THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 208

September 1993

FORTHCOMING SOCIETY MEETINGS

Friday 15 October 1993, Scientific Societies Lecture Theatre Symplectic Geometry and Hamiltonian Dynamics S. Alpern, H. Hofer, D. Salamon, C. Viterbo Friday 19 November 1993, Burlington House D.G. Crighton, M.V. Berry

COLLINGWOOD MEMORIAL PRIZE

This prize was established by the London Mathematical Society in memory of Sir Edward Collingwood and is awarded annually to a student of the University of Durham obtaining First Class Honours in Mathematics and entering a course of postgraduate study. The 1993 prize is awarded to Mr L. Hatter of Van Mildert College who will be a research student at the University of Oxford.

DEPARTMENTAL NEWS

It is intended that 'Departmental News' will be a regular item in the Newsletter, recording appointments, promotions, retirements and other matters of general interest to the mathematical community. The Editors will be most grateful to receive such information from Departments.

University of Bristol, Department of Engineering Mathematics

Following the retirement of Professor R.D. Milne, the University has appointed S.J. Hogan as Professor of Mathematics in the Faculty of Engineering. A.R. Champneys has been appointed Lecturer in Nonlinear Systems from 1st October 1993.

Exeter University, Department of Mathematics

Emeritus Professor David Rees was awarded an Honorary Degree of Science by the University of Exeter on the 15th July 1993. Heriot-Watt University, Department of Mathematics

The University has approved the promotions of Drs C.E. Beevers and K.J. Brown to personal professorships, with effect from the 1st August 1993.

University of Central Lancashire, Department of Mathematics and Statistics

M. Grannell has been appointed to a professorship.

University of Leeds, Department of Mathematical Studies

Malcolm Bloor, reader in mathematical engineering will become professor of mathematical engineering.

Teesside University, School of Computing and Mathematics

W.S. Hall has been appointed to a professorship.

BIRTHDAY HONOURS

Congratulations to Professor Philip Burke, Professor of Mathematical Physics, Queen's University Belfast who was awarded a CBE.

LONDON MATHEMATICAL SOCIETY NOTICE OF GENERAL MEETING

There will be a General Meeting of the Society on Friday 15 October 1993 at 5.00 p.m. in the Scientific Societies Lecture Theatre, New Burlington Place, off Savile Row, London W1, to consider two proposals by the Council of the Society to make changes to the By-Laws.

1. By-Law II,3

The Council of the Society proposes that the existing By-Law II,3 be deleted and replaced by that printed below.

The Council has, in the light of Statute 11, increased the annual subscription of Corporation and Institutional Members for 1993-94 to £430 from the 1992-93 level of £411. The new By-Law II,3 would record the new rate.

Text of the proposed By-Law II,3

The annual subscription to the Society of Corporation and Institutional Members for the 1993-94 session shall be £430, inclusive of one volume of the **Bulletin** and two volumes of the **Journal** and of the **Proceedings**, except that those Corporation and Institutional Members who have more than one Representative shall pay an additional subscription of £14.50 for each Representative in excess of one.

2. By-Law III,3

Statute 6(iv) and By-Law III,3 concern the nomination of mathematicians for election as Honorary Members of the Society. The Council's current practice is consistent with Statute 6(iv), which reads as follows.

Text of Statute 6(iv)

Honorary Members will be elected by Council subject to confirmation by a Meeting of the Society.

By-Law III,3 reads as follows.

Text of By-Law III,3

Mathematicians so nominated shall be proposed at the first subsequent Ordinary or Annual General Meeting, and shall be voted on at the Meeting next following.

The Council considers that there is no further need for By-Law III,3, and **proposes that it be deleted**, and that the current By-Laws III,4 and III,5 be renumbered as III,3 and III,4 respectively.

