LMS NEWSLETTER

No. 54 *December 1978*

DATES OF SOCIETY MEETINGS

Friday, 19 January 1979, Newcastle, Joint meeting with E.M.S. (see below).

Friday, 16 March 1979, Burlington House, Naylor Lecture.

Friday, 18 May–Saturday, 19 May 1979, Birmingham.

Friday, 15 June 1979, Burlington House, Hardy Lecture.

London meetings will be held in the Geological Society's Rooms, Burlington House, Piccadilly. Council meetings will be held in conjunction with all the above meetings except that on 18 May 1979. Council will meet in London on 11 May 1979.

D. B. SINGMASTER

JOINT E.M.S. AND L.M.S. MEETING

The meeting on Friday, 19 January will be held at the University of Newcastle and it will be a joint meeting of the Edinburgh Mathematical Society and the London Mathematical Society. The meeting will commence at 3.30 p.m. and there will be two speakers, Prof. M. F. Atiyah and Dr. S. Wassermann. D. B. SINGMASTER

SOCIETY DINNER

A buffet dinner will be served in the Buttery, Merz Court, University of Newcastle at 7.00 p.m. on Friday, 19 January at a cost of £4·50 per person (wine included). Would those wishing to attend please book by sending a cheque (payable to B. E. Johnson) for the appropriate amount to Dept. of Pure Mathematics, Merz Court, The University, Newcastle upon Tyne, NE1 7RU to arrive by 8 January 1979, if possible.

B. E. JOHNSON

PERSONAL ITEMS

W. H. Cockcroft, Vice-Chancellor of the New University of Ulster, is chairman of the Government's Committee of Inquiry into the Teaching of Mathematics in Primary and Secondary Schools in England and Wales. M. F. Atiyah (Oxford) is also on the Committee.

Dr. Cockcroft has also been appointed to the Science Research Council.

D. B. SINGMASTER

SYMPOSIUM ON ANALYTIC NUMBER THEORY

A Durham symposium on Progress in Analytic Number Theory will be held on 22 July–1 August 1979, in Grey College, Durham. The central themes of the programme will be Riemann's zeta function and allied functions and recent advances in the study of prime numbers, of exponential sums and of sieves. Attendance is primarily by invitation, but interested mathematicians who have not been invited and would like to attend should write to H. Halberstam, Department of Mathematics, University of Nottingham.

1979 B.M.C.: UNIVERSITY COLLEGE, LONDON

The Thirty-first British Mathematical Colloquium will be held in University College, London on 3–7 April 1979. Evening lectures will be given by: W. Browder (Princeton), K. Roth (Imperial College, London) and H. Bauer (Erlangen/Nürnberg). The complete programme and application form will be distributed with a forthcoming issue of the *Newsletter*. The Colloquium Secretary is C. B. Thomas, Department of Mathematics, University College, London.

AUSTRALIAN MATHEMATICAL SOCIETY—1979 MEETING

The 1979 Annual Meeting of the Australian Mathematical Society will be held on 14–18 May 1979 at the Australian National University, Canberra. Invited speakers include K. Gruenberg, M. Kac, B. B. Mandelbrot, R. B. Potts, M. J. D. Powell and J. W. Tukey. Further details can be obtained from E. Seneta, Department of Statistics, Australian National University, Box 4, P.O. Canberra ACT 2600, Australia.

COXETER SYMPOSIUM

A symposium covering aspects of the mathematical work of H. S. M. Coxeter will be held in Toronto on 21–25 May 1979. Invited speakers include J. H. Conway, H. S. M. Coxeter, L. Fejes Tóth, B. Grünbaum, W. M. Kantor, P. McMullen, C. A. Rogers, J. J. Seidel, G. C. Shephard, J. L. Tits and W. T. Tutte. There will be sessions for contributed papers. Further information can be obtained from Chandler Davis, Department of Mathematics, University of Toronto, Toronto, Canada.

ANALYSIS ON VARIETIES

A colloquium on Analysis on Varieties will be held in Metz on 28–30 May 1979. Lectures will cover the geometry and topology of varieties, Lie algebras and P.D.E. Invited speakers include M. F. Atiyah, T. Aubin, R. Barre, M. Berger, J. P. Bourguignon, E. Combet, N. Desolneux-Moulis, S. Gallot, F. Hirzebruch, J. P. Jouanolou, A. Lichnerowicz, R. Moussu, J. P. Penot, V. Poenaru, R. Roussarie and T. J. Wilmore. Further details can be obtained from A. Roux, Département de Mathématiques, Université de Metz, Ile du Saulcy, 57000 Metz, France

NUMERICAL ANALYSIS OF SEMICONDUCTOR DEVICES

A Conference on the Numerical Analysis of Semiconductor Devices will be held in Trinity College, Dublin on 27–29 June 1979. Further details can be obtained from J. J. H. Miller, Numerical Analysis Group, Trinity College, Dublin, Ireland. Contributed papers must be submitted by 16 March 1979.

