# The London Mathematical Society Newsletter

# No. 166

# November 1989

# FORTHCOMING SOCIETY MEETINGS

### Friday 17 November 1989, Royal Society R.M. May, J.D. Murray

Friday 19 January 1990, Burlington House Friday 16 February 1990, Bath Friday 16 March 1990, Burlington House Friday, Saturday, 18-19 May 1990, Sheffield Friday 15 June 1990, Burlington House Friday 19 October 1990, Burlington House Friday 16 November 1990, Burlington House

### ANNUAL DINNER

The 1989 Annual Dinner will be held after the Annual General Meeting on Friday 17th November at 6.30 p.m. for 7.00 p.m. at The Royal Over-Seas League, St James's Street, London SW1. The cost is £17.50 per person and members may book places for guests. The booking form, enclosed with the October Newsletter, should be returned together with payment, to the LMS Office by Wednesday 8th November.

### EUROPEAN WOMEN MATHEMATICIANS

The fourth annual meeting of E.W.M. will be held in Lisbon from 14th to 19th December 1989. For details please contact: Dr Helena Gomes, Universidade Técnica de Lisboa, (Instituto Superior Tecnico), Departamento de Mátematica-Seccao de Estatistica e Applicaoes, AV. Rovisco Pais, 1096 Lisboa Codex, Portugal.

### **INTERNATIONAL CONGRESS OF MATHEMATICIANS, KYOTO 1990**

It is hoped that limited funds will be provided by the Royal Society to assist with the expenses of scientists planning to attend the above Congress. Persons wishing to apply for assistance should obtain the appropriate application form from: Miss B.M. de Vere, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG, telephone:01-839 5561 ext. 222. Applications should be sent to arrive no later than 31st January, 1990. It should be noted that the Royal Society travel grants are available only to non-government scientists of PhD status and who are normally resident in the UK.

It is expected that additional limited funds will be made available by the London Mathematical Society and by the trustees of the International Congress of Mathematicians (Edinburgh) Fund. Assistance from such funds may possibly be available to scientists who do not fulfil the Royal Society's requirements for eligibility. Persons wishing to apply for support from these funds should also contact Miss de Vere.

## CONFERENCE ON HYPERBOLIC PROBLEMS

The third international conference on Hyperbolic Problems will be held in Uppsala Sweden from 11th to 15th June 1990. For further information write to: Lena Jutestahl, Department of Scientific Computing, Uppsala University, Sturegaten 4B, S-75223 Uppsala, Sweden.

### 300 YEARS MATHEMATISCHE GESELLSCHAFT IN HAMBURG

A convention has been arranged on the occasion of the third centenary of the Mathematische Gesellschaft in Hamburg from 18th – 24th March, 1990. The convention has been designed to bring together mathematicians of various fields of mathematical sciences to discuss recent main developments, results and problems.

The sessions will be about: 1. Algebra, Algebraic Geometry and Number Theory; 2. Analysis,

### MATHEMATICS IN A CHANGING CULTURE

Mathematical education, in its broadest sense, is facing the challenge of dealing effectively with the problems arising from the widening of student access, the problem of providing education and training relevant not only to the needs of today but to the expected needs of tomorrow. Courses and teaching strategies have to adapt to less numerate entrants but must still provide an educational foundation suitable for students who expect to be able to apply taught knowledge and to develop new expertise as their careers progress. All this is taking place within an environment of readily available but continually changing computer technology. The conference aims to address these problems as they affect the teaching of mathematics, statistics and operational research in

Topology; 3. Applied and Constructive Mathematics; 4. Computer Science; 5. Didactics of Mathematics; 6. Geometry, Combinatorics; 7. History of Mathematics; 8. Mathematical Physics; and 9. Stochastics.

For further information write to Mathematisches Gesellschaft in Hamburg, Geschaftsstelle, Bundesstr. 55, 2000 Hamburg 13, Federal Republic of Germany.

#### all types and levels of courses.

The conference will take place from Tuesday 3rd to Wednesday 4th April 1990 at the Glasgow College. There will be plenary sessions and parallel sessions which may also include workshops. Proposals for special sessions and panel discussions are also welcome and will be carefully considered. It is intended to publish the proceedings.