R.Y. Sharp Council and General Secretary

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WHITE PAPER ON SCIENCE AND TECHNOLOGY

The most significant thing about the recent White Paper on science is that it exists at all. The government is showing more interest in science than it or its predecessors have done for a long time. There are also some good things in the document, and not just the usual exhortations that more must be done to attract young people and especially women into science. For example, not only did the Minister quote Sir Michael Ativah's insistence that progress in science depends on what scientists do, not on the machinations of committees, he also proposes to retain the dual-support system which is crucial in putting this idea into practice. There is even an acknowledgement of the problems of staff on short term contracts.

Throughout the White Paper, however, there is a depressing note of complacency. The government apparently believes that science in the UK is in excellent shape and that the present level of funding is adequate. The only serious problem is that British science is not making a large enough contribution to wealth creation.

This may not be quite how most of us see it, and it is hard to find any international comparison that supports such a view, but it is consistent with what Waldegrave said in his speech at Imperial College earlier this year. He reminded us that while he had decided it was time to have a look at the state of science, this did not necessarily mean that there were any major problems that had to be addressed. And when a group from Save British Science was invited to give evidence to the House of Lords Committee on Science and Technology we were explicitly told that we were not being asked to discuss the level of funding, only the distribution.

Now this has an obvious and serious implication. Some of the proposals may be welcome, but their costs will reduce what is available for existing activities. For example, the MSc is to become the normal initial postgraduate degree in science. Many mathematicians will see the need for an extra year of largely taught material before students begin their research, but they may be less enthusiastic when they realize that the government means to pay for it by reducing the number of PhD students. There is also to be more emphasis on relating research training to the needs of potential employers, and we have to consider how this may affect the distribution of awards among different subjects and what constraints there may be on what our graduate students do. The Research Councils are to be reorganized, and here the change that concerns us most is the creation of a Particle Physics and Astronomy Research Council. This will separate the funding of large facilities and international subscriptions from the smaller amounts. The UK will, however. continue to pay its contribution to CERN and similar organizations from the science budget, rather than from the Foreign Office as many other countries do.

The White Paper sets out mission statements for the Research Councils and all of them (except the new PPARC) give very great prominence to the promotion of wealth creation. This in itself may be unexceptionable, but we are in a zero-sum game, and more for wealth creation must mean less for pure science. Since the contribution of mathematics to industry and commerce tends to be less direct than that of other subjects (though I have no doubt that it is at least as important) we may find it harder to frame grant proposals that will satisfy the new criteria that may be set up, and this could reduce our share of the cake.

Perhaps if the economic climate had been more favourable the government might not have been so reluctant to acknowledge any need for more money for science. But the appointment of a Minister at Cabinet rank and the appearance of a White Paper have raised the profile of science and so made it easier for us to continue to argue our case, as we shall have to do. The White Paper is disappointing, but it is not a disaster and it is not the end of the story.

> P.T. Saunders King's College London

DIFFERENTIAL GEOMETRY DAY

Wednesday 22 September, 1993

School of Mathematics, University of Leeds

- 10.15 Coffee, level 9, outside Mathematics staff common room
- 10.45 A. West (Leeds) Non-spherical submanifolds with pointwise 2-planar normal sections
- 11.50 S. Gudmundsson (Copenhagen) Harmonic morphisms from complex Grassmannians
- 2.15 I.R. McIntosh (Bath) Superconformal 2-tori in CPn
- 3.15 Tea, level 9, outside Mathematics staff common room
- 3.45 J.W. Bruce (Liverpool) Duality in generic geometry

All interested are welcome to attend. Further details from John C. Wood, School of Mathematics, University of Leeds, LS2 9JT, tel: 0532-335106, fax: 0532-429925, e-mail: i.c.wood@uk.ac.leeds

VISIT OF DR. S. GUDMUNDSSON

Dr. S. Gudmundsson, at present at the University of Copenhagen, will be visiting the United Kingdom during the period 13th to 24th September, 1993. He will give a lecture entitled "Minimal submanifolds via harmonic morphisms" at 2.15p.m. on Friday 17th September in Room CM221, Department of Mathematical Sciences, University of Durham and a different lecture as part of a Differential Geometry Day at Leeds on 22nd September (see separate notice). His visit has been made possible by a Scheme 2 travel grant from the London Mathematical Society. Further details from Dr. J.C. Wood, School of Mathematics, University of Leeds, Leeds, LS2 9JT.

