

LMS NEWSLETTER

No. 85

January 1982

DATES OF SOCIETY MEETINGS

Friday 15 January 1982, Burlington House (N. L. Biggs and D. Williams).

Friday, 19 February 1982, Burlington House (J. T. Stafford and I. N. Herstein).

Friday, 19 March 1982, Burlington House (S. Sternberg and E. C. Zeeman).

Friday, 16 April–Saturday, 17 April 1982. Two-day meeting at Oxford.

Friday, 14 May–Saturday, 15 May 1982. Two-day meeting at Sheffield.

Friday, 21 May–Monday, 24 May 1982. Weekend meeting at Gregynog.

Friday, 18 June 1982, Burlington House (P. J. Cameron and R. Bieri).

Friday, 15 October 1982, Burlington House.

Friday, 19 November 1982, Burlington House.

Although the Society usually meets on the third Friday of the month, the ordinary meeting in May 1982 is that in Sheffield, as the Gregynog meeting is more specialized.

R. A. BAILEY

TREASURER'S REPORT 1980/81

The most significant part of the Society accounts is that arising from our publications which this year reached a turnover of over £200,000. Some slowing down of the recent increases in printing costs and the cessation of losses on the translated *Transactions of the Moscow Mathematical Society* were factors leading to a surplus of £31,400 compared with £9,750 in 1979/80. The journals for which we are responsible remain competitive in price and their mathematical quality is high and so should be well placed to withstand the coming wave of library cancellations. The Society is most fortunate in the dedication of all the referees, editorial advisers, editors and secretaries involved.

The increased level of support for conferences, and for speakers from overseas who might not otherwise visit the United Kingdom, was reflected in expenditure from the Conference and Programme Fund of £5,840 compared with £4,160 in 1979/80. The general income and expenditure

account, which covers all the remaining activities of the Society showed a surplus of £20,000 compared with £31,270 last year. This figure does not yet include the full cost of the new office arrangements at Burlington House where the appointment of Susan Oakes as full-time Administrative Assistant from 1 January 1981 has already brought welcome relief to the Meetings and Membership Secretary, Treasurer, Editor of the *Bulletin* and other officers.

When the accounts are considered together the net addition to the Society's assets was £48,650 or approximately 11% of the book value (i.e. original cost at purchase of property or stocks and shares) of those assets at 31 August 1980. If the Society can continue to avoid too steep a decline in the real value of its capital assets then it will be possible to continue using our income to assist the mathematical life of the country during the adverse period in which universities find themselves.

R. L. E. SCHWARZENBERGER

NEW STATUTES

Copies of the 1981 edition of the Society's Charter and Statutes and By-Laws are now available on application to the Administrative Assistant, Susan Oakes, at Burlington House, Piccadilly, London W1V 0NL.

Members elected from the October 1981 meeting onwards will receive a copy as a matter of course together with their copy of the Membership List.

P. R. GOODEY

COUNCIL NEWS

The LMS Council met on 20 November 1981, when the following matters were among those under discussion.

1. The President informed Council that Professor D. E. Edmunds had agreed to serve as the Society's nominee on the British National Committee for Mathematics.

2. Council approved the Treasurer's Report to the AGM (see above), and expressed its thanks to the Treasurer for the work he had done throughout the year.

3. It was agreed that values of Society Prizes should be increased to take account of inflation.

4. Council received a progress report from the Treasurer regarding the acquisition of a microcomputer. It was noted that such

a system would greatly facilitate the handling of membership lists, accounts, and so on. A subcommittee was appointed to look into the matter, with a view to placing an order.

5. Council approved a draft reciprocity agreement with the Finnish Mathematical Society.

6. It was noted that Dr. C. J. Bushnell had been appointed to the Editorial Board.

7. Some Russian journals, offered to the Society by the editors of the *Journal of Applied Probability*, are to go to the Collingwood Library in Durham.