For further information contact: Sandra McAllister, Conference Secretary, Department of Mathematics, Glasgow College, Cowcaddens Road, Glasgow G4 0BA. Tel. 041 332 7090 ext. 336. Janet: MAT.MCALLISTER@UK.AC.GLASP.

### INDUSTRIAL AND APPLIED MATHEMATICS INTERNATIONAL CONFERENCE

In 1991, SIAM will host the second International Conference on Industrial and Applied Mathematics, to be held from 8th to 12th July in Washington D.C. The first call for papers will be sent out in January 1990. All SIAM members will be invited to contribute, as will other groups of applied mathematicians.

To ensure that you are notified of all ICIAM 91

developments, send your name, mailing address, phone and fax number and primary mathematical interest area to SIAM, 3600 University City Science Center, Philadelphia, PA 19104-2688, U.S.A. For additional information call (215) 382-9800, e-mail SIAM@WHARTON,UPENN.EDU. or fax (215) 382-7999.

## COMPUTING AND INFORMATION CONFERENCE

The 1990 International Conference on Computing Information, Niagara Falls, Ontario, Canada will be held from 23rd to 26th May 1990. For further information write to Dr W.W. Koczkodaj, ICCI Secretary, Laurentian University, CoSc, Sundbury. Ontario, Canada P3E 2C6. E-mail ICCI@LAUVAX01.LAURENTIAN.CA or fax (705) 673-6532 addressed to W. Koczkodaj, Computer Science.

## STRUCTURES IN MATHEMATICAL THEORIES

An international symposium on Structures in Mathematical Theories will be held from 24th to 28th September 1990 at San Sebastian, Spain. The programme will consist of invited lectures, invited lectures with a reply given by a commentator, and fifteen minute contributed papers. All contributed papers will be refereed by members of the Scientific Committee.

Submission of abstracts (maximum 400 words) by 30th January, 1990. Notification of acceptance

by 1st March 1990. Submission of papers (maximum 2000 words) by 30th April 1990. All abstracts should be sent in triplicate to Javier Echeverria, SSMT-90, Dept de Logica y Filosofia de la Ciencia (UPV/EHU), Apdo. 1249, 20080 San Sebastian, Spain. The second Circular will be sent out in December 1989. Further information can be obtained by writing to Andoni Ibarra at the SSMT-90 address.

# LONDON MATHEMATICAL SOCIETY

# Annual General Meeting Friday 17 November 1989 at 3.00

R.M. May (Oxford) Chaotic Dynamics and Forecasting in Nonlinear Systems

J.D. Murray (Oxford) (1989 Naylor Prize Lecture) A Mechanochemical Theory of Complex Biological Pattern Generation and the Formulation of Morphogenetic Laws

Tea will be served at 4.10

The meeting is at the Royal Society, Wellcome Lecture Hall, 6 Carlton House Terrace, London SW1

The Annual Dinner will be at the Royal Over-Seas League

All interested are very welcome

PLEASE NOTE EARLY START AT 3.00 pm. AND VENUE

## SERGEI L'VOVICH SOBOLEV

Sergei L'vovich Sobolev, the eminent Soviet mathematician whose work had a substantial influence on the development of twentieth century mathematics, died on 3rd January, 1989 in Leningrad at the age of 81. Sobolev made fundamental contributions to the theory of partial differential equations, functional analysis, function theory, mathematical physics and computational mathematics.

#### EDINBURGH MATHEMATICAL SOCIETY

The 1989 Sir Edmund Whittaker Memorial Prize has been awarded jointly to Dr Andrew A. Lacey (Heriot-Watt University) and Dr Michael G. Röckner (University of Edinburgh). The prize is awarded every four years for published work of particular merit by younger mathematicians who have connections with Scotland.

### **CELEBRATION OF THE CENTENARY OF JULIO REY PASTOR**

A celebration of the centenary of Julio Rey Pastor, mathematician and historian of science will be held on Saturday 18th November 1989 at Exeter College,Oxford, Talks will be given by E.L. Ortiz (London),S. Roberts (Oxford), A. Dobson (Keele), A. Dou (Barcelona) and M. Hormigon (Zaragoza). Those interested in taking part should telephone 01-235 1485 or 01-736 7724 for further information.

