

# THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 217

June 1994

---

## FORTHCOMING SOCIETY MEETINGS

**Friday 17 June 1994, Burlington House**  
**B.J. Birch, J. Eells**

Friday 21 October 1994, Burlington House  
Mathematical Biology

A. Fowler, V. Isham, T. Pedley, D. Rand

Friday 18 November 1994, Burlington House  
Annual General Meeting

B.E. Johnson, J.R. Ringrose (Presidential Address)

---

## INTERNATIONAL CONGRESS OF MATHEMATICIANS LONDON MATHEMATICAL SOCIETY RECEPTION

The London Mathematical Society will be holding a Meeting and Reception, for its members, during ICM-94 at 6.30 pm on Monday 8 August in Rooms E11 and E13 (ground floor) in the Kollegiengebäude (main building) of the Universität Zürich for which the street address is 71 Rämistrasse. Members who wish to

attend should apply for their free ticket to the Administrator, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL, no later than 15 July. The Society hopes to entertain as many as possible of its members who are attending the International Congress but numbers are limited by the capacity of the rooms.

## MATHEMATICAL WHO'S WHERE - UNITED KINGDOM 1994 edition

This directory contains information about mathematicians and mathematics departments in universities in the U.K. It has been enlarged from previous editions by the inclusion of entries from the new universities and by the inclusion of some additional categories of staff. A copy is enclosed with this mailing of the Newsletter to each member with an

address in the area covered by the directory. Copies are available for purchase at a price of £3.00 or US\$6.00 per copy inclusive of postage from the Administrator, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL. Cheques should be made payable to the 'London Mathematical Society'.

## DEPARTMENTAL NEWS

**East Anglia University** Dr A. Camina has been appointed Dean of the School of Mathematics as from 1 August 1994.

**Nottingham Trent University** Dr Neville Davies has been appointed

Professor of Applied Statistics, Dr Tony Sackfield has been appointed Reader in Applied Mathematics and Dr David Applebaum has been appointed Reader in Mathematics.

## VISIT OF PROFESSOR R.I. GRIGORCHUK

Professor R.I. Grigorchuk of the Moscow Institute of Railway Transportation Engineers will be visiting the United Kingdom from 26 June until 12 July 1994, supported by a London Mathematical Society fSU Visitors Scheme grant. He will visit UMIST, Nottingham, QMW, Southampton and Cardiff. On Wednesday 29 June 1994 at 2 pm he will lecture

on "Tychonoff groups" at the Department of Mathematics, UMIST. From 12 July until 22 July 1994 Professor Grigorchuk will be attending the LMS Durham Symposium on "Geometry and Cohomology in Group Theory". For further details contact Dr R. Stöhr, Department of Mathematics, UMIST, P.O. Box 88, Manchester M60 1QD.

## VISIT OF PROFESSOR YU. V. KUZ'MIN

Professor Yu. V. Kuz'min of the Moscow Institute of Railway Transportation Engineers will be visiting the United Kingdom from 26 June until 12 July 1994, supported by a London Mathematical Society fSU Visitors Scheme grant. He will visit UMIST, QMW, Cambridge and Warwick. On Wednesday 29 June 1994 at 3 pm he will lecture on "New results on

dimension subgroups" at the Department of Mathematics, UMIST. From 12 July until 22 July 1994 Professor Kuz'min will be attending the LMS Durham Symposium on "Geometry and Cohomology in Group Theory". For further details contact Dr R. Stöhr, Department of Mathematics, UMIST, P.O. Box 88, Manchester M60 1QD.

## VISIT OF PROFESSOR A. YU. OL'SHANSKII

Professor A. Yu Ol'shanskii of Moscow State University will be visiting the United Kingdom from 26 June until 12 July 1994, supported by a London Mathematical Society fSU Visitors Scheme grant. He will visit UMIST, Glasgow, St. Andrews, QMW, and Oxford. On Wednesday 29 June 1994 at 4.30 pm he will lecture on "The Burnside problem and

hyperbolic groups" at the Department of Mathematics, UMIST. From 12 July until 22 July 1994 Professor Ol'shanskii will be attending the LMS Durham Symposium on "Geometry and Cohomology in Group Theory". For further details contact Dr R. Stöhr, Department of Mathematics, UMIST, P.O. Box 88, Manchester M60 1QD.