VISIT OF PROFESSOR G.A. NOSKOV

Professor G.A. Noskov (Omsk) will be visiting the United Kingdom from 26th September to 17th October. His visit has been made possible by a Scheme 2 travel grant from the London Mathematical Society. His interests are in infinite group theory, including algorithmic questions, soluble groups, cohomology and group actions on R-trees. He will lecture at the University of Manchester, UMIST, Cambridge and possibly other places. Further information can be obtained from B. Hartley, Department of Mathematics, University of Manchester, Manchester M13 9PL, email: mbbgsbh@ uk.ac.mcc.cms.

BOOK REVIEWS EDITOR

Council is pleased to announce that Dr D.J.H. Garling has accepted an invitation to serve as the Society's Book Reviews Editor for a period of five years from August 1993.

FOREIGN MEMBER OF THE ROYAL SOCIETY

On 17 June 1993, Professor Lennart Axel Edvard Carleson, Professor of Mathematics at the Royal Institute of Technology, Stockholm, Sweden, was elected a Foreign Member of the Royal Society.

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MATHEMATICAL CHALLENGE

In 1976 the Scottish Mathematical Council, inspired by what it had heard about the Wisconsin Talent Search, introduced the problem-solving competition "Mathematical Challenge" to all secondary schools on the mainland of Scotland, and Orkney, Shetland and the Western Isles. Much has happened since then, and other Mathematical Challenges have arisen, but the original competition persists, its aims are unchanged and its mode of operation, except in one important detail, remains essentially the same as it was at the beginning. Therefore an avid reader of the Society's Newsletter having an exceptionally retentive memory might know that "the aims are (i) to stimulate interest in mathematics generally and thereby to attract pupils to the study of mathematics and its applications, (ii) to encourage pupils to think for themselves and to develop their powers of mathematical and logical reasoning and (iii) to discover and foster talent in the art of problem solving"; these words are quoted from an article I wrote for Newsletter 54, December 1978, after the competition had been running for two years. Just over four years later, in Newsletter 95, January 1983, there was an excellent report "Scottish Mathematical Challenge 1981-82", by Mr Donald Smith of Morrison's Academy, Crieff, in which he reviewed the workings of the competition from the point of view of a school teacher. (The term "Scottish Mathematical Challenge" is sometimes used in place of "Mathematical Challenge" if it is felt that there is danger of confusion.)

The organisers can now draw on the accumulated experience of seventeen years, during which over 22,000 young problem-solvers have submitted more than 50,000 entries. By no means all have been brilliant pieces of work; ideas can be wildly wrong and powers of communication can leave much to be desired. Particularly noticeable is a general lack of knowledge of geometry, coupled with evidence of poor spatial intuition. Yet there are strikingly good solutions and examples of sheer determination winning through as a result of refusal to admit defeat. Some of the best solutions are published in the Scottish Mathematical Council's annual journal. But it is not only brilliant solutions that interest us. We appreciate, through personal experience of course, that not everyone is a genius, and we try to encourage as many as we can to try their best, to discover what talents they have and to enjoy the experience. We are not consciously aiming at an elite class, although we believe that from time to time we are instrumental in identifying and encouraging someone whose ability is well above normal.

There are neither examinations nor tests in Mathematical Challenge. Contestants are given plenty of time to think about the problems, keeping an eye on the calendar rather that on the clock. Of course there is a worry that teachers, parents and other students may from time to time give too much help in what is supposed to be a student's own piece of work. Whilst there is some evidence that this occurs, it does seem to be rare. Most young people appreciate that they will derive the greatest pleasure from efforts that have been their very own.