### VISIT OF DR MIKLOS LACZKOVICH

Dr. Miklos Laczkovich of Eötvös Lorand University, Budapest will be visiting England from 4th to 11th November. Dr Laczkovich has recently solved the famous problem of Tarski on squaring the circle. He will be speaking at Bristol University on 6th November, Oxford University 7th November,

University College London on the 8th November, Cambridge University on the 9th November. For further information contact David Larman, University College London. 01-387-7050 Ext. 2855. Dr Laczkovich has been invited under the L.M.S. scheme 2.

### **BRITISH SCIENTISTS ABROAD**

A group of British and British-educated scientists who are working abroad has launched a petition to illustrate the 'brain drain'. The petition is to be signed only by British scientists working overseas and recommends that science policy should be reformed along the lines suggested by the Save British Science Society. Members who would like more information should write to BSA, c/o Dr Marie Rose Schravendijk, Lab. of Infectious Diseases, DNAX Research Institute, 901 California Avenue, Palo Alto, CA 94304-1104, USA. or telephone on (415) 856-4214.

We wish to purchase runs and odd Nos of: Sphinx, Revue Mensuelle des Questions Recreatives, Bruxelles, 1931-39 Journal of Recreational Mathematics, 1968-. Recreational Mathematics Magazine, 1961-64, Sphinx-Oedipe, Nancy, 1906-1932. Mathematical Pie, 1950-. All books published in the series "Libraire du Sphinx" Bruxelles, Rouse-Ball, W.W. "Mathematical Recreations and Essays" all editions from the first (1891) to 11th (1939). Also mathematical books of all kinds from very elementary to advanced texts. Also biographies of mathematicians and physicists.

We also sell books in this field, indeed, we specialise in mathematics and will be pleased to receive your list of books wanted and to send you our current catalogue sent post free on request.

> F.E. Whitehart, Bookseller, 40, Priestfield Road, Forest Hill, LONDON SE23 2RS Tel: 01-699-3225

# BRITISH MATHEMATICAL COLLOQUIUM 1990

The 42nd British Mathematical Colloquium will be held at the University of East Anglia, Norwich on April 3, 4, 5, 1990.

### Main Speakers

W. Feit (Yale) 'The construction of Galois groups'
R. Graham (Bell Labs) 'Arithmetic progressions: from Hilbert to Shelah'
S.J. Taylor (Virginia) 'What is a fractal?'

Other invited speakers: (40 mins) G. Ellis (Galway) 'Algebraic models of topological spaces' M. Prest (Manchester) 'Model theory and modules' A. Chetwynd (Lancaster) 'Colouring graphs' S. Bullett (QMC) 'Dynamics of complex maps and correspondences' R. Plymen (Manchester) 'Arithmetic aspects of operator algebras' N. Stephens (Cardiff) 'Applications of number theory in cryptography' S. Donkin (QMC) 'Reductive group actions and representations in characteristic p' M. Barlow (Cambridge) 'Random walks and diffusion on fractals' J. Gray (Open) 'The rise of complex analysis' D. Benson (Oxford) 'Cohomology and representations of finite groups' P. Kropholler (QMC) 'Ends, amalgams, and HNN-extensions'

W. Chen (Imperial) 'Irregularities of distribution'
H. Halberstam (Illinois) 'Sums of integer sets and long arithmetic progressions'
A. May (INMOS Ltd) – no title yet
A. Wilkie (Oxford) 'Some topics in applied model theory'

(50 mins)

Splinter sessions will be arranged in specialist areas throughout the meeting

Application forms will be sent out later this term. For further information please write to : 42nd BMC, School of Mathematics, University of East Anglia, Norwich, Norfolk NR4 7TJ

## **MATHEMATICIANS VISITING THE UK 1989-90**

The following is a list, from the Royal Society, of mathematicians visiting the United Kingdom during 1989-90.

#### ABERDEEN UNIVERSITY

Professor A. Kono (Kyoto University, Japan) Algebraic topology, Oct 89-Sept 90.

Professor M. Mimura (Okayama University, Japan) Algebraic topology, Summer 90.

BRADFORD UNIVERSITY

Professor R.E. Hartwig (North Carolina State University, U.S.A.) Matrix theory, Sept - Dec 89.