## MODEL THEORY AND ALGEBRAIC GEOMETRY

A workshop on "Model Theory: Stability and its relationship to Algebraic Geometry" will be held, with financial assistance from the London Mathematical Society, at the University of Manchester from 5th - 10th September 1994. The workshop is a meeting of a European Community Human Capital and Mobility Network in Model Theory but is open to participants outside the network although, in order to maintain the workshop character of the meeting, the total number of participants may have to be limited.

There will be a series of lectures on the following topics: stable groups, fields (algebraically, separably and differentially closed), introduction to algebraic groups and abelian varieties, Zariski geometries, the Mordell-Lang conjecture for function fields in all characteristics. It is anticipated that speakers will include E. Bouscaren, F. Delon, D. Lascar, D. Marker, A. Pillay, C. Wood and M. Ziegler.

For further information contact Dr Mike Prest, Department of Mathematics, University of Manchester M13 9PL, e-mail: mprest@ma.man.ac.uk.

# **LONDON MATHEMATICAL SOCIETY**

## **General and Ordinary Meeting**

FRIDAY 17 JUNE 1994 at 3.30

J. Eells (Warwick/Cambridge )  
will speak at 3.35 on

### **Harmonicity - and beyond**

B.J. Birch (Oxford)  
will speak at 5.00 on

**Elliptic Curves over the Rationals**  
(1993 Senior Whitehead Prize Lecture)

Tea will be served at 4.30

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

All interested are very welcome

## RECENT LMS PUBLICATIONS

**Shintani Zeta Functions** by A. Yukie, pp 351, ISBN 0 521 44804 2. LMS Lecture Note Series 183, £25.00, LMS members discount price £18.75.

The theory of prehomogeneous vector spaces is a relatively new subject although its origin can be traced back through the works of Siegel to Gauss. The study of the zeta functions related to prehomogeneous vector spaces can yield interesting information on the asymptotic properties of associated objects, such as field extensions and ideal classes. This is amongst the first books on this topic, and represents the author's deep study of prehomogeneous vector spaces. Here the author's aim is to generalise Shintani's approach from the viewpoint of geometric invariant theory, and in some special cases he also determines not only the pole structure but also the principal part of the zeta function. This book will be of great interest to all serious workers in analytic number theory.

**Arithmetical Functions** by W. Schwarz and J. Spilker, pp 388, ISBN 0 521 42725 8. LMS Lecture Note Series 184, £25.00, LMS members discount price £18.75.

The goal of this book is the characterization of certain multiplicative and additive arithmetical functions, by combining methods from number theory with some simple ideas from functional and harmonic analysis. The authors achieve this goal by considering convolutions of arithmetical functions, elementary mean-value theorems of Wirsing and Halász and study the pointwise convergence of the Ramanujan expansion. Finally, some applications to power series with multiplicative coefficients are included, along with exercises and extensive bibliography.

**Locally Presentable and Accessible Categories** by J. Adamek and J. Rosicky, pp 330, ISBN 0 521 42261 2. LMS Lecture Note Series 189, £25.00, LMS members discount price £18.75.

The concepts of a locally presentable category and an accessible category have

turned out to be useful in formulating connections between universal algebra, model theory, logic and computer science. The aim of this book is to provide an exposition of both the theory and the applications of these categories at a level accessible to graduate students.

**Two-dimensional Homotopy and Combinatorial Group Theory** edited by C. Hog-Angeloni, W. Metzler and A.J. Sieradski, pp 424, ISBN 0 521 44700 3. LMS Lecture Note Series 197, £25.00, LMS members discount price £18.75.