8. Proposals for future Durham Symposia were discussed and approved for submission to SERC.

N. L. BIGGS

1981 COUNCIL ELECTIONS

At the Annual General Meeting on 20 November 1981 the following members were elected to Council: B. E. Johnson (President); P. J. Higgins, J. R. Ringrose and P. A. Samet (Vice-Presidents); R. L. E. Schwarzenberger (Treasurer); H. Kestelman (Librarian); S. A. Robertson (Publications Secretary); P. R. Goodey (Council and General Secretary); R. A. Bailey (Meetings

and Membership Secretary); G. R. Allan, N. L. Biggs, P. M. Cohn, J. S. Pym and J. T. Stuart (Members-at-Large, with two-year terms). A. W. Goldie, K. W. Gruenberg, W. K. Hayman, J. M. Howie, I. G. Macdonald and G. E. H. Reuter are Members-at-Large whose terms expire in 1982.

P. R. GOODEY

SOCIÉTÉ MATHÉMATIQUE DE FRANCE

For the year 1982 the fees for LMS members who are/become reciprocity members of the SMF are *either* 75FF for basic membership, *Circulaire Mensuelle d'information*, and *Gazette*; *or* 200FF for the above, plus *Bulletin* of the SMF (volume 110, 1982), and four issues of *Astérisque* to be chosen from those published before 31 December 1982.

Reciprocity members of the SMF should send their fees directly to Mme. Noctan, Société Mathématique de France, BP 126-05, 75226 Paris Cedex 05, France. LMS members wishing to become reciprocity members of the SMF should apply to the same address.

R. A. BAILEY

1982 SOCIETY PRIZES

In summer 1982 the Council proposes to award a Senior Berwick Prize, a Senior Whitehead Prize and one or more Junior Whitehead Prizes. Accordingly it has appointed B. E. Johnson, I. G. Macdonald and J. F. Adams to the 1982 Prizes Committee. Members of the Society are invited to submit their views confidentially in

writing to any member of the committee by 1 March 1982. Detailed regulations and the procedure for the award of each Prize may be obtained from the undersigned. The principal points that members should note are stated in detail in the December *Newsletter*.

P. R. GOODEY

BRITISH COMBINATORIAL COMMITTEE

At the Business Meeting held during the Eighth British Combinatorial Conference (20 to 24 July 1981, University College of Swansea) a new committee was elected to serve until the next Conference. At a subsequent meeting of the newly elected committee, members to serve as Honorary Secretary and Honorary Treasurer were chosen. The members of the new committee are as follows: Prof. R. Rado (Chairman), Dr. B. Bollobás, Dr. P. J. Cameron, Dr. M. J. Ganley (*Bulletin* Editor), Dr. A. D. Keedwell (Secretary), Dr. E. K. Lloyd (Treasurer and Local Organizer for 1983 Conference), Prof. H. N. V. Temperley, Dr. D. J. A. Welsh, Dr. R. J. Wilson.

The committee is grateful for financial support received from the London Mathematical Society Conferences Fund towards the costs of the above-mentioned Conference.

Ninth British Combinatorial Conference

The committee wishes to announce that the next British Combinatorial Conference will be held at the University of Southampton from 11 to 15 July 1983.

British Combinatorial Bulletin

This booklet, published annually, contains news of Conferences and Colloquia on Combinatorial topics, a list of British mathematicians known to be interested in

Combinatorics and information about their forthcoming research publications. It is available on request free of charge to mathematicians resident in Great Britain and at a cost of £1 (to cover postage for two issues) to interested persons resident overseas. Please send £1 in sterling to the Editor, Dr. M. J. Ganley, Department of Mathematics, University of Glasgow, Glasgow, Scotland G12 8QW.