ABRAHAM ROBINSON PROFESSORSHIP

As a tribute to the late Abraham Robinson, Yale University invites contributions toward an endowed professorship in the Department of Mathematics. The chair honouring the memory of this distinguished mathematician will be held by an individual whose interests and ideals reflect Professor Robinson's. Members of the scientific community who wish to join in this memorial should write to W. Feit, Chairman, Yale University Department of Mathematics, 218 Leet Oliver Memorial Hall, 12 Hillhouse Avenue, New Haven, Ct. 06520, U.S.A.

VISITING MATHEMATICIANS

The following mathematicians are expected to visit Britain. The list is supplementary to that published in the September *Newsletter*. A further supplementary list will appear in June and a complete list in September. The Editor relies on all members, particularly local LMS representatives, informing him of visitors to their departments.

Name	*Home University*	*Visiting*	*Dates*
M. A. Al-Bassam	Kuwait	Cambridge	Feb.–July 79
A. A. Alemzadeh	Tehran	Leeds	Oct. 78–July 79
S. Althoen	Michigan	Bangor	Jan.–Aug. 79
I. Barrodale	Victoria, B.C.	Liverpool	Summer 79
M. Batchelor	M.I.T.	Cambridge	Oct. 78–July 79
W. Blair	Northern Illinois	Leeds	Sept. 78–May 79
W. W. Boone	Illinois	Oxford	Oct. 78–July 79
J. Boyle	Argon National Laboratory, Chicago	Liverpool	Easter 79

Name	*Home University*	*Visiting*	*Dates*
D. Brizolis	California State Poly	Cambridge	Oct. 78–July 79
W. Browder	Princeton	Oxford	Oct. 78–July 79
R. F. Brown	U.C.L.A.	Warwick	Oct. 78–July 79
M. Cesare	Rome	Cambridge	Oct. 78–July 79
S. U. Chase	Cornell	Kings, London	Oct. 78–July 79
H. E. Debrunner	Berne	U.C., London	May–Aug. 79
W. E. Deskins	Pittsburgh	Westfield	Oct. 78–July 79
D. Dubois	New Mexico	Bedford	Sept. 78–March 79
T. Eto	Tsukuba	Royal Holloway	Oct. 78–July 79
J. Fink	Kalamazoo	Westfield	March–May 79
E. Flytzanis	Thessaloniki	Warwick	Oct. 78–July 79
L. Ford	Wisconsin	King's, London	Oct. 78–Sept. 79
D. Foulis	Massachusetts	Oxford	Jan.–July 79
B. E. Fristedt	Minnesota	Liverpool	Sept. 78–June 79
F. Gallone	Milan	Bedford	Sept. 78–Aug. 79
K. S. Ganghadaran	Papua	Sussex	Nov. 78–July 79
C. W. Garner	Carlton	Westfield	Oct. 78–July 79
P. M. Gill	Adelaide	Southampton	Aug. 78–July 79
G. Glaubermann	Chicago	Oxford	Oct. 78–July 79
S. I. Goldberg	Illinois	Cambridge	Oct. 78–July 79
G. R. Goodson	Witwatersrand	Sussex	Nov. 78–Aug. 79
R. Grassl	New Mexico	Reading	Feb.–May 79
J. Graves	Cape Town	Sussex	Oct. 78–Sept. 79
C. C. Heyde	C.S.I.R.O.	I.C., London	March–April 79
H. Hiller	M.I.T.	Oxford	Oct. 78–July 79
A. G. Hitchcock	Rhodesia	Oxford	Sept. 78–May 79
S. Huxham	N.S.W. Institute of Technology	City	Oct. 78–July 79
R. Jensen	Bonn	Oxford	Oct. 78–July 79
V. Jezak	Kingston	Shrivenham	July 78–Aug. 79
N. Kheralla	Einshams, Cairo	Leeds	Sept. 78–June 79
P. Lappan	Michigan State	I.C., London	Oct. 78–July 79
J. F. Lawless	Waterloo	I.C., London	Sept. 78–April 79
G. I. Lehrer	Sydney	Warwick	Jan. 79–Jan. 80
H. W. Leopoldt	Karlsruhe	King's, London	Jan.–Feb. 79
A. I. Lichtman	Ben Gurion	Manchester	Aug. 78–Aug. 79
B. G. Lindsay	Washington	I.C., London	Aug. 78–Aug. 79
L. Low	Adelaide	Cambridge	Dec. 78–Aug. 79
C. G. Lyons	James Madison	Edinburgh	Jan.–July 79
A. Mann	Hebrew University	Oxford	Oct. 78–July 79
S. A. Maslowe	McGill	I.C., London	Aug. 78–Aug. 79
W. Massey	Yale	Oxford	Jan.–July 79
D. J. McCaughan	Otago	Warwick	Dec. 78–Aug. 79
L. McCulloh	Illinois	King's, London	Jan.–July 79
D. Meier	Zurich	Warwick	Jan.–Dec. 79
J. L. Mijnheer	Leiden	Liverpool	March 79
E. C. Milner	Calgary	Oxford	Oct. 78–July 79
G. D. Mislin	E.T.H., Zurich	Oxford	Oct. 78–April 79
M. Mori	Ibaraki	I.C., London	April–Sept. 79
A. Opie	New South Wales	Bristol	Jan.–June 79
C. C. Page	McGill	I.C., London	Oct. 78–July 79
L. C. Papaloucas	Athens	Bedford	Oct. 78–July 79
R. Parikh	Boston	Oxford	Oct. 78–July 79
C. H. Randall	Massachusetts	Oxford	Jan.–July 79
D. Ravenel	Washington	Oxford	Oct. 78–July 79
M. Rosenblatt	San Diego	Cambridge	April–July 79
I. R. Savage	Yale	I.C., London	Jan.–July 79
H. Sawada	Sophia	Warwick	Sept. 78–Sept. 79
D. Schlomiuk	Montreal	Oxford	Oct. 78–July 79
J. P. Seldin	Carbondale	Oxford	Oct. 78–July 79
R. B. Seymour	British Columbia	Oxford	Sept. 78–Aug. 79
P. F. Siew	Australia	I.C., London	June 78–June 79

