Great Britain)	-	Hardy-Littlewood integral inequalities.
E. H. Lieb (Princeton, United States of America)	-	Inequalities in mathematical physics
H. W. McLaughlin (Troy, United States of America)	-	General finite inequalities
B. Saffari (Paris, France)	-	Trigonometric inequalities
L. E. Payne (Ithaca, United States of America)	-	Isoperimetric inequalities
J. Schröder (Köln, West Germany)	-	Operator inequalities and applications
H. Triebel, (Jena, East Germany)	-	Sobolev inequalities
R. C. Vaughan (London, Great Britain)	-	Hilbert's inequality
W. Walter (Karlsruhe, West Germany)	-	Differential inequalities
A. Zettle (DeKalb, United States of America)	-	Landau - Kolmogorov inequalities

For further information please write to:-

The Organising Secretary,
Inequalities Conference,
Department of Mathematics,
University of Birmingham,
PO BOX 363,
BIRMINGHAM B15 2TT,
England, U.K.

COUNCIL NEWS

Amongst the matters discussed by the LMS Council at its meetings in January, March and May 1986 were the following:

1. Council agreed to make available to the Royal Society an amount of £5000 for the financial support of United Kingdom mathematicians attending the International Congress of Mathematicians to be held at Berkeley in August 1986.

2. Council noted that John Wright and Sons, the printers of the Society's Proceedings for about the last 40 years, had gone into liquidation in November 1985. Oxford University Press had moved the printing of the Proceedings to the Universities Press in Belfast, at least for the time being.

3. Council considered reports from the meetings of the European Mathematical Council's Data Base Committee held at Oberwolfach in November 1985 and at Oxford in March 1986, at which proposals were discussed for the establishment of a data base and communications network for mathematicians within Europe.

4. Council discussed a number of points concerning the furtherance of mathematical contact between the United Kingdom and New Zealand, following the estalishment of the Forder Lectureship at the end of last year. In particular, Council agreed that ways should be sought of encouraging fuller use to be made of the existing exchange agreement between the Royal Society and its New Zealand counterpart, of facilitating temporary inter-faculty exchanges between the countries, and of resolving the diffulties experienced by New Zealand students in obtaining financial support for graduate work in the United Kingdom.

5. Council noted that, at the General Meeting called to consider its proposal that changes to the By-Laws to allow a President to be elected to a third year of office, concern has been expressed at the wisdom of such a change. The General meeting had been adjorned until the date of the Annual General Meeting in November, to allow further consultation and discussion by Council to take place, following which it was agreed that an amendment withdrawing the existing proposal be proposed by Council when adjourned meeting reconvened.

6. Council learnt that the Mathematics Section of the British Association for the Advancement of Science had agreed that there should be an LMS Lecture during the 1987 Annual Meeting of the British Association.

7. Council considered the guidelines under which it dealt with questions involving human rights issues which were brought to its attention, agreeing that its principal concern was to give support to those cases in which the contribution to mathematics of an individual was being diminished by the persecution which was being experienced, without attempting to pass judgement on the issues which might be involved in the persecution. Council approved a range of measures which might be invoked in dealing with cases fallng within these guidelines, and agreed procedures for approaching those which came to the attention of Council.

8. Council decided to give early consideration to ways in which the concern of the Society about the increasing problems facing the provision of mathematics teaching in schools could be brought to the attention of the Government. In particular, Council agreed on the need to argue the case for enhancing the career structure within the mathematics teaching profession, for increasing morale within schools, and for dispelling the idea that children should not coninue with mathematics unless the highest grades were being attained in examinations. Council noted that the Joint Mathematical Council and the recently established Committee of Heads of University Departments of Mathematics were also taking initiatives in this field, and that a seminar was being held at the Royal Society on the shortage of mathematics and physics teachers.

9. Council agreed to appoint D. A. Brannan to serve as Publications Secretary of the Society for the period from 1st July 1986 until the Annual General Meeting in November, following the retirement from office of J. S. Pym.

10. The following appointments were also made by Council: I. R. Porteous to represent the Society on the Joint Mathematical Council for the period of two years from 1st January 1986 to 31st December 1987; W. D. Evans and J. Wiegold to serve as Joint Editors of the Proceedings, and Joint Secretaries of the LMS Editorial Advisory Board, for the period from a date to be agreed to 31st December 1991; N. H. Bingham to represent the Society on the Mathematics Committee of the British Association for the Advancement of Science for the period from 1st June 1986 to 31st December 1991; T. Porter to serve on the LMS Popular Lectures Committee for the period from 1st June 1986 to 31st December 1991.

