

LMS NEWSLETTER

No. 19

April, 1975

The Society will meet on Friday, 16 May, 1975, at The Royal Society, 6 Carlton House Terrace, London S.W.1. The speakers will be

J.-P. Serre (Paris)
D. Mostow (Yale)
L. Hormander (Lund)

The meeting will start at 11.30 a.m.; the exact timetable and the titles of the lectures will be in the May Newsletter.

If you wish to attend this meeting and to have lunch and afternoon tea, please write to Professor J. L. Britton, Department of Mathematics, Queen Elizabeth College, Campden Hill Road, London W8 7AH, enclosing a cheque for £11.40 payable to The London Mathematical Society, to arrive by 1 May. Bar facilities will be available. (It is possible, of course, just to turn up for the lectures without advance arrangement—but rather expensive and inconvenient to try to eat elsewhere in this area!)

DURHAM SYMPOSIUM ON L-FUNCTIONS AND GALOIS PROPERTIES OF NUMBER FIELDS

The 4th Working Research Symposium at Durham, on *Algebraic Number Theory: L-Functions and Galois Properties of Number Fields*, will run from 2–13 September, 1975 (the dates given are the arrival and departure dates). The programme will consist of (i) a number of short lecture courses introducing the main topics, to be given by J. Coates, A. Frölich, J. Martinet, J.-P. Serre, J. Tate, and (ii) seminar talks. Among those who have already indicated that they are likely to participate are M. F. Atiyah, J. Birch, W. Casselman, J. W. S. Cassels, K. Iwasawa, R. Langlands, H. Stark. There is a limited number of places available for people who have not yet been sent invitations. If you feel you can contribute to the symposium and would like to

come please write as soon as possible to Dr. S. M. J. Wilson, Department of Mathematics, University of Durham, Science Laboratories, South Road, Durham DH1 3LE, England.

There will be a registration fee of £5 for U.K. participants only and accommodation in Grey College is expected to cost about £6 a day (all meals included). The Symposium has support from the Science Research Council, the Royal Society and the London Mathematical Society. We will be able to offer members *some* help with their expenses, *but* they should apply for support from their own institutions in the first instance.

A. FRÖLICH
S. M. J. WILSON

JOURNAL OF APPLIED PROBABILITY

The Applied Probability Trust and the Society have agreed that the price of the *J.A.P.* will remain the same in 1976 as in 1975: namely that the subscription rate

for LMS individual members will be £5.10, and for L.M.S. corporate members £15.30.

G. E. H. REUTER

GENERAL TOPOLOGY CONFERENCE

There will be a small General Topology Conference in Oxford on 14 and 15 April, 1975. Further information is available

from Dr. P. J. Collins, St. Edmund Hall, Oxford OX1 4AR (Telephone 0865-45511).

FORTHCOMING MEETINGS

1. May 19–23, 1975. Third Symposium on The Numerical Solution of Partial Differential Equations. The University of Maryland, College Park, Maryland.

Information: David Chittenden, Conferences & Institutes Division, University of Maryland, University College, University Boulevard at Adelphi Road, College Park, Maryland 20742.

2. May 26–29, 1975. Abraham Robinson Memorial Conference. Yale University, New Haven, Connecticut.

Information: Angus Macintyre, Department of Mathematics, Yale University, New Haven, Connecticut 06520.

3. June 9–13, 1975. Fifth Conference on Stochastic Processes and their Applications. University of Maryland, College Road, Maryland.

Information: R. Syski, Department of Mathematics, University of Maryland, College Park, Maryland 20742.

4. June 17–July 18, 1975. Seminar on Topics in Topology. University of Toledo, Toledo, Ohio.

Information: American Mathematical Society, Editorial Department, P.O. Box 6248, Providence, Rhode Island 02940.

5. June 30–July 21, 1975 (approx.). C.M.C. Summer Research Institute. University of Calgary, Alberta, Canada.

Program: The Institute's Applied Mathematics Workshop will have singular perturbations and control as its theme.

Information: P. Binding, Mathematics Department, University of Calgary, Alberta, Canada.

6. July 28–August 1, 1975. Fourth Annual Southern California Symposium in Algebraic and Geometric Topology. California State University, Long Beach, California.

Information: Robert E. Mosher, Department of Mathematics, California State University, Long Beach, California 90840.

7. August 3–9, 1975. International Symposium on Infinite Dimensional Holomorphy, Universidade Estadual de Campinas, Brazil.

Information: Mário C. Máto, Instituto de Matemática, Universidade Estadual de Campinas, Caixa Postal 1170, 13100 Campinas, S.P., Brazil.