Basic work on two-dimensional theory dates back to K. Reidemeister and J.H.C. Whitehead. Much work in this area has been done since then, and this book considers the current state of knowledge in all the aspects of the subject. The editors start with introductory chapters on low-dimensional topology, covering both the geometric and algebraic sides of the subject, the latter including crossed modules, Reidemeister-Peiffer identities, and a concrete and modern discussion of Whitehead's algebraic classification of 2-dimensional homotopy types. Further chapters have been skilfully selected and woven together to form a coherent picture. The latest algebraic results and their applications to 3- and 4-dimensional manifolds are dealt with. The geometric nature of the subject is illustrated to the full by over 100 diagrams. Final chapters summarise and contribute to the present status of the conjectures of Zeeman, Whitehead and Andrews-Curtis. No other book covers all these topics. Some of the material here has been used in courses, making this book valuable for anyone with an interest in two-dimensional homotopy theory, from graduate students to research workers.

These books have recently been published and are available from Cambridge University Press, Customer Services, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU. Payment should be sent with your order.

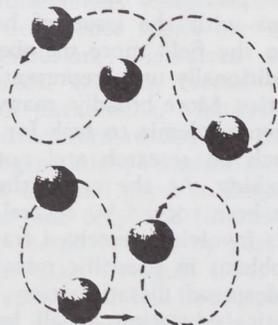
# LONDON MATHEMATICAL SOCIETY 1994 POPULAR LECTURES

**Strathclyde University - Thursday 16 June**  
**Manchester University - Friday 17 June**  
**Imperial College - Friday 1 July**

**Dr Richard Pinch**

## **FERMAT'S LAST THEOREM**

**"This infamous problem, which was posed in the 1630's, may now have succumbed. We describe the successes and failures along the way."**



**Dr Colin Wright**  
**JUGGLING**

**"Juggling is an ancient art that has baffled and entertained countless people. In this talk we discover a richness and variety of mathematical structure only recently discovered in this skill."**

**STRATHCLYDE UNIVERSITY** Commences at 2.00 pm, 3.00 pm refreshments, ends at 4.30 pm. Lecture Room 1, McCance Building, University of Strathclyde, 16 Richmond Street, Glasgow G1 1XQ. Admission is free. For further information contact Dr C. Constanda (041 552 4400 ext 3714) or Dr A. McBride (041 552 4400 ext 3647) at the Department of Mathematics, University of Strathclyde.

**MANCHESTER UNIVERSITY** Commences at 7.00 pm, 8.00 pm refreshments, ends at 9.30 pm. Lecture Theatre B, Roscoe Building, University of Manchester. Admission free, with ticket in advance. Apply by Friday 10 June to Dr M. Prest, Department of Mathematics, University of Manchester M13 9PL. A stamped addressed envelope would be appreciated.

**IMPERIAL COLLEGE, LONDON** Commences at 7.30 pm, 8.30 pm refreshments, ends at 10.00 pm. The Great Hall, Sherfield Building, Imperial College, South Kensington, London SW7. Admission free, with ticket in advance. Apply by Monday 27 June to Miss S.M. Oakes, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL. A stamped addressed envelope would be appreciated.

## THE AMERICAN MATHEMATICAL SOCIETY IN 1994

The American Mathematical Society owes its origins to the London Mathematical Society - it was in the late 1800s that the American mathematician Thomas Scott Fiske visited England and attended meetings of the LMS. Impressed with the sense of community the LMS fostered among mathematicians, Fiske returned to the U.S. determined to create such an organization in America. In 1888, he founded the New York Mathematical Society, which in 1894 was named the American Mathematical Society. The AMS offices were in New York City, at Columbia University, until 1954, when the AMS moved to its present home, Providence, Rhode Island. The closeness of the AMS and LMS continues to the present, manifested by joint publication ventures and activities such as the Joint AMS-LMS Meeting, held at the University of Cambridge in the summer of 1992.

The AMS is a non-profit professional society with nearly 30,000 members worldwide, one-third of whom reside outside North America. The primary mission of the Society is to further the interest of mathematical research and scholarship. The AMS serves the national and international community through its publications, meetings, advocacy and other programmes which foster the development and communication of research in the mathematical sciences. In pursuit of its mission, the AMS is also concerned with mathematics' education, public awareness of mathematics, the status of the mathematics profession, and issues facing the international mathematics community. Among the major activities of the AMS are organizing meetings and conferences of all sizes and specialties; offering a great variety of publications, from research monographs to videotapes; developing *Mathematical Reviews* in both its electronic and paper versions; providing a range of employment services; and offering a variety of membership services and benefits.