The problems are not set with any particular syllabus in mind. As far as possible, they require a minimum of technical knowledge. In the early years of the competition, the problems were for all to try. Naturally it was recognised that senior students would in some cases have definite advantages over juniors because of their greater experience. This was taken into account in choosing the award winners. For a few years, the work of the more junior contestants was judged on the solutions to the first three problems in each set of five, but now the competition is in three "Divisions" - Junior for first and second year. Middle for third and fourth and Senior for fifth and sixth, with some questions occurring in more than one division. For each division there are three sets of problems, with four in each set.

For the organisation of the competition, Scotland is divided into four sections. Each section is responsible for its own distribution of competition material, for marking, for choosing award winners and for arranging award ceremonies. A "National Committee" coordinates the work of the sections, invents, collects, grades and chooses problems and, in collaboration with the Scottish Mathematical Council, tackles the difficult problem of fund-raising. Income is spent on prizes (normally money and commemorative items such as Mathematical Challenge mugs, which have proved to be very popular), on administration (for example paper, postage and photocopying) and on expenses incurred in running award ceremonies. The regional and islands education authorities give valuable help in the distribution of material and university departments give much appreciated secretarial assistance. There are no paid officials in Mathematical Challenge; all the work is voluntary.

The schools' interest in Mathematical Challenge remains high, with particular emphasis now on the Junior Division. In 1992-93, entries were received from over 250 secondary schools, more than half the number in Scotland. Prize-winners have come from all over the country - from Highland, Orkney, Shetland and the Western Isles as well as from the more densely populated areas. So long as this interest remains, and funding can still be obtained, the competition will go on, provided of course that recruits can still be persuaded to join the army of unpaid workers. As is well known, the demands on teachers' time are ever increasing and yet up to now we have found no real difficulty in persuading them to contribute to the work as well as to encourage their pupils to take part.

As I have already said, fund-raising is a hard problem. Mathematical Challenge has been able to continue over the years, and is able to look forward to the future. because it has been greatly helped not only by the members of the army referred to above, but also by a variety of sponsors who know the importance of encouraging young people to develop their mathematical talents and to widen their experience of solving problems. But these are difficult times, and financial sponsors, however enlightened and enthusiastic they may be, may be unable to continue their support. Much appreciated is the support given by the London Mathematical Society, which helped in the early years of the competition and awarded a timely grant for 1992-93 without which the value of the prizes would have remained at the previous year's desperately low level, which was the same as when the competition began in 1976, or would have fallen lower still. This grant, and the encouragement that came with it, has made all the effort well worthwhile.

> Edward Patterson Chairman, Mathematical Challenge

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Edin. Math. Society	3	490	180	15 - 20
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Journal	6	1152	800	15 - 20
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JOURNAL BACKLOG

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GRADUATE SUMMER SCHOOL IN HARMONIC AND FUNCTIONAL ANALYSIS

A Graduate Summer School in Harmonic and Functional Analysis will be held in Bordeaux from 6th to 18th September, organised jointly by the Bordeaux University Mathematics Department and the North British Functional Analysis Seminar, with the support of the London Mathematical Society. Short courses are to be given by E. Amar (Bordeaux), Y. Yger (Bordeaux), T.W. Körner (Cambridge) and N.J. Young (Lancaster). The last two days will take the form of a colloquium addressed to graduate students. This part is open to all members of the London Mathematical Society. Enquiries to Dr. David Salinger, School of Mathematics, Leeds University, email pmt6dls@ uk.ac.leeds.gps or to E. Lousteau, Ecole Doctorale de Mathematiques, Universite de Bordeaux I, 351 Cours de la Liberation, 33405 Talence, France, tel (33) 5684 6053, fax (33) 5684 6955, email: deville@fr.U-bordeaux.ceremab.