8. September 8–19, 1975. NATO Advanced Study Institute on Nonlinear Operators and The Calculus of Variations. Université Libre de Bruxelles. Lecturers: H. Amman (Bochum), H. Brezis (Paris), U. Mosco (Rome), R. T. Rockafellar (Seattle), R. Teman (Orsay). Deadline for applications: April 15, 1975. The application should mention clearly whether a grant is necessary and whether the grant should cover all or part of the travel or living expenses.

Information: Enrique Lami Dozo, Département de Mathématique de l'U.L.B., Chaussée de la Hulpe, 166, B-1170 Bruxelles, Belgium.

9. SUMMER COURSE IN COMPLEX ANALYSIS.

The International Centre for Theoretical Physics, (Miramare–Trieste, Italy), supported by the U.N. Development Programme and UNESCO, will offer training and research programmes from 21 May to 8 August, 1975, in the theory of functions of one and several variables. The course directors are A. Andreotti (Pisa), J. Eells (Warwick) and W. H. J. Fuchs (Cornell).

Further information from the International Centre for Theoretical Physics, P.O. Box 586, I-34100 Trieste, Italy.

10. UNIONE MATEMATICA ITALIANA

The 10th Congress of the Unione Matematica Italiana will be held in Cagliari, 22–26 September, 1975, with a final session in Alghero on 27 September. *Information:* Segreteria Comitato Organizzatore, Istituto di Matematica per Ingegneri, Viale Merello, 09100 Cagliari, Italy.

11. 1975 SUMMER INSTITUTE ON SEVERAL COMPLEX VARIABLES, 28 JULY–15 AUGUST, 1975.

The twenty-second Summer Research Institute of the American Mathematical Society will be devoted to the topic "Functions of Several Complex Variables". The institute will be held on the campus of Williams College, Williamstown, Massachusetts. The Organising Committee will consist of Professor H. Grauert, R. C. Gunning (co-chairman), D. Lieberman, J. Morrow, R. Narasimhan, H. Rossi (co-chairman), Y. T. Siu, and R. O. Wells.

Information: Dr. Gordon L. Walker, American Mathematical Society, P.O. Box 6248, Providence, Rhode Island 02940.

TOPOLOGY SYMPOSIUM

It is hoped to hold a two- or three-day Topology Symposium in Oxford during the period 30 June–2 July, 1975. Those interested in attending should write as

soon as possible for further particulars to: Professor I. M. James, Mathematical Institute, 24–29 St. Giles, Oxford OX1 3LB.

I. M. JAMES

REFERENCES FOR RECENT LECTURES

Dr. C. J. Preston (January):

R. L. Dobrushin, Description of a random field by means of conditional probabilities and the conditions governing its regularity, *Theory of Prob. and its applications*, 13, 197-224, (1968).

C. J. Preston, Gibbs states on countable sets, *Cambridge Tracts in Mathematics*, No. 68, C.U.P., (1974).

F. Spitzer, Introduction aux processus de Markov à paramètres dans Z_n , *Springer Lecture Notes*, 390, (1974).

A.M.S. PROCEEDINGS

In action of 22 January, 1975, the Council of the A.M.S. directed the *Proceedings* Editorial Committee to upgrade the content of the journal. Effective immediately, *Proceedings* referees and editors will be asked to act in accord with the following statement of policy:

"To be published in the *Proceedings*, a paper must be correct, new, nontrivial and significant. Further, it must be well written and of interest to a substantial number of mathematicians. Piecemeal results, such as an inconclusive step toward an unproved major theorem or a minor variation on a known result, are in general not acceptable for publication. *Proceedings* Editors shall solicit, and encourage publication of,

worthy papers of lengths not exceeding twelve typed pages.

"In further action, the Council selected the *Proceedings* for a two-year experiment with 'blind refereeing'. Effective with the publication of these notices, authors submitting a paper to the *Proceedings* shall send two manuscripts: one containing all pertinent personal data and the other not containing the author's name or institutional affiliation. This second copy will be refereed, and the Editor shall not reveal the name or institution of the author to the referee. It shall not be the responsibility of the Editor to suppress evidence internal to the paper from which the referee might guess the author's identity."

MERTON COLLEGE, OXFORD Fellowship and Tutorship in Mathematics

The College proposes to elect an Official Fellow and Tutor in Mathematics, with effect from 1 October, 1975, or as soon as possible thereafter. The person appointed will be required to give tuition in Pure Mathematics for the Final Honour Schools of Mathematics and Mathematics and Philosophy. It is hoped that a University

(C.U.F.) Lectureship will in due course be associated with this Fellowship.

Applications should be sent to the Warden, with details of career and publications and the names of three referees, not later than Friday 25, April, 1975. Further particulars may be obtained from the Warden's secretary.