One-day Colloquia on Combinatorial Topics

The British Combinatorial Committee has again decided to make a limited sum of money available for the support of One-Day Colloquia on Combinatorial topics. The committee will, however, expect any Institution requesting money under this arrangement to provide a reasonable proportion of the total needed from its own funds. Proposals for consideration by the committee should be sent in the first instance to the Secretary, Dr. A. D. Keedwell, Department of Mathematics, University of Surrey, Guildford, Surrey, England, GU2 5XH.

Two one-day colloquia have so far been arranged for the 1981-82 Academic Year, at the Open University on Friday, 13 November 1981 and at the University of Reading on Wednesday, 19 May 1982.

A. D. KEEDWELL

SYSTEMS EFFECTIVENESS

A NATO Advanced Study Institute on Electronic Systems Effectiveness and Life Cycle Costing will be held in Norwich, 19-31 July 1982.

System Effectiveness Analysis aims to predict the probabilities that systems will perform successfully. The measures used in System Effectiveness Analysis can be complex functions of other measurable attributes. In System Effectiveness Analysis the most important attribute is reliability which is defined to be the probability that the system functions satisfactorily without maintenance, and is a function of time. Similarly maintainability can be defined as the probability that a failed system element can be repaired. Both of these measures, and others (e.g. the effectiveness of the logistic support operations) can be combined to determine an overall measure of system effectiveness. If costs are known then (in theory) all the many possible ways

of realizing a system with the desired system effectiveness measure can be evaluated and the one with the smallest Life Cycle Cost selected. Here Life Cycle Cost means the entire cost of ownership (i.e. procurement costs, labour costs, spares costs etc.). The mathematics can become extremely complex, and it is hoped on the basis of certain results which have been obtained, that it will be possible to generalize the central limit theorem to cover the arbitrary (but coherent) system topologies that might be desirable. Stochastic Theory (Queuing theory, Renewal theory, Martingale theory etc.) Statistics and Measure theory all play their part in this analysis.

Further details and application forms may be obtained from the undersigned at Great Baddow Research Laboratories, Great Baddow, Chelmsford, Essex CM2 8HN.

B. DE NEUMANN

WORKSHOP ON ALGEBRAIC TOPOLOGY

From 22 March to 26 March 1982, a meeting on Algebraic Topology will be held at the Universitat Autònoma de Barcelona (Spain). The meeting is organized as follows.

Morning sessions (five sets of invited lectures): P. Hilton: Relative group theory and relative homotopy theory, G. Mislin: Characteristic classes of discrete group representatives, L. Smith: Applications of invariant theory in algebraic topology, C. Wilkerson: The cohomology and

K-theory of the classifying spaces of the exceptional Lie groups, A. Zabrodsky: Cohomology operations and the theory of H-spaces.

Afternoon sessions: some seminar talks, according to the interests of the participants. Suggestions for the subjects of the seminar talks would be welcome.

People wishing to attend the workshop are asked to write to: J. Agudé, Secció de Matemàtiques, Universitat Autònoma de Barcelona, Bellaterra (Barcelona), Spain.

GEOMETRIC TOPOLOGY CONFERENCE

A conference supported by the London Mathematical Society will be held at the White House Conference Centre, University of Sussex, from 2 to 6 August 1982. The subjects to be covered will include: topological surface theory, knots, links, three manifolds, and related topics.

Further details can be obtained from Roger Fenn at the following address: Mathematics Division, University of Sussex, Falmer, Brighton BN1 9QH. Persons already on the mailing list will receive further details shortly.

STUDY SKILLS IN MATHEMATICS

A booklet designed to help students acquire the skills necessary for the effective study of Mathematics has recently been published. It has been compiled and edited by Diana Burkhardt and Des Rutherford, of the University of Birmingham, from the reports of the three panels on "Helping Students Develop Learning Methods in

Mathematics" at the University Mathematics Teaching Conference 1979.

These booklets are available from the Shell Centre for Mathematical Education, University of Nottingham, University Park, Nottingham NG7 2RD, at a cost of 35p each (plus 25p postage and packing for orders under 20 copies).