ISAAC NEWTON INSTITUTE FOR MATHEMATICAL SCIENCES

The Institute's scientific work started in July 1992 in its purpose designed building in west Cambridge. At any time there are two six-month visitor programmes in progress, each with about twenty scientists in residence. In addition, during these programmes, there are periods of more expanded activity including instructional courses and workshops. The first four programmes, on Low-dimensional Topology and Quantum Field Theory, Dynamo Theory, L-functions and Arithmetic and Epidemic Models have now been completed, and the programmes which have been chosen for the next two and a half years are: Computer Vision (Jul - Dec 1993); Random Spatial Processes (Jul - Dec 1993); Geometry and Gravity (Jan - Jun 1994); Cellular Automata, Aggregation and Growth (Jan. - Jun 1994); Topological Defects (Jul - Dec 1994); Symplectic Geometry (Jul - Dec 1994); Exponential Asymptotics (Jan - Jun 1995); Financial Mathematics (Jan - Jun 1995); Semantics of Computation (Jul - Dec 1995); From Finite to Infinite Dimensional Dynamical Systems (Jul - Dec 1995).

The Institute is actively seeking new proposals for programmes for 1996 onwards which should be addressed to the Deputy Director, Professor Peter Goddard, Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge CB3 0EH, UK. Further information about the Institute, about the programmes for 1993 - 1995 and advice on the submission of proposals are available from Peter Goddard (tel 0223 335999; email i.newton@newton.cam.ac.uk) who will answer any enquiries.

Information about the Institute is also available in electronic form. The Institute sends weekly lists of seminars by email in the form of a TeX source file or an ASCII file; anyone who wishes be sent these lists should send an email message to info@newton.cam.ac.uk indicating which programme he or she is interested in and which file format is preferred. The seminar lists and other information about the Institute's activities are also available via anonymous ftp. In order to use this facility, one should ftp to newton.newton.cam.ac.uk entering ftp as username and one's email address as password. All information is beneath the pub directory (e.g. seminar information is in the directory pub/seminars).

The seminars and lectures held at the Institute are open to all who are interested. Limited financial support, in the form of contributions towards travel and accommodation costs, may be available to UK mathematical scientists who wish to make short visits to the Institute to take part in its activities and who are unable to obtain adequate support from other sources. This is made possible by a grant to the Institute from the London Mathematical Society. Those wishing to apply for such support should write to the Deputy Director. **Gordon and Breach Science Publishers**

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SCOTTISH COMPUTATIONAL MATHEMATICS SYMPOSIUM

The 2nd Scottish Computational Mathematics Symposium will be held in the Hume Tower of Edinburgh University from 10am to 4:45pm on Monday 13th September 1993. The aim of the meeting is to bring together mathematicians and others who develop and/or use computer algorithms to solve mathematical problems. The speakers will be J.C. Eilbeck, D.J. Higham, K.W. Morton and A.J. Wathen and a representative from NAG will describe and demonstrate the AXIOM symbolic computation system.

The meeting is open to everyone interested and has received financial support from the London Mathematical Society conference fund. The registration fee is £15 (payable to Heriot-Watt University) and this includes tea/coffee breaks and lunch. To register or obtain further information please contact Dr. Dugald Duncan, Department of Mathematics, Heriot-Watt University, Edinburgh, EH14 4AS, e-mail dugald@cara.ma. hw.ac.uk.

BRITISH TOPOLOGY MEETING

The 8th British Topology Meeting will be held in Sheffield on 22nd and 23rd September 1993. The program will consist of short talks. Offers to speak on any aspect of topology are welcome and space will be available for displaying preprints and posters.

The meeting is supported by the London Mathematical Society, which will enable us to support those who cannot obtain funding from their own institution. The full cost of registration, dinner, bed and breakfast for the single night of the conference will be under £40. If you or any research students you know are interested in attending please contact John Greenlees, Department of Pure Mathematics, University of Sheffield, Hicks Building, Sheffield S3 7RH, email: j.greenlees@uk.ac.sheffield, phone: (0742) 824437.

UNIVERSITY OF SUSSEX

Lectureship in Mathematics

The University of Sussex intends that, when Professor D.E. Edmunds retires on 30 September 1996, its research strength in the area of "hard analysis" will continue. Thus applications are invited **now** for a Lectureship in Mathematics, to commence on or after 1 October 1996; candidates must be able to obtain their own funding for research in the intervening period, for example by obtaining an SERC Advanced Fellowship to hold at Sussex.