The past several years have been a time of change and challenge for the mathematical sciences community in the United

States. Scientifically, mathematics in the U.S. is strong and flourishing. However, there are many issues facing the mathematical profession that have brought it under pressure. In this time of stringent budgets, mathematics departments are being asked to take on new tasks in educational reform. Academic libraries are struggling to keep their collections current in a time of declining budgets, proliferation of new journals, and rising costs of existing journals. Electronic publishing holds both great promise and unknown risks for scientific publishers, presenting the Society with numerous directions for possible change. With the employment crisis continuing unabated for the last few years, many new PhDs face a discouraging future in mathematics. The profession has still not come to grips with the issue of how to bring into the field more members of groups traditionally underrepresented in mathematics. More broadly, many critics have taken academia to task for focusing too much on research and not enough on teaching. At the same time, academia has been rocked by several public scandals involving perceived fraud or ethical problems in scientific research. There is widespread dissatisfaction with mathematics education at all levels, and although a great deal of work has been done in this area, substantive, lasting reform is still in the future.

These are the kinds of issues confronting the AMS today. To address them, the AMS developed a consensus-building process that brings into focus the most important goals and objectives for the coming three to five years. The process initiates from the Society membership, acting through its elected leaders and brings in the involvement of the AMS staff. Setting forth clearly articulated goals has allowed the Society to increase its focus and to better utilize its resources.

In recent years, the AMS has begun to develop a greater international role, particularly in aiding mathematicians in need and delivering mathematical literature to developing areas. One such

example is the AMS programme to assist mathematicians in the former Soviet Union. Closer to home, the AMS has established an office in Washington, DC and has developed a national science policy agenda for mathematics. Currently, the Society is pursuing many new initiatives, including: enhanced membership communication, increased employment services, greater electronic communication capabilities, a national in-

ternship programme for graduate students, improved support for mathematical research, expanded opportunities for postdocs, better research publications, and enhanced services to the international mathematics community. The AMS is actively preparing to serve the needs of the mathematics community in the twenty-first century.

William H. Jaco  
AMS Executive Director

## FRACTAL 95

The 3rd International Working Conference on "Fractals in the Natural and Applied Sciences" will be held from 7 - 10 February 1995 in Marseille, France. The conference is intended to provide a forum for the dissemination of the latest research findings in the broad field of fractals. Interdisciplinary submissions are encouraged. Conference topics are: Applications; Diffusion; Disordered systems; Dynamical systems; Fractal surfaces; Growth phenomena; Multifractal formalism; Pattern formation; Phase transitions; Self organization; Visualization.

Four copies of a full paper in English, typed on one side only and limited to 5,000 words, should be sent by post to arrive no later than 4 August 1994. No e-mail or fax submission will be accepted. Submission of a paper implies that the work has not been previously published nor is currently under consideration for publication elsewhere. In order to be considered, the first page should contain the title, authors' names and affiliations, phone and fax numbers, full electronic and postal addresses, an abstract of not more than 200 words, and at most five

keywords. All papers will be refereed and those accepted and presented will be published.

The Programme Committee consists of: E. Ben-Jacob (Israel), A. Coniglio (Italy), M. Daoud (France), T.G. Deweey (USA), M.S. Elnaschie (UK), F. Family (USA), N. Frankel (Australia), M.H. Jensen (Denmark), R. Kapral (Canada), J. Kigami (Japan) J.M. Kowalski (USA), M.L. Lapidus (USA), A.J. Mandell (USA), M.M. Novak (UK), J. Parisi (Germany), J. Pëincke (France), H. Takayasu (Japan), R.B. Tao (China), R. Tokunaga (Japan), C. Tricot (Canada) and S. Ushiki (Japan).

The Conference is promoted by the International Federation for Information Processing, through its Specialist Group on Fractals and Chaos, SG15, is organised by Kingston University and hosted by CIRM in Marseille, France. For further information and submission of papers write to Miroslav M. Novak, School of Physics, Kingston University, Surrey KT1 2EE, England, e-mail: novak@uk.ac.kingston, fax: +44 (0)81 547 7562, tel: +44 (0)81 547 2000.