OXFORD LECTURE NOTES

A list of Lecture Notes for various undergraduate and graduate courses given at Oxford and which are available for purchase can be obtained from the Assistant

Librarian, Mathematical Institute, 24-29 St. Giles, Oxford OX1 3LB.

I. M. JAMES

MATHEMATICAL COMPUTER SCIENCE

I am trying to make contact with other mathematicians interested in the mathematical theories of computer science with the aim of developing interest in and providing information about current activities in these areas. Two major aims would be:

- (i) to bring to a wider mathematical audience the many interesting results and problems in the subject with particular reference to algebra, number theory, combinatorics, logic, etc., and

- (ii) to promote a greater awareness about the mathematical foundations of computer science amongst computer scientists in the UK.

I would be delighted to hear from members of the Society interested in these subjects and from those who wish to improve communications generally between mathematicians and computer scientists. My address is: Department of Pure Mathematics, Queen's University, Belfast BT7 1NN.

M. HOLCOMBE

COMPUTATIONAL GROUP THEORY

A Durham Symposium on Computational Group Theory will be held from 30 July to 10 August 1982 in Grey College, Durham.

Attendance is by invitation. The organizers are aware of a number of omissions on the invitation list which they

wish to rectify as vacancies occur. Anyone who has not yet been invited but would like to attend should write to: Dr. C. R. Leedham-Green, Department of Pure Mathematics, Queen Mary College, Mile End Road, London E1 4NS.

AUSTRALIAN MATHEMATICAL SOCIETY

The Twenty-sixth Annual Meeting of the Australian Mathematical Society will be held at the University of Newcastle (Australia) from Monday 10 May to Friday, 14 May 1982.

Each day of the meeting there will be a one-hour general lecture by a distinguished mathematician. The speakers for the one-hour sessions are: Professor F. F. Bonsall, FRS (Functional Analysis), University of Edinburgh, Scotland; Professor J. E. Cohen (Population Modelling), Rockefeller University, New York; Professor J. N. Darroch (Statistics), Flinders University, South Australia; Professor T. W. Hawkins (History of Mathematics), Boston University, Massachusetts; Professor G. J. Simmons (Cryptography, Combinatorics); Sandia Laboratories, Albuquerque, New Mexico.

There will also be $\frac{3}{4}$ -hour specialist lectures by invited speakers. The list of these speakers and their research areas is

being prepared and will be included in the Second Circular.

There will be sections for contributed papers grouped under various headings. It is expected that there will be strong research sections in the interests represented by the invited speakers. A first listing of specialist sections with section secretaries is as follows: Functional Analysis (Dr. V. Ficker); Combinatorics (Professor W. D. Wallis); History of Mathematics (Mr. R. F. Berhout); Statistics, Analysis of Discrete Data (Dr. A. J. Dobson); Mathematical Modelling (Dr. R. W. Gibberd); Computing Science (Dr. D. W. E. Blatt); Numerical Analysis (Dr. W. Summerfield); Applied Mathematics (Dr. W. P. Wood); Differential Geometry and Relativity (Professor P. K. Smrz); Algebra (Professors W. Brisley); Number Theory (Dr. T. K. Sheng).

For further information, write to Dr. J. G. Couper, Department of Mathematics, University of Newcastle, New South Wales 2308, Australia.

DON'T BURN YOUR PAPERS

The Contemporary Scientific Archives Centre has published a booklet entitled "Preserving Scientific Source Materials—A Guide for Owners". The guide is addressed primarily to those who, on retirement, believe that their papers should be preserved, and to the families of those who have died. It also aims at helping those who, on changing their jobs or interests, wish to

reduce the bulk of their files, or those who, on retiring from continuous professional activities, wish to retain the material in their possession but reduce its size. Copies of the booklet are available on request to Dr. R. W. J. Keay, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG.