C. J. Mulvey,
Council and General Secretary.

INTERNATIONAL CONGRESS OF MATHEMATICIANS 1986

The London Mathematical Society intends to hold a meeting during the International Congress at the University of California, Berkeley. The meeting will be held at 6.00 p.m. on Friday 8 August 1986 in the Joseph Wood Krutch Theatre, Building 14 of the Clark Kerr Campus which is located at 2601 Warring Street, Berkeley. The meetings will be brief, its purpose being to give overseas members of the Society an opportunity to sign the Membership Book. It will be followed by a reception, organized in conjuction with Cambridge University Press and Oxford University Press, at which hospitality will be extended to all members who are attending the Congress. Members who will be at the Congress and would like to attend the meeting/reception are asked to send a request for a ticket to the LMS Administrator, Miss S. M. Oakes, London Mathematical Society, Burlington House, Piccadilly, London W1V ONL, England. Members are also invited to apply for tickets for accompanying spouses. Please give an address to which the ticket should be sent in July. Tickets to overseas members will be sent by Air Mail.

LMS 1986 HONORARY MEMBERS

At the Society Meeting on 16th May 1986, Professor Shiing-Shen Chern was elected an Honorary Member of the London Mathematical Society, in recognition of his contributions to modern differential geometry.

C. J. Mulvey
Council and General Secretary.

STOCHASTIC MECHANICS AND STOCHASTIC PROCESSES

A five-day meeting on Stochasic Mechanics and Stochastic Processes will be held from the 4th to the 8th August 1986 at the Department of Mathematics and Computer Science, University College of Swansea. Financial support is being provided by the SERC. Speakers include E. Carlen (MIT), D. Williams (Cambridge), K. D. Elworthy (Warwick), W. Zheng (Edinburgh and Shanghai), Z. Haba (Wroclaw), J. C. Zambrini (Bielefeld), P. McGill (Maynooth), S. Albeverio (Bochum), Ph. Blanchard (Bielefeld), Y. Kifer (H. U. Jerusalem), J. Lewis (DIAS), P. Baxendale (Aberdeen), M. van den Berg (Heriot-Watt), T. Lyons (Edinburgh), A. B. Cruzeiro (Lisbon). Some speakers will be visiting Swansea for periods in excess of the dates above. The meeting is being organised by I. M. Davies, J. Hawkes, and A. Truman (UCS). Enquiries should be directed to I. M. Davies, Department of Mathematics and Computer Science, University College of Swansea, Singleton Park, Swansea, SA2 8PP. Tel: 0792-205678 ext. 4620.

NUMBER THEORY AND DYNAMICAL SYSTEMS AT YORK

A two week workshop culminating in a three day conference on Number Theory and Dynamical Systems will be held at the University of York from 30 March to 15 April 1987. The meeting is being organised jointly by the LMS and the Department of Mathematics at the University of York and will be supported by the LMS and the SERC. Those who have provisionally agreed to speak include W. Schmidt (Colorade), D. Sullivan (CUNY), I. Percival (QMC, London).

The SERC will provide some funds to help participants unable to obtain support. Accommodation on the campus for the workshop (30 March - 12 April) is very limited.

Anybody intersted in attending for all or part of the time should contact Maurice Dodson, Department of Mathematics, University of York, York, YO1 5DD or James Vickers, Department of Mathematics, University of Southampton, Highfield, Southampton. SO9 5NH.

LMS 1986 PRIZES

The De Morgan Medal is awarded to J. W. S. Cassels for his distinguished contributions to the theory of numbers.

The Senior Berwick Prize is awarded to G. P. Scott for his paper *The geometries of 3-manifolds.*

Junior Whitehead prizes are awarded to T. J. Lyons for his work in mathematical analysis, and to D. A. Rand for his work on dynamical systems.

C. J. Mulvey,
Council and General Secretary.

PROGRAMME AND CONFERENCE FUND

The Society's Programme and Conference Fund is used to give financial support to various mathematical activities in the UK. This fund is administered by the Society's Programme Committee. Grants are made under three main headings.

1. Scheme 1 Visitors.

Under this scheme, a speaker from abroad is invited to spend about two weeks in the UK, to address a Society Meeting and to give lectures in three or four seperate institutions. The Society pays the cost of the visitor's travel to and from the UK and for accommodation in London, and the host institutions are expected to share the cost of travel within the UK and local accommodation. LMS Council is anxious that greater use should be made of this scheme to enhance, by such visits, the benefit of LMS membership to members who are not easily able to attend London meetings. In planning the Society's future meetings, Programme Committee will have this scheme in mind, and suggestions from UK institutions for visitors they would like to receive but whose expenses they could not normally afford are very strongly encouraged. Programme Committee tries to plan Society Meetings about a year in advance, so suggestions under this scheme should normally be made with at least 12 months notice.

2. Scheme 2 Visitors.

Under this scheme, some financial support it provided for visitors to the UK who do not address a Society Meeting but will give lectures in at least three separate institutions. Exceptional support under this scheme might be provided for a speaker addressing a meeting which is regional in scope. The LMS contribution under this scheme will be for the visitor's travelling expenses to and from some convenient base in the UK. Host institutions are expected to share the cost of travel within

the UK and local accommodation. All arrangements for a visit supported under this scheme are the responsibility of the member who makes the application. Applications can be made at any time, but should normally be made at least two months before the starting date of the proposed visit, so that the lectures to be given can be publicized in the Society's Newsletter. The Society believes this scheme to be very useful, making ten such grants in 1985.