## BANACH ALGEBRAS 95

### First Notice

This conference will be held in Newcastle on 17 - 28 July 1995. The programme will consist of lectures by the participants on recent developments in the subject. These will be scheduled for the morning and late afternoon, leaving the rest of the afternoon and evening free for informal discussion, workshops, etc. Anyone who

wants further information should contact either Professor B.E. Johnson or Dr M.C. White at Department of Mathematics and Statistics, University of Newcastle, Newcastle upon Tyne NE1 7RU, e-mail: michael.white@uk.ac.newcastle, fax: 091 222 8020.

## GRANTS IN SUPPORT OF PUBLIC UNDERSTANDING OF SCIENCE

Grants are available for new or continuing activities or initiatives directly concerned with the promotion of the public understanding of science (including mathematics, technology and engineering). Innovative and imaginative proposals are welcome. Over three hundred grants have already been awarded for an exciting range of projects such as science in theatre, enhancing displays; travelling shows and open days; providing equipment and interactive exhibits, signage, labelling and leaflets; science workshops; and talks and lecture series.

Applicants are asked to show clearly how their proposal relates to the public understanding of science, to submit a statement of the financial basis of their proposal, to specify any related schemes in the area of the public understanding of science of which they are aware and to

give an assurance that the grant applied for is not for an activity in direct competition or conflict with existing schemes. Successful applicants will be required to submit a brief written report after the event on how the grant was used.

All applicants must be resident in the United Kingdom. The maximum sum available for an individual grant is £3000 and allocations will often be less than this amount. The closing dates for applications are 31 March and 31 October each year: late applications will be considered at the next round. Application forms are available from Ms Cheryl Davies, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG, telephone 071-839 5561 ext.247. The Council of the Royal Society is advised on suitable recipients for grants by COPUS (Committee on the Public Understanding of Science).

## EUROPEAN WOMEN IN MATHEMATICS

European Women in Mathematics is now a formally constituted organisation. EWM is an affiliation of women bound by a common interest in the position of women in mathematics. Their purposes are: to encourage women to take up and continue their studies in mathematics; to support women with or desiring careers in research in mathematics or mathematics related fields; to provide a meeting place for these women; to foster international scientific communication among women and men in the mathematical community; to co-operate with groups and organisations, in Europe and elsewhere, with similar goals.

It has recently been decided that the next EWM general meeting will be held in Madrid in the second half of July 1995. There will be some joint activity of AWM and EWM at the 1994 International Congress of Mathematicians in Zürich. This is being organised by Cora Sadosky, the

president of AWM, and Eva Bayer. The e-mail network is now being organised by Sarah Rees (England), to join contact [sarah.rees@uk.ac.newcastle](mailto:sarah.rees@uk.ac.newcastle).

For further information about European Women in Mathematics contact: The Secretary of EWM: Ritta Ulmanen, Department of Mathematics, PO Box 4 (Hallituskatu 15), SF-00014, University of Helsinki, Finland, e-mail: [ulmanen@sophiehelsinki.fi](mailto:ulmanen@sophiehelsinki.fi). The UK regional co-ordinator, from whom information about joining EWM and receiving the Newsletter can be obtained, is Dr Amanda Chetwynd, Department of Mathematics & Statistics, University of Lancaster, e-mail: [maa003@uk.ac.lancaster](mailto:maa003@uk.ac.lancaster). There are three levels of subscription: Low (for postgraduate and unemployed) £1.00; Standard (for most people) £15.00; High (for people able to make a substantial donation) £38.50.



University  
of Durham

**DEPARTMENT OF  
MATHEMATICAL SCIENCES**

**Chair in Pure Mathematics**

A Chair in Pure Mathematics is offered from 1 January 1995 or a subsequent date to be arranged.

Candidates should have an outstanding research record in a branch of Pure Mathematics. The interests of present members of the department include Number Theory, Algebraic and Differential Geometry, and Topology; preference may be given to persons whose interests lie in these or closely related areas.