#### BRISTOL UNIVERSITY

Dr M.A. Al-Gwaiz (King Saud University, Saudi Arabia) Fluid mechanics/Applied mathematics, Sept-Dec 89.

Dr M. Okamura (Kyushu University, Japan) Waves and instabilities in fluid mechanics, Mar 90-Jan 91. Ms Y.H. Xu (China) Probability theory/Statistics, Sept 89-June 90.

#### **BRUNEL UNIVERSITY**

Professor Y. Kusnetsov (University of Moscow, U.S.S.R.) Numerical solution of partial differential equations, May 90.

Professor L. Qun (Academia Sinica, China) Numerical analysis, finite element methods, May-June 90.

CAMBRIDGE UNIVERSITY

Professor S.J. Taylor (University of Virginia, U.S.A.) Probability Theory, Jan-June 90.

**CITY UNIVERSITY** 

Professor R.B. Muniz (Universidade Fedeal Flumiense, Brazil) Low-dimensional magnetic structures, Aug 89-Jul 90.

DUNDEE UNIVERSITY

Dr H.B. Said (University of Penang, Malaysia) Nov 89- Jul 90.

DURHAM UNIVERSITY

Dr L. Palla (Eotvos University, Hungary) Conformal field theory, May 89-May 90

EAST ANGLIA UNIVERSITY

Dr A. Sawiciki (Institute of Hydro-engineering Gdansk, Poland) Geomechanics, Oct 89-Sept 90.

EDINBURGH UNIVERSITY Professor S.F. Ebey (University of the South, U.S.A.) Statistics and computing, Jan-Jun90.

#### **GLASGOW UNIVERSITY**

Dr O.M. Rijal (University of Malaysia, Malaysia) Statistics, May-Nov 90.

Professor B.S. Yandell (University of Wisconsin, U.S.A.) Statistics, Jan-May90

### IMPERIAL COLLEGE

Professor J.H.H. Chalk (Toronto University, Canada) Number theory, Oct 89-Jul 90.

Dr S. Hirooka (Kaogishima University, Japan) Theory of condensed matter, Mar-Dec 90.

Professor E. Knobloch (University of California, U.S.A.) Nonlinear dynamics, Jan-Apr 90.

Professor A.D. Pollington (Brigham Young University, U.S.A.) Number theory, May-Aug 90.

Mr P. Rabinowitz (Weismann Institute, Israel) Approximate quatrature, Apr 90.

Mr H. Samara (Crescent Petroleum Sharjah, UAE) Differential equations for oil reservoir simulation, Oct 89-Jun 90.

Dr I. Sarac (Uludag University, Turkey) Statistics, Oct 89-Jun 90.

Professor E. da Silva (University of Campinas, Brazil) Theory of condensed matter, Oct 89-Jul 90. Professor M. Tokia (Fukouka Institute, Japan), Theory of condensed matter, Apr 90-Mar 91.

#### KINGS COLLEGE LONDON

Dr M. Barros (Universidade do Porto, Portugal) Nov 89 - Apr 90.

Dr S. Goldstein (Universitat Bielefeld, West Germany) Jan - Apr 90.

#### LIVERPOOL UNIVERSITY

Dr K. Bekka (Paris – Sud University, France ) Stratification theory, Oct 89-Sept 90.

Dr K. Burrage (Auckland University, New Zealand) Ordinary differential equations, Jun 89-Aug 90.

LOUGHBOROUGH UNIVERSITY Dr G. Spaletta (Bologna University, Italy) Parallel computers and linear algebra, Sept 89-Sept 90.

Dr L. Hethelyi (Budapest, Hungary) Algebra, Oct-Dec 89

NEWCASTLE UPON TYNE UNIVERSITY

Mr Z. Jianhe (Beijing Language Institute, China) Applied mathematics, Oct 89-Jun 90.

Dr G. Racher (Salzberg University, Austria) Banach algebras, Jan-Jul,90.

Miss L. Tianyong (Bejing Language Institute, China) Statistics, Oct 89-Jun 90.

NOTTINGHAM UNIVERSITY

Mr V.P. Belavkin (Moscow) Quantum probability, Oct 89-Jul 90.