BOOKS RECEIVED FOR REVIEW IN THE BULLETIN

Complimentary copies of the books listed below have been received from their publishers by the Society. Those for which the *Bulletin* is unable to publish a review will be lodged in the Society's Library at University College, London, where they are available for inspection and use by members.

P. M. Cohn: Universal algebra, pp 412, Dfl 85, \$44.50/Dfl 37.50, \$19.50 (D. Riedel Pub. Co.).

I. Singer: Bases in Banach spaces II, pp 880, DM 148, \$77.70 (Springer-Verlag).

H. E. Goldstine: A history of the calculus of variations from the 17th through the 19th century, pp 410, DM 88, \$51.80 (Springer-Verlag).

- O. Bratteli, D. W. Robinson:** Operator algebras and quantum statistical mechanics, pp 505, DM 86, \$41 (Springer-Verlag).
- T. Meis, U. Marcowitz** (translated by P. R. Wadsack): Numerical solution of partial differential equations, pp 541, DM 52, \$27·30 (Springer-Verlag).
- U. Grenander:** Regular structures, pp 569, DM 53, \$25·30 (Springer-Verlag).
- H. Davenport:** Multiplicative number theory, pp 177, DM 37, \$21·90 (Springer-Verlag).
- L. Arnold, R. Lefever** (eds): Stochastic nonlinear systems in physics, chemistry and biology, pp 277, DM 62, \$26·90 (Springer-Verlag).
- J. A. De Santo, A. W. Saenz, W. W. Zachary** (eds): Mathematical methods and applications of scattering theory, Proceedings, Washington DC, 1979, pp 331, DM 38, \$22·50 (Springer-Verlag).
- T. L. Herdman, S. M. Rankin II, H. W. Stech** (eds): Integral and functional differential equations, pp 269, SFr 88 (Marcel Dekker Inc.).
- W.-Y. Hsiang, S. Kobayashi, I. M. Singer, A. Weinstein, J. Wolf, H.-H. Wu** (eds): The Chern symposium 1979: Proceedings, Berkeley, California, June 1979, pp 259, DM 56, \$33·10 (Springer-Verlag).
- S. R. S. Varadhan:** Lectures on diffusion problems and partial differential equations, pp 315, DM 18, \$10·70 (Springer-Verlag).
- A. G. Ramm:** Theory and applications of some new classes of integral equations, pp 343, DM 37·50, \$22·20 (Springer-Verlag).
- C. F. Gardiner:** A first course in group theory, pp 227, DM 28, \$16·60 (Springer-Verlag).
- J. A. G. Groenendijk, T. M. V. Janssen, M. B. J. Stokhof** (eds): Formal methods in the study of language, Part 1, pp 320, Dfl 40·95; Part 2, pp 283, Dfl 37·50 (Mathematical Centrum, Amsterdam).
- W. K. Bühler:** Gauss, a biographical study, pp 208, DM 39, \$17·80 (Springer-Verlag).
- J. R. Silvester:** Introduction to algebraic K-theory, pp 255, £15 h/b, £6·95 p/b (Chapman and Hall).