Informal enquiries may be directed to Professor A.J. Scholl (telephone 091-374 2355, e-mail [a.j.scholl@durham.ac.uk](mailto:a.j.scholl@durham.ac.uk)), or Dr M.A. Armstrong (telephone 091-374 2352, e-mail [m.a.armstrong@durham.ac.uk](mailto:m.a.armstrong@durham.ac.uk)).

**Further particulars may be obtained form the Director of Personnel, University of Durham, Old Shire Hall, Durham, DH1 3HP (tel: 091 374 3158), to whom applications (5 copies, including cv and the names of three referees) should be submitted by 30 June 94, citing reference C013. Candidates outside the British Isles need submit one copy only.**

**COLLOQUIUM CAROLUS MAGNUS ON ARITHMETIC AND GEOMETRY**  
**1200 Years of Science in Central Europe**  
**Aachen, 19-22 March 1995**  
**Call for Papers**

The RWTH, the Cathedral Chapter and the City of Aachen are celebrating the 1200th anniversary of the scientific school of Charlemagne's Court at Aachen. Since the year 794/95 Emperor Charles had spent the remaining winters of his life at Aachen. This made Aachen de facto the capital of his empire; his court school, led by Alcuin of York, became a permanent institution. The revival of the old septem artes liberales was a new beginning for these artes in Central Europe, in particular for Arithmetic and Geometry.

An outstanding contribution of this time was the collection of 53 mathematical problems "propositiones ad acuendos iuvenes", which is attributed to Alcuin. This work was the first collection of mathematical problems written in Latin; it has been of great importance for the teaching of mathematics in the medieval western world.

There will be invited lectures and sections for contributed papers. We encourage papers on both modern and historical topics. Selected papers will be published in refereed proceedings.

The mathematical colloquium is part of the general Colloquium Carolus Magnus, which will cover other fields as well, in particular history and the other artes

liberales. Although Aachen's cathedral is the centre of Charlemagne's empire, there will be excursions to other historic sites. Many cultural contributions are included. The Colloquium Carolus Magnus will continue until 26 March.

The tentative scope of the meeting will include such topics as Number Theory, Combinatorics, Optimization and Complexity, Discrete Geometry, Differential Geometry, Algebraic Geometry, History of Mathematics.

Preliminary Scientific Board: P.L. Butzer (chair), W. Benz, I. Ekeland, D. Foata, M. Groetschel, H.Th. Jongen, H.W. Lenstra, W. Oberschelp, S. Smale. Local Organizing Committee: W. Oberschelp (chair) and members of the Departments of Mathematics of the ALMA Universities (Aachen, Liege, Maastricht).

Registration forms can be ordered by phone/fax/mail from Professor Walter Oberschelp, RWTH Aachen, Department of Mathematics, 52056 Aachen, Germany. Phone: + +49-241-80-21050, fax: + +49-241-8888-215, e-mail: carolus@rwth-aachen.de. Deadline for registration: 31 October 1994. Deadline for abstracts (30 minutes presentations): 30 November 1994.

**NINETYETH ANNIVERSARY**

To commemorate the ninetieth anniversary of the birth of J.H.C. (Henry) Whitehead there will be a lecture by Professor P.J. Hilton on "The continued

influence of Henry Whitehead's ideas" at 1.30 pm on Monday 13 June 1994 in the Mathematical Institute at Oxford.

**THIRD INTERNATIONAL WORKSHOP ON REAL AND COMPLEX SINGULARITIES**

The Third International Workshop on Real and Complex Singularities will be held at the University of Sao Paulo (USP) in Sao Carlos (in the state of Sao Paulo), Brazil, from 1 - 5 August 1994. The

workshop aims to bring together mathematicians from various countries working on singularity theory and its applications. Further information may be obtained by e-mail from sing3@icmsc.sc.usp.br



**F. KLEIN**  
**Honorary Member 1875**

## 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 1994

- 1-7 Algebraic Topology Conference, Barcelona, Spain (201)
- 4 Edinburgh Mathematical Society Meeting, St Andrews (209)
- 5-11 Workshop on Harmonic Analysis, Oscillatory Integrals & Applications to PDEs, ICMS, Edinburgh (210)
- 11-13 Summer Meeting of the Canadian Mathematical Society, Alberta University, Canada (215)
- 13-17 Elliptic & Parabolic Problems Conference, Pont-a-Mousson, France (204)
- 13-17 Hyperbolic Problems - Theory, Computations & Applications Conference, Stony Brook, New York, U.S.A. (204)
- 17 London Mathematical Society Meeting, London
- 27-1 Jul Ordinary and Partial Differential Equations Conference, Dundee University (215)