OXFORD UNIVERSITY

Dr A.L. Golbeck (San Diego State University, U.S.A.) Demographic biostatistics, Jan-Jun 90

Professor N.P. Jewell (University of California, U.S.A.) Statistical methods for studies of the epidemiology of aids, Mar-Jun 90.

Dr H.S. Lee (Toronto University, Canada) Statistical inference, resampling techniques, Sept 89-Jun 90.

Dr P.J. Soloman (Australian National University, Australia) Biostatistics; statistical aspects of aids, Apr-Jul 90.

Dr W.T. Tsai (Columbia University, U.S.A .) Statistical aspects of aids, summer 90.

Professor S.A. Adeleke (Western Illinois University, U.S.A.) Group theory, Aug 89-Jun 90.

Dr S. Camazine (Ithaca College, U.S.A.) Mathematical biology, Oct-Dec 89.

Professor Chipot (Metz University, France) PDES, Nov 89.

Professor G. Cimatti (Pisa University, Italy) Mathematics of electronic devices, Oct 89-Sept 90. Professor T. Daniel (Washington University, U.S.A.) Mathematical biology, May- Jun 90.

Dr M. Futura (Tokyo University, Japan) Differential geometry, Jun 89-May 90.

Dr I. Gerontidis (Thessaloniki University, Greece) Stochastic processes, Jun-Aug 90.

Dr P. Hagen (Los Alamos, U.S.A.) Mar-Apr 90.

Mr M. Hood (Perth University, Australia) Statistics/ Differential equations, Dec 89-Dec 90.

Professor P. Kareiva (Washington University, U.S.A.) Mathematical biology, May-Jun 90.

Dr G. Kember (Ontario University, Canada) Applied mathematics, Oct 89-Mar 90.

Mr R. Kocherlakota (Harvard University, U.S.A.) Loop spaces, 89/90.

Dr L. Jianguo (Tsinghua University, China) Nonlinear diffusion, Jan 90.

Dr B.T. McInnes (National University of Singapore, Malaysia) Mathematical physics, Dec 89-Mar 90.

Professor H.J. Marcum (Ohio State University, U.S.A.) Topology Jan-May 90.

Professor A. Meirmanor (Novosibirsk, U.S.S.R.) Mar-Apr 90.

Professor P.B. Mong (Delaware University, U.S.A.) Mathematical biology, May-Jun 90.

Professor M. Morimoto (Okayama University, Japan ) Algebraic topology, Aug 89-Apr 90.

Professor H.F. Nijhout (Duke University, U.S.A.) Mathematical biology, May-Jun 90.

Professor O. Oleinik (Moscow University, U.S.S.R.) Differential equations, Nov-Dec 89

Professor J.F. Rodrigues (CMAF-INIC, Portugal) PDEs, Nov 89.

Professor J.J. Rotman (University of Illinois, U.S.A.) Algebra and finite projective planes, Jan-Jul 90.

Professor E.H. Sage (Washington University, U.S.A.) Mathematical biology, May 90.

Professor W. Seward (Waterloo University, Canada) PDEs, Apr-May 90.

Dr A. Shalev (Jerusalem, Israel) Algebra, 89/90.

Dr J. Sneyd (Courant Institute, U.S.A.) Mathematical biology, 89/90.

Dr K.M. Tsang (Hong Kong University, Hong Kong) Number theory, Oct 89-Sep 90.

Professor S. Tullipani (Camerino University, Italy) Algebra, Sep 89-Jun 90.

Professor M.Y. Wang (McMaster University, Canada) Differential geometry, Oct 89-Aug 90.

**READING UNIVERSITY** 

Dr D.R. Stocks (University of Alabama, U.S.A.) Lattice paths and Fibonacci numbers, Oct89-Jul90.

#### SHEFFIELD UNIVERSITY

Dr Y.M. Song (Sunchon National University, Korea) Commutative algebra, Aug89-Aug90.

ST ANDREWS UNIVERSITY

Professor D.J. Kaup (Clarkson University, U.S.A.) Differential equations, May-Jun 90.

#### STRATHCLYDE UNIVERSITY

Professor J.A. Goldstein (Tulane University, U.S.A.) Semigroups of operators, evolutation equations, Mar-May 90.