The particular research interests sought include partial differential equations, classical harmonic analysis and spectral theory. Further details may be obtained from Ms V. Lay, Personnel Office, University of Sussex, Falmer, Brighton BN1 9RH.

The closing date for receiving completed applications at Sussex is 15 October 1993. Candidates seeking a SERC Advanced Fellowship should obtain the relevant forms direct from SERC, (telephone 0793-411172, current closing date is 30 September). We plan to continue our joint seminar in algebraic geometry, meeting 6 to 8 times each term in Cambridge, Oxford and Warwick (in rough rotation). Most meetings consist of two talks on Thursday afternoons. Those interested in taking part should try to keep Thursdays free of other commitments. The first meeting of the 1993/94 academic year is planned for Thursday 14th October in Warwick, followed by Thursday 21st October in Oxford, and so on by induction. There will be a whole day meeting in Warwick on Saturday 4th December 1993 (11:00 to 18:00) to allow people from outside the COW triangle to take part.

Seminar announcements are circulated a few days in advance by e-mail. Please let one of the following know if you would like to be on the mailing list: Greg Sankaran (Cambridge) GKS1@Phoenix. Cambridge.ac.uk; Peter Kronheimer (Oxford) Kronheim@Maths.ox.ac.uk; Miles Reid (Warwick) Miles@Maths. Warwick.ac.uk.

THE UNIVERSITY OF AUCKLAND New Zealand

Division of Science and Technology, Tamaki Campus LECTURESHIP/SENIOR LECTURESHIP IN MATHEMATICAL SCIENCES

(Vacancy UAC.309)

The Tamaki Campus is the second campus of the University of Auckland. It was established in 1991 as part of the University's strategy for meeting the ever-increasing demand for university education particularly in Auckland. The Campus is located about 13 kilometres from the City Campus on a 30-hectare site in Glen Innes that was used for the 1990 Commonwealth Games Village. It overlooks the Tamaki River estuary and includes the excellent playing fields and spacious clubrooms of the University Park. There are three academic divisions responsible for the teaching at the Tamaki Campus. These are the division of Arts, Commerce, and Science and Technology. The courses and papers taught on the Tamaki Campus are governed by the General Statutes and Regulations and by the Regulations for the specific degrees of the University.

Applicants must have advanced qualifications (a PhD or equivalent is expected) and a proven research and teaching record in applied or industrial mathematics, statistics, operations research or mathematical modelling or in a field closely related to these, preferably with links to one or more of the special areas being developed at Tamaki, viz Industrial Mathematics, Information Technology, International Business, Environmental Management and Sports Medicine.

The appointee will be expected to begin teaching during the academic year that commences in February 1994.

Commencing salary will be established within the range NZ\$37,440 - NZ\$49,088 per annum for Lecturers; NZ\$52,000 - NZ\$60,944 per annum for Senior Lecturers.

Further information, Conditions of Appointment and Method of Application should be obtained from Appointments (42012), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF (tel. 071 387 8572 ext. 206; fax 071 383 0368); or from the Academic Appointments Office, University of Auckland, Private Bag 92019, Auckland, New Zealand (tel. [64 9] 373 7999 Ext 5097; fax [64 9] 373 7454). Three copies of applications should be forwarded to reach the Registrar by **27 September 1993.**

Please Vacancy Number UAC.309 in all correspondence.

The University has an EEO policy and welcomes applications from all qualified persons.

SAVE BRITISH SCIENCE 1993 GENERAL MEETING

The SBS Annual General Meeting this year will take place on Wednesday 17th November in the Great Hall of Imperial College, London. It will be preceded by an open meeting at 6.30 pm at which the Guest Speaker will be The Rt. Hon. John Smith, MP, Leader of the Opposition.

COULTER MCDOWELL

Coulter McDowell, former Professor of Applied Mathematics at Royal Holloway and Bedford New College, died on 13 June 1993 at the age of 61.