- F. John:** Plane waves and spherical methods—applied to partial differential equations, pp 172, DM 42, \$20 (Springer-Verlag).
- R. C. Vaughan:** The Hardy-Littlewood method, pp 172, £15 (CUP).
- H. Halberstam, C. Hooley:** Recent progress in analytic number theory, Vol. 1, pp 350, Vol. 2, pp 300, £28·80, \$69·50 per volume (Academic Press).
- R. Bott** (ed.): Marston Morse—selected papers, pp 882, DM 68, \$32·50 (Springer-Verlag).
- R. Glowinski:** Lectures on numerical methods for non-linear variational problems, pp 240, DM 18, \$8·60 (Springer-Verlag).
- L.-K. Hua, Y. Wang:** Applications of number theory to numerical analysis, pp 241, DM 78, \$37·20 (Springer-Verlag).
- J. Kevorkian, J. D. Cole:** Perturbation methods in applied mathematics, pp 558, DM 88, \$41·90 (Springer-Verlag).
- R. Y. Rubinstein:** Simulation and the Monte Carlo method, pp 278, £23 (John Wiley).
- C. Dixon:** Advanced calculus, pp 147, £5·75 (John Wiley).
- R. Gilmore:** Catastrophe theory for scientists and engineers, pp 666, £32·15 (John Wiley).
- A. Seidenberg** (ed.): Studies in algebraic geometry, pp 143, £9·75 (John Wiley).
- M. B. Priestley:** Spectral analysis and time series: Volume I: Univariate series, pp 702, £49·60, \$119·50 (Academic Press).
- I. Gohberg, S. Goldberg:** Basic operator theory, pp 285, SFr 36 (Birkhauser-Verlag).
- L. A. Steen, D. J. Albers** (eds): Teaching teachers teaching students: Reflections on mathematical educations, pp 136, SFr 26 (Birkhauser-Verlag).
- M. E. Taylor:** Pseudodifferential operators, pp 451, £21·30 (Princeton University Press).
- W. Ledermann** (ed.): Handbook of applicable mathematics, Volume III: Numerical methods, pp 565, £27·50, US \$75 (John Wiley).
- B. J. West:** Mathematical models as a tool for the social science, pp 120, £26·50 (Gordon & Breach).
- D. J. Bartholomew:** Mathematical methods in social sciences, Guidebook 1 (Handbook of applicable mathematics), pp 153, £10·50, US \$25·50 h/b, £5·95, US \$14·90 p/b (John Wiley).
- W. Hock, K. Schittkowski:** Test examples for nonlinear programming codes, pp 177, DM 28, US \$14·70 (Springer-Verlag).
- H. N. V. Temperley** (ed.): Combinatorics, proceedings of the eighth British combinatorial conference 1981, pp 190, £11·95 (Cambridge University Press).
- B. V. Limaye:** Functional analysis, pp 376, £6·50 (John Wiley).
- D. van Dalen:** Brouwer's Cambridge Lectures on intuitionism, pp 109, £9·95 (Cambridge University Press).