Professor R.E. Kleinman (University of Delaware, U.S.A.) Integral equation methods, scattering theory, Feb 90.

Professor R. Leis (Bonn University, West Germany) Scattering theory hyperbolic systems, Nov 89.

#### SUSSEX UNIVERSITY

Mr P.M. Gilmore (Northeastern University, U.S.A.) Topology, Autumn 89.

Mr O.A. Oleinik (Moscow University, U.S.S.R.) P.D.E., May 90.

#### UNIVERSITY COLLEGE OF WALES

Dr T. Stroud (Queens University, Canada) Bayesian statistics, Sep 89-Aug 90.

#### UNIVERSITY COLLEGE OF NORTH WALES

Professor H.J. Baues (Max-Planck-Institut fur Mathmatik, West Germany) Homotopy theory, algebraic topology, Apr-Jul 90.

Dr R. Dirl (Technical University Vienna, Austria) Representation theory of space groups, Jan and Jul 90.

#### UNIVERSITY COLLEGE OF SWANSEA

Mr S. Albeverio (University of Bochum) Stochastic processes and applications to quantum physics, 3-4 weeks 89-90.

Mr P. Baxendale (University of Southern California, U.S.A.) Stochastic processes and applications to quantum physics, 3-4 weeks 89-90.

Mr G.J. Lasnio (University of Rome, Italy) Stochastic processes and applications to quantum physics, 3-4 weeks 89-90.

Mr J. Lewis (Dublin Institute for Advanced Study, Ireland) Stochastic processes and applications to guantum physics, 3-4 weeks 89-90.

Mr P. McGill (University of California, U.S.A.) Stochastic processes and applications to quantum physics, 3-4 weeks 89-90.

Mr T. Zastarwrick (University of Cracow Poland) Stochastic processes and applications to quantum physics, 3-4 weeks 89-90.

#### YORK UNIVERSITY

Professor H. Halberstam (University of Illinois at Urbana-Champaign, U.S.A.) Number theory and analysis, May-Jun 90.

# COMBINATORICS AND CONNECTIONISM **First Announcement**

Connectionism will be held at the London School of Economics on Wednesday 13 December 1989. The aim is to bring together mathematicians who are working on the application of combinatorial methods to connectionist models. It is intended

A one-day colloquium on Combinatorics and that the talks will be mainly expository, but some account of current research will also be given. Full details will appear in the December Newsletter. Enquiries should be taken to Philomena McNicholas, email: mcnichola@uk.ac.lse.vax2, tel 01-405-7686. extn 2630.

# DEPARTMENT OF COMPUTER SCIENCE ROYAL HOLLOWAY AND BEDFORD NEW COLLEGE UNIVERSITY OF LONDON

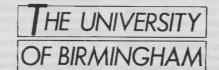
# **RESEARCH ASSISTANTS**

The Formal Methods group seeks to appoint two Research Assistants to work for 3 years on algebraic methods in Computer Science.

Applications are invited from mathematicians or computer scientists with research interests in algebra, combinatorics or logic. Applications from women wishing to return to work after a career break, retrain or work part-time are particularly welcome. Salary will be on the research 1B or 1A scale depending on age and experience.

The closing date is 30th November and the positions are tenable as soon as possible or by arrangement. Further details may be obtained from Dr Ursula Martin, Department of Computer Science, Royal Holloway and Bedford New College, University of London, Egham, Surrey TW20 OEX, UK.

Electronic mail: uhm@uk.ac.rhbnc.cs.ux, Telephone: (0784) 439014



# School of Mathematics and Statistics PURE MATHEMATICS

Two appointments in Pure Mathematics will be made in 1990, a Lectureship and a two year Research Fellowship. Candidates for the Lectureship should have a strong record of post-doctoral research. Salary will be within the range £10,458-£20,469 for the Lectureship and £10,458-£16,665 for the Research Fellow, both according to qualifications and experience.

Further details and informal enquiries can be made to Professor M.A. Ronan on 021-414 6582. Candidates should send a curriculum vitae including a full list of publications and a statement of current and future research to Professor Ronan in the School of Mathematics and request three referees to supply references.

Applicants should in addition complete an application form available from The Staff Office, The University of Birmingham, Edgbaston, Birmingham, B15 2TT, or by telephoning 021-414 6483 (24 hour ansaphone). Please quote reference 4325 for the Lectureship vacancy, 2194 for the Research position. Closing date 31 December 1989.