Name	*Home University*	*Visiting*	*Dates*
A. D. Sneyd	Waikato	Bristol	Sept. 78–Aug. 79
M. Stiassnie	Haifa	Bristol	July 78–July 79
M. E. Thompson	Waterloo	I.C., London	Sept. 78–April 79
A. Tomaras	Athens	Oxford	Oct. 78–July 79
D. W. Trenerry	New South Wales	Cambridge	Dec. 78–Feb. 80
R. N. Wagener	Mons	Cambridge	Oct. 78–July 79
R. Westbrook	Calgary	Dundee	Jan.–June 79
R. M. Wilson	Ohio State	Westfield	Oct. 78–July 79
B. B. Winter	Ottawa	I.C., London	Sept. 78–June 79
H. Yoshida	Chiba, Japan	I.C., London	Oct. 78–July 79
A. K. Zotov	Moscow	Westfield	Sept. 78–March 79

MATHEMATICAL CHALLENGE

A brief description of the work of the Scottish Mathematical Council was given in an article in the *Newsletter* (October 1977) and mention was made there of the Council's competition Mathematical Challenge. This is a problem-solving competition, open to all pupils in Scottish secondary schools; it is based upon the University of Wisconsin Talent Search. 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. The competition is not directed solely at the high-flyers; the intention is to encourage as many people as possible rather than to single out those of exceptional talent.

For the administration of the scheme, Scotland is divided into four sections, each based on one or more universities linked with one or more regional authorities. Each section is controlled by a committee consisting of university and school teachers, a mathematics adviser and a member of staff of a college of education. This committee has the duty of arranging the distribution of problems, solutions and other material, as well as being responsible for the grading of entries and the selection of prize-winners. To maintain uniformity of standards throughout Scotland the same problems are used in all four sections at the same time. A national committee is responsible for the selection of problems and for the wording of problems and solutions; it also serves to co-ordinate the work of the local committees.

Problems are sent out to the schools at intervals with plenty of time to submit solutions. Pupils are put on trust to present only their own work and not to collaborate with one another. Four sets of four problems each are sent out each year and prize-winners are chosen in the different sections on the basis of overall attainments. Prizes are modest and so far they have been mainly of £10 each. In each of the two years during which the competition has operated about 100 pupils in all have been awarded prizes. The prizes have been presented at ceremonies held in a university in the appropriate section. Prize days give an opportunity to pupils and their teachers to see something of the university and to meet members of staff as well as the organisers of the competition.

The two years of the competition have produced some remarkable talent as well as a considerable show of persistence and determination. Some solutions have been of exceptional elegance, and remarkably high standards have been achieved by some very young competitors. Reaction has of course been varied. It is clear that in some schools it is felt that the problems *must* be exceptionally difficult, but in fact a conscious effort is made to include several problems that are not at all hard; what is needed is courage to try them. No shame need be attached to failing to solve a problem and those who enter into the spirit of the competition appreciate that there is much to be gained from partial success. Depair at being defeated in one case may be counterbalanced by delight at achievement in another.

For the first two years, welcome financial support came from the eight Scottish universities. For the next two years generous help is being provided by IBM Limited, by the Associated Scottish Life Offices and by BP Limited. Thus the reactions from both educational and industrial organisations have been encouraging.

Further information may be obtained by writing to me at the University of Aberdeen. Comments from members will be welcomed.

E. M. PATTERSON

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Printed by C. F. Hodgson & Son Ltd., 50 Holloway Road, London N7 8JL