TRYFAN G. ROGERS

Tryfan Rogers, who was Professor of Theoretical Mechanics at the University of Nottingham, died on 15 July 1993 at the age of 57.

JAMALA. SIDDIQI

Professor Jamal A. Siddiqi who was elected a member of the London Mathematical Society on 21 November 1963, died on 18 October 1922.

MICHAEL G. SMITH

Dr Michael G. Smith, formerly of City University, died on 25 May 1993. He was elected a member of the London Mathematical Society on 17 March 1960.

A MEMORIAL MEETING FOR PROFESSOR PHILIP HOLGATE

WILL BE HELD ON FRIDAY 10th DECEMBER 1993 AT BIRKBECK COLLEGE

An afternoon session will be devoted to scientific papers and an evening session to personal tributes

A DETAILED PROGRAMME WILL BE PUBLISHED IN OCTOBER



Sir Erik Christopher Zeeman was born in 1925 and educated at Christ's Hospital and Christ's College Cambridge. He lectured at Cambridge from 1955 to 1964, when he became a Professor at and the first Director of the Mathematical Research Centre at Warwick. Since 1988 he has been Principal of Hertford College Oxford. He is wellknown for his work on PL topology, dynamical systems and catastrophe theory. In 1975 he was elected to Fellowship of the Royal Society. The London Mathematical Society awarded him the Whitehead Prize in 1982, he was the Society's first Forder Lecturer in 1987 and was the Society's 63rd President from 1986-1988.

DIARY

The diary lists Society meetings and other events publicised 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.

1993

SEPTEMBER

- 5-11 Third International Wigner Symposium, Christ Church, Oxford (207)
- 6-9 Bubble Dynamics & Interface Phenomena Conference, Birmingham (188)
- 9-10 Parallel Numerical Mathematics Symposium, University of Manchester (207)
- 12-16 Differential Equations Meeting, Dublin (201)
- 13-17 Computer Science Logic 1993 Conference, University College, Swansea (201)
- 13-17 Stochastic Methods in Partial Differential Equations International Symposium, Isaac Newton Institute for Mathematical Sciences, Cambridge (206)
- 17-20 Technology in Mathematics Teaching, University of Birmingham (200)
- 19-25 Algebraic Groups and Lie Theory, LMS-SERC Postgraduate Short Course, University of Lancaster (205)
- 20-24 Ordinary Differential Equations and Their Applications, Florence, Italy (198)
- 23-24 Higher Order Algebra, Logic and Term Rewriting Workshop, Amsterdam, Holland (204)
- 24 Retirement J.R. Ringrose Meeting, Newcastle upon Tyne (199)
- 27 13th One-Day Function Theory Meeting, Open University (207)

OCTOBER

- 1-3 Joint AMS-DMV Mathematics Meeting, University of Heidelburg, Germany (205)
- 15 London Mathematical Society Meeting, London
- 16 Memorial Service, John Charles Burkill, Little St Mary's Church, Cambridge (207)

NOVEMBER

19 London Mathematical Society Meeting, London

1994

MARCH

- 7-25 Workshop on Fluid Mechanics, ICTP, Trieste, Italy (207)
- 21-25 LMS Invited Lectures, King's College, London (207)

MAY

16-27 Workshop on Commutative Algebra and its Relation to Combinatorics and Computer Algebra, ICTP, Trieste, Italy (207)

JUNE

- 1-7 Algebraic topology conference, Barcelona, Spain (201)
- 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)

AUGUST

- 3-11 International Congress of Mathematicians, 1994, Zurich, Switzerland (189)(197)(207)
- 15-26 Advanced Workshop on Algebraic Geometry, ICTP, Trieste, Italy (207)

OCTOBER

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

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 WIV 0NL, to arrive before the first day of the month prior to publication. Telephone 071- 437 5377, Fax 071-439 4629, E-mail Ims@uk.ac.kcl.cc.oak.

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