NEW A.M.S. PUBLICATIONS

Lectures on Set Theoretic Topology, by Mary Ellen Rudin (Number 23, C.B.M.S.; Regional Conference Series). 76 pages list price \$4; individual price \$3 (I.S.B.N. 0-8218-1673-X to order, please specify C.B.M.S./23).

Facing up to Arrangements: Face-count Formulas for Partitions of Space by Hyperplanes, by Thomas Zaslavsky. (Number 154, A.M.S. Memoirs) 102 pages; list price \$3.30; member price \$2.48 (I.S.B.N. 0-8218-1854-6). To order please specify MEMO/154.

Classifying Spaces and Fibrations, by J. Peter May (Number 155, A.M.S. Memoirs). 98 pages, list price \$3.30; members price \$2.48 (I.S.B.N. 0-8218-

1855-4). To order, please specify MEMO/155.

Axiomatic Set Theory, edited by Thomas J. Jech (Volume XIII, Part 2; Proceedings of Symposia in Pure Mathematics). 232 pages; list price \$22.50; member price \$16.88. (I.S.B.N. 0-8218-0246-1). To order, please specify PSPUM/13/2.

The Theory of Extremal Problems for Univalent Functions of Class S, by K. I. Babenko. (Number 101, Proc. Steklov Institute) 303 pages, list price \$46.40; member price \$34.80 (I.S.B.N. 0-8218-3001-5). To order, please specify STEKLO/101.

THE JOINT MATHEMATICAL COUNCIL OF THE UNITED KINGDOM

The Joint Mathematical Council was founded as a result of initiatives originating from within bodies of professional mathematicians who saw the need for collaboration and who wished to provide a wider basis for discussion of the particular needs of science and technology. A preliminary meeting in July 1962 was attended by Dame Mary Cartwright F.R.S., Sir William Hodge F.R.S., and Mr. J. T. Combridge (representing the London Mathematical Society, the Royal Society and the Mathematical Association, respectively) and this led to the Inaugural Meeting held in January 1963, attended by 11 representatives of professional societies. The objects of the Council were: "to provide co-ordination between constituent societies and generally to promote the advancement of mathematics and the improvement of mathematical teaching."

The Council's concern for the improvement of mathematics teaching in schools was reflected in discussions with the Royal Society on the need for courses for teachers of science and mathematics and led to the setting up of an Education Sub-Committee, with special concern for the problems of in-service training; and this resulted in the establishment of an Advisory Unit and Centre for Mathematical Education in the University of Nottingham. A similar Centre was established recently in the University of Durham with the aid of a grant to the J.M.C. from British Petroleum. Council was closely involved with the newly formed Schools Council and urged then, and continues to urge now, the need for consultation, by the Schools Council, with professional bodies of mathematicians. Council sponsored a joint conference with the Schools Council to discuss VIth form mathematics and that led to the Schools Council VIth Form Project, currently based on the University of Reading. This Council has also been concerned with various schools Council proposals on the structure of the school mathematics curriculum and of the examination system and is at present about to enter a dialogue on the effects of recent proposals on the teaching of mathematics at all levels. Council has also stimulated Schools Council activity on the

comparison of A-level standards and the relation of mathematics to other disciplines within the school curriculum. General discussions of the school syllabus, especially with reference to recent curriculum changes continues to occupy the attention of Council and numerous requests for guidance led to the publication (in 1970) of a Statement on Mathematics at Secondary level. This Statement did not seek to make propaganda for one particular view, but sought rather to identify the general principles underlying curriculum development in mathematics and the subject's relation to other disciplines.

Although school matters have occupied a great deal of Council's attention, the concerns of higher education are not neglected. In recent years, Council has been the focus of concern over S.R.C. policy on the funding of research in mathematics.

The Joint Mathematical Council provides a forum where constituent bodies can bring into the open matters of common concern. When a consensus for action emerges, it then brings pressure to bear in the appropriate quarter. It seeks to preserve a synoptic view of the needs of the mathematical community and to initiate or facilitate appropriate collaboration. At present the constituent societies represented on Council are: The Royal Society British National Committee for Mathematics, The Mathematical Association, The London Mathematical Society, The Association of Teachers of Mathematics, The Institute of Mathematics and its Appliances, The Edinburgh Mathematical Society, The Glasgow Mathematical Association, The Association of Teachers in Colleges and Departments of Education (Maths. Section), The University Departments of Education Mathematics Study Group, The Royal Statistical Society, The British Computer Society, The Conference of Professors of Applied Mathematics, The Conference of Professors of Statistics, and The British Society for the History of Mathematics. For 1975 the Officers are: Chairman: Professor S. J. Taylor, Westfield College, London; Secretary: Mr. H. Neill, Durham University; and Treasurer: Dr. J. A. Todd, F.R.S.
S. J. TAYLOR