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# **NEW FROM OXFORD**

# Let Newton Be!

# Edited by John Fauvel, Raymond Flood, Michael Shortland, and Robin Wilson

'Beautifully produced, with many excellent illustrations, it cannot fail to have a very big impact on the general perception of Newton in our post-Newtonian era.' The Times Educational Supplement

0 19 853937 1, 278 pp., illus., Oxford Paperbacks, October 1989 £8.95

# **Discrete Mathematics**

**Revised Edition** 

# Norman L. Biggs

A carefully structured, coherent, and comprehensive course of discrete mathematics. The main change in the new edition is to present numerous algorithms in a form close to that of a real programming language.

0 19 853426 4, 496 pp., illus., Clarendon Press, November 1989 0 19 853427 2, paperback, November 1989

# Acoustic and **Electromagnetic Waves**

# **D.S.Jones**

'This excellent book contains a great wealth of material which the author has presented clearly and logically, admirably fulfilling his intentions ... a joy to own . . .' Contemporary Physics

0 19 853380 2, 764 pp., illus., paperback, Clarendon Press, May 1989

**Parallel Algorithms and Matrix Computation** Jagdish J. Modi

The fundamental concepts in parallel computing are presented in this textbook. The emphasis is on the design and analysis of algorithms of particular importance in industry and research.

Oxford Applied Mathematics and Computing Science Series

0 19 859655 3, 270 pp., illus., Clarendon Press, 1988	£35.00
0 19 859670 7, paperback, 1988	£15.00

Publishers of the second edition of The Oxford English Dictionary

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# Encyclopaedia of Mathematical Sciences

### Volume 7

A. G. Vitushkin, Steklov Mathematical Institute, Moscow (Ed.)

# Several Complex Variables I

## Introduction to Complex Analysis

1989. Approx. 265 pp. Hardcover £42,00 ISBN 3-540-17004-9

Contents: A. G. Vitushkin: Outstanding Aspects of Complex Analysis. - G. M. Khenkin: Method of Integral Representation in Multidimensional Analysis. - E. M. Chirka: Complex Analytic Sets. -A. G. Vitushkin: Holomorphic Mappings and the Geometry of Surfaces. - P. Dolbeault: General Theory of Multidimensional Residues.

This is the first of four or more volumes of the **Encyclopaedia of Mathematical Sciences** which present surveys in different branches of complex analysis in several variables including applications.

The contributions to this volume present extended and comprehensive surveys on modern methods and results in complex analysis.

The volume is mainly addressed to graduate students and researchers. It can also be used as a reference book for mathematicians working in related areas.

### Volume 8

G.M. Khenkin, Academy of Sciences, Moscow; A.G. Vitushkin, Steklov Mathematical Institute, Moscow (Eds.)

# Several Complex Variables II

Function Theory in Classical Domains. Complex Potential Theory

1990. Approx. 260 pp. £42,00 ISBN 3-540-18175-X

Contents: L. A. Aizenberg, A. K. Tsikh, A. P. Yuzhakov: Multidimensional Residues and Applications. - A. Sadullaev: Plurisubharmonic Functions. - A. B. Aleksandrov: Function Theory in the Ball. - A. G. Sergeev, V.S. Vladimirov: The Future Development of Complex Analysis. Volume 9

G. M. Khenkin, Academy of Sciences, Moscow (Ed.)

# Several Complex Variables III

### **Geometric Function Theory**

1989. VII, 261 pp. Hardcover £42,00 ISBN 3-540-17005-7

**Contents:** L. I. Ronkin: Entire Functions. – I. M. Dektyarev: Multidimensional Value Distribution Theory. – E. A. Poletskij, B. V. Shabat: Invariant Metrics. – M. G. Zaidenberg, V. Ya. Lin: Finiteness Theorems for Holomorphic Maps. – S. I. Pinchuk: Holomorphic Maps in C<sup>n</sup> and the Problem of Holomorphic Equivalence. – A. E. Tumanov: The Geometry of CR-Manifolds. – A. A. Roslyj, O. M. Khudaverdyan, A. S. Schwarz: Supersymmetry and Complex Geometry.