### JULY 1994

- 1-11 Quantum Concepts in Space and Time, LMS Durham Symposia (211)
- 4-7 Conference on Nonlinear Dynamics and Pattern Formation in the Natural Environment, The Netherlands (210)
- 5-10 The Mathematical Theory of Phase Transitions Summer Workshop, Sussex University (214)
- 10-16 Combinatorial Geometry Euroconference, Anogeia, Greece (214)
- 11-15 Algebraic and Number Theoretic Aspects of Ergodic Theory Workshop, Warwick University (214)
- 11-16 Quantum Communications and Measurement Workshop, Nottingham University (212)
- 11-22 Topological Methods in Differential Equations and Inclusions Seminar, University of Montreal Canada (212)
- 12-22 Geometry and Cohomology in Group Theory, LMS Durham Symposia (211)
- 15-16 W.N. Everitt Seventieth Birthday Meeting, Birmingham University (215)
- 17-23 Workshop on Elliptic PDE's & related areas of Harmonic Analysis, ICMS, Edinburgh (210)
- 17-23 Actions of Lie Groups and Discrete Subgroups on Manifolds Euroconference, Anogeia, Greece (214)
- 18-22 Non-Standard Mathematics Colloquium, University of Averoio, Portugal (212)
- 18-22 Workshop on Lattice Dynamics, Statistical Mechanics and Ergodic Theory, Warwick University (214)
- 20-22 International Symposium on Symbolic and Algebraic Computation, Oxford (213)
- 20-27 3rd Souslin Conference, Saratov, Russia (209)

- 25-29 Category Theory European Colloquium, France (213)
- 25-29 Evolution Equations Conference, University of Strathclyde (211)
- 26-30 Differential Geometry International Colloquium, University of Santiago de Compostela, Spain (210)
- 28-1 Aug Differential Geometry Workshop, Leeds University (211)

### AUGUST 1994

- 3-11 International Congress of Mathematicians, 1994, Zurich, Switzerland (189)(197)(207)(216)
- 12-20 Classical and Quantum Geometry of Homogeneous Spaces Workshop/Conference, Moscow, Russia (213)
- 14-17 Asymptotics in Mechanics International Conference, Marine Technical Univ, St Petersburg, Russia (213)
- 14-27 Finite and Locally Finite Groups, NATO Advanced Study Institute, Bosphorus University, Istanbul, Turkey (210)
- 15-26 Advanced Workshop on Algebraic Geometry, ICTP, Trieste, Italy (207)
- 18-25 Third International Conference on Group Theory, Pusan, Republic of Korea (209)
- 22-24 Galois Modules Workshop, College of St Hild & St Bede, Durham University (216)

### SEPTEMBER 1994

- 5-16 Electron-Phonon Workshop, Warwick University (214)
- 9-12 Physical Interpretations of Relativity Theory, Imperial College, London (216)
- 19-24 Analytic Aspects of Partial Differential Equations Instructional Conference, Bath University (213)
- 21-22 British Topology Meeting, Southampton University (213)
- 26 One-Day Function Theory Meeting, Imperial College, London (215)
- 28-30 Open Taniguchi Symposium, Warwick University (214)

### OCTOBER 1994

- 10-28 School/Workshop on Variational and Local Methods in the Study of Hamiltonian Systems, ICTP, Trieste, Italy (207)

### DECEMBER 1994

- 12-17 Pacific Rim Geometry Conference, National University of Singapore (214)

---

The Newsletter is published monthly except in August. Items and advertisements for inclusion in the Newsletter should be sent to the Editor, Susan Oakes, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL, to arrive before the first day of the month prior to publication. Telephone 071-437 5377, fax, 071-439 4629, e-mail lms@uk.ac.kcl.cc.bay. The London Mathematical Society is registered with the Charity Commissioners.