- T. Y. Lam: Serre's conjecture, pp 227, DM 25 (Springer-Verlag).
- A. P. Luthi: Messung wirtschaftlicher ungleichheit, pp 287, DM 40, US \$19·10 (Springer-Verlag).
- J. M. Ortega, W. G. Poole, Jr.: An introduction to numerical methods for differential equations, pp 329, £8·95 (Pitman Books).
- J. V. Grabiner: The origins of Cauchy's rigorous calculus, pp 252, £17·50 (MIT Press).
- D. Bos: Economic theory of public enterprise, pp 142, DM 22, US \$10·50 (Springer-Verlag).
- J. E. Fornæss (ed.): Recent developments in several complex variables, pp 452, £19·70 / £7·50 (Princeton University Press).
- D. R. Cox, E. J. Snell: Applied statistics—principles and examples, pp 189, £6·95 / £13·50 (Chapman and Hall).
- J. K. Beem, P. E. Ehrlich: Global Lorentzian Geometry, pp 472, SFr 126 (Marcel Dekker).
- L. Boutet de Monvel, V. Guillemin: The spectral theory of Toeplitz operators, pp 160, £10·70 / £4·25 (Princeton University Press).
- G. Temple: 100 years of mathematics, pp 316, £32 (Duckworth).
- P. A. Fuhrmann: Linear systems and operators in Hilbert space, pp 325, £19·25 (McGraw Hill).
- A. C. Norris: Computational chemistry, pp 454, £19·75 / £8·75 (John Wiley).
- V. I. Arnold: Singularity theory, pp 266, £12·50 (Cambridge University Press).
- S. P. Novikov, et al.: Integrable systems—selected papers, pp 136, £3·95 (Chapman & Hall).
- R. Smullyan: What is the name of this book?, pp 255, £1·95 (Penguin Books).
- M. Warriner: A solution of quartic equations and others, pp 29 (Acanthus Press).
- M. Toda: Theory of nonlinear lattices, pp 205, DM 69, US \$31·40 (Springer-Verlag).
- G. P. Hochschild: Basic theory of algebraic groups and lie algebras, pp 267, DM 59·80, US \$35·30 (Springer-Verlag).
- P. Kell, G. Matthews: The non-euclidean hyperbolic plane, pp 333, DM 49, US \$22·30 (Springer-Verlag).
- J. Carr: Applications of centre manifold theory, pp 142, DM 32, US \$14·60 (Springer-Verlag).
- I. A. Ibragimov, R. Z. Has'minski: Statistical estimation: Asymptotic theory, pp 403, DM 98, US \$46·70 (Springer-Verlag).
- D. B. Zagier: Zetafunktionen und quadratische Korper, pp 144, DM 29, US \$12·80 (Springer-Verlag).
- L. A. Steen (ed.): Mathematics tomorrow, pp 250, DM 39, US \$17·80 (Springer-Verlag).
- A. V. Selevinsky: Representations of finite classical groups—A Hopf algebra approach, pp 184, DM 21·50, US \$9·80 (LNM 869) (Springer-Verlag).
- S. Mardesic, J. Segal (eds): Shape theory and geometric topology, Proceedings, Dubrovnik, 1981, pp 265, DM 29, US \$13·20 (LNM 870) (Springer-Verlag).
- B. Banaschewski, R. E. Hoffman (eds): Continuous lattices, Proceedings, Bremen, 1979, pp 413, DM 43·50, US \$19·80 (LNM 871) (Springer-Verlag).
- F. Richman (ed.): Constructive mathematics, Proceedings, New Mexico, 1980, pp 347, DM 39, US \$17·80 (LNM 873) (Springer-Verlag).
- R. B. Jensen, A. Prestel (eds): Set theory and model theory, Proceedings, Bonn, 1979, pp 174, DM 21·50, US \$9·80 (LNM 872) (Springer-Verlag).
- R. Gobel, E. Walker (eds): Abelian group theory, Proceedings, Oberwolfach, 1981, pp 447, DM 48·50, US \$22·10 (LNM 874) (Springer-Verlag).
- H. Zieschang: Finite groups of mapping classes of surfaces, pp 340, DM 34·50, US \$15·70 (LNM 875) (Springer-Verlag).
- S. V. Stratila: Modular theory in operator algebras, pp 492, £33 (Abacus Press).
- R. D. Jarvinen: Finite and infinite dimensional linear spaces, pp 168, SFr 82 (Marcel Dekker).
- J. Glimm, A. Jaffe: Quantum physics—A functional integral point of view, pp 417, DM 62, US \$26·40 (Springer-Verlag).
- H. R. Bennett, D. J. Lutzer (eds): Topology and order structures, Pt. 1, pp 190, Dfl 24·15 (Stichting Mathematisch Centrum).
- R. Rousseau: Extended covariant systems, A contribution to the study of crossed products of von Neumann algebras, pp 59, BFr 300 (AWLSK, Belgium).

LONDON MATHEMATICAL SOCIETY

DR. J. T. STAFFORD (Leeds)

CLASSICAL ALGEBRAIC K-THEORY OVER NONCOMMUTATIVE RINGS

PROFESSOR I. N. HERSTEIN (Chicago)

DERIVATIONS AND INVOLUTIONS IN RINGS

FRIDAY, 19 FEBRUARY 1982, at 3.30 p.m.

**Geological Society's Meeting Room,
Burlington House,
Piccadilly, London W1**

All interested are very welcome

Tea will be served at 4.30 p.m.