This volume is devoted to the foundations of value distribution theory of holomorphic mappings, basic complex geometry of multidimensional domains and manifolds, and applications of complex geometry and complex analysis in supersymmetric field theories.

Volume 10

**R. V. Gindikin**, State University Moscow; **G. M. Khenkin**, Academy of Sciences, Moscow (Eds.)

# Several Complex Variables IV

### Algebraic Aspects of Complex Analysis

1989. Approx. 280 pp. Hardcover £42,00 ISBN 3-540-18174-1

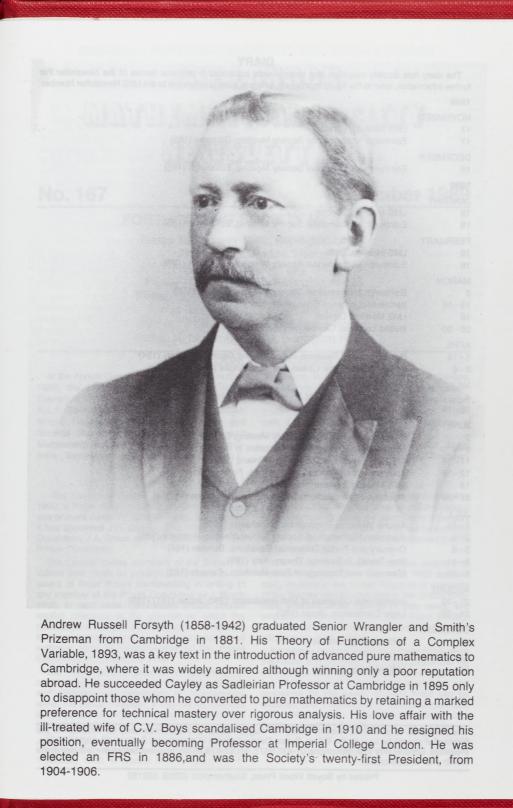
**Contents:** A. L. Onishchik: Methods of the Theory of Bundles and Stein Spaces. – J. Leiterer: Holomorphic Vector Bundles and the Oka-Grauert Principle. – V. P. Palamodov: Deformations of Complex Spaces. – D. N. Akhiezer: Homogenous Complex Manifolds.

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### 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.

1989	
NOVEMBER 17 17	LMS Meeting, London Edinburgh Mathematical Society Meeting, Glasgow (165)
DECEMBER 15	Edinburgh Mathematical Society Meeting, Edinburgh (165)
1990 JANUARY	
19 19	LMS Meeting, London Edinburgh Mathematical Society Meeting, Edinburgh (165)
FEBRUARY 16 16	LMS Meeting, Bath Edinburgh Mathematical Society Meeting, Edinburgh (165)
MARCH 9 13-16	Edinburgh Mathematical Society Meeting, Dundee (165) Iranian Mathematics Conference, Iran (165)
16 26-30	LMS Meeting, London Invited Lectures, Cambridge (160) (165)
APRIL 1-14 2-6	Generators and Relations in Groups and Geometries, Italy (164) British Mathematical Colloquium, East Anglia (166)
MAY 4 18-19	Edinburgh Mathematical Society Meeting, Aberdeen (165) 2-day LMS Meeting, Sheffield
JUNE 2	Edinburgh Mathematical Society Meeting, St Andrews (165)
6-9 11-14 12-15	European Consortium for Mathematics in Industry, Finland (159) XIV Rolf Nevanlinna Colloquium, Finland (162) Analysis and Optimization of Systems, France (161)
15 27-30	LMS Meeting, London Algebraic Hyperstructures and Applications, Greece (162)
JULY 1–15 2–6 3–6 9–11	Adams Memorial Symposium, Manchester (163) Australian Mathematical Society Annual Meeting, Australia (165) Ordinary and Partial Differential Equations, Dundee (164) New Trends in Systems Theory, Italy (162)
9-20 AUGUST	Geometry and Topology of Four-Manifolds, Canada (162)
21-29 21-29	International Congress of Mathematicians 1990, Japan (151) (165) Logic Conference, Japan (160)
OCTOBER 19	LMS Meeting, London
NOVEMBER 16	LMS Meeting, London

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