3. Financial Support for Conferences

Grants are made from the Programme and Conference Fund to the organizers fo conferences to be held in the UK. Funds for this purpose are limited and Programme Committee intends in future to give priority to small meetings where an LMS grant can be expected to make a significant contribution to the viability and success of the meeting. Support of larger meetings of high quality is not ruled out but for such meetings an LMS grant would normally cover only part of the total cost. An Application Form, obtainable from the Meetings and Membership Secretary, sets out conditions under which grants are normally made and requests the information Programme Committee usually requires when considering an application.

Further information about these activities of Programme Committee can be obtained from the Meetings and Memberhsip Secretary, A. R. Pears, Department of Mathematics, King's College, Strand, London WC2R 2LS, telephone number 01-836-5454, who will be pleased to discuss proposals informally with potential applications and to give advice on submission of an application to the Society. The next meeting of Programme Committee will be held in September and it would be a great help if suggestions and applications to be considered at that meeting could be submitted to the Meetings and Membership Secretary no later than 31 August 1986.

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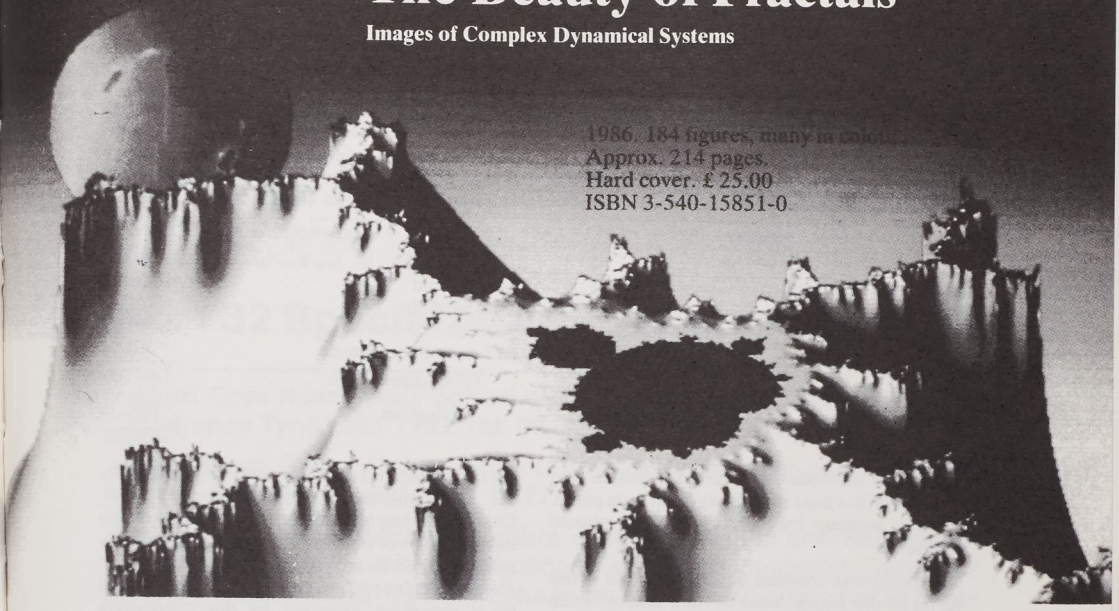

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RAMANUJAN BUST APPEAL

This appeal (see *LMS Newsletter* 127) has now achieved its object, the outcome being very satisfactory. Contributions were received from 105 individual mathematicians, the Cambridge Philosophical Society, the Edinburgh Mathematical Society, the Indian High Commission, and the Hunterian Art Gallery of Glasgow University, who provided a mahogany plinth at a nominal cost. Through the generosity of Professor Richard Askey of the University of Wisconsin-Madison, the bust, which was executed by the American sculpture Paul Granlund, was purchased for a greatly reduced price and was transported to Cambridge by Professor Askey. To avoid import duty and VAT, the sum collected was paid to the University of Cambridge, in whose name the purchase was made. The detailed accounts are as follows:

Income

	£
Contributions received	1541.29
Bank Interest (less tax)	7.28
Total Income	1548.57

Expenditure

	£
Cost of bust	1300.00
Cost of plinth	70.00
Postage	40.57
VAT exemption charge	30.00
Total expenditure	1440.57
Surplus	108.00
	1548.57

It will be necessary to provide a plaque and ensure that the bust is securely fixed to its plinth. For this purpose the surplus of £108 should suffice.

The bust was unveiled on 27 May 1986 in the library of the Department of Pure Mathematics and Statistics in Mill Lane, Cambridge, by Professor Askey, who as part of his address read out a message from Ramanujan's widow (now in her 86th year) and an appreciation, composed by the distinguished physicist, Professor S. Chandrasekhar, of Ramanujan's influence on the development of science in India. The ceremony was preceded by a lecture of 'Ramanujan today' given by Professor R. A. Rankin and was followed by a reception provided by the Cambridge Department.

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Special Issue

There will be a special issue of the *Newsletter* in September 1986. Please submit items for inclusion as soon as possible. Because of the holiday season the Editor cannot guarantee the inclusion of items received after the end of July 1986. Messages may be left on 091 - 284 4209