LONDON MATHEMATICAL SOCIETY

HARDY CENTENARY MEETING
16–17 December 1977

Friday 16th December

2.00 p.m.	Opening Session
2.30 p.m.	Professor W. K. Hayman: *When does a function tend to infinity along a path?*
3.30 p.m.	Professor L. Carleson: *Maximal functions.*
4.30 p.m.	Tea
5.15 p.m.	Professor L. S. Bosanquet: *The discovery of Tauberian theorems.*
5.35 p.m.	Professor J.-P. Kahane: *Trigonometric series.*
7.30 p.m.	Reception (Old Kitchens, Trinity College)
8.00 p.m.	Dinner

Saturday 17th December

9.30 a.m.	Professor Sir Edward Maitland Wright: *Some aspects of Hardy's work on the theory of numbers.*
9.50 a.m.	Professor A. Baker: *Diophantine analysis and transcedence.*
10.50 a.m.	Coffee
11.30 a.m.	Professor A. Selberg: *Zeros on the critical line: a survey.*

Lectures will take place in the

Mill Lane Lecture Rooms

Cambridge

LMS NEWSLETTER

No. 44   *December 1977*

DATES OF SOCIETY MEETINGS

Friday/Saturday, 16/17 December 1977, Trinity College, Cambridge, Hardy Centenary Meeting.

Friday, 20 January 1978, Burlington House.

Friday, 17 March 1978, Burlington House.

Friday/Saturday, 19/20 May 1978, Gregynog, Powys, weekend meeting.

Friday, 16 June 1978, Burlington House, Whitehead meeting.

Friday, 20 October 1978, Burlington House.

Friday, 17 November 1978, Burlington House, Annual General Meeting.

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 London meetings. Council will also meet on 12 May 1978.

<div align="right">D. B. Singmaster</div>

HARDY CENTENARY MEETING

The London Mathematical Society is holding a meeting in Cambridge on the afternoon of Friday, 16 December, and the morning of Saturday, 17 December 1977, to commemorate the centenary of the birth of G. H. Hardy.

The programme appears on the front of this *Newsletter*.

The meeting will commence at 2 p.m. on 16 December, in the Mill Lane Lecture Rooms, Cambridge. There will be an LMS Dinner on the evening of the 16th in the Hall of Trinity College, for which the charge is £6 (including wine). A limited amount of overnight accommodation in single rooms is available in Trinity College for £5·40 (including breakfast) per person. Those wishing to attend the dinner or to stay overnight in Trinity should write, enclosing payment, to Professor J. W. S. Cassels, Department of Pure Mathematics and Mathematical Statistics, 16 Mill Lane, Cambridge CB2 1SB, U.K. by Friday 9 December at the latest and if possible before the end of November. Cheques should be payable to "University of Cambridge".

The meeting is open to all who are interested. If it proves impossible to provide accommodation in Trinity for all who apply, then preference will be given to members of the London Mathematical Society and their spouses.

<div align="right">J. W. S. Cassels</div>

NEWS FROM COUNCIL

Council has appointed I. M. James and R. L. E. Schwartzenberger as Editors of the LMS Lecture Note Series in succession to G. C. Shepherd. Professor Shepherd has been Editor of this series since it started in 1968. D. A. Edwards and H. Halberstam have been appointed Editors of the LMS Monographs. They replace P. M. Cohn and G. E. H. Reuter who have also been Editors since this series started in 1968. The Librarian reported that 200 shelf feet of LMS periodicals (see April 1977 *Newsletter*) are being transferred to the Collingwood Library in Durham. Council has decided to give substantial financial support to an Instructional Conference on Analytic Sets organised by C. A. Rogers to be held in University College, London on 16–29 July 1978. The conference will cover the theory of Analytic Sets and its applications in Mathematical Logic. Details will appear in a later issue of the *Newsletter*. Council has also approved the new Editorial Board for the *Bulletin*, *Journal* and *Proceedings*; details of this appear below.

<div align="right">B. E. Johnson</div>

30th BRITISH MATHEMATICAL COLLOQUIUM

The 30th BMC will be held at the University of Lancaster in April 1978. The provisional list of speakers is: R. C. Vaughan, J. B. Slater, P. Aczel, R. A. Fenn, M. D. McDuff, P. Stefan. J. Milnor A. M. Sinclair, D. H. Fremlin, J. H. Wilkinson, R. Hart, R. Y. Sharp, P. J. Cameron, R. R. Phelps, F. Holland, W. F. Newns, A. G. Hawkes, A. Camina, J. C. Lennox, R. H. Dye and J. Conway.

The colloquium fee will be £4 for those applying before 24 February, and the cost for a full stay about £36. Application forms are being circulated to Mathematics departments of British universities and polytechnics. For additional copies, or further information, write to Dr. L. W. Flinn, Department of Mathematics, The University, Lancaster LA1 4YL.

NEW EDITORIAL BOARD FOR LMS PERIODICALS

The editorial boards of the Society's three periodicals have been amalgamated to form a single panel of some 30 editorial advisers. Any manuscript intended for publication in the *Proceedings*, *Journal* or *Bulletin* should be sent to an appropriate editorial adviser. As in the past, longer papers will appear in the *Proceedings*, while short papers will be assigned either to the *Journal* or to the *Bulletin*. The names of the editorial advisers, whose full titles, addresses and research interests will be printed in each of the periodicals, are as follows. The new arrangement will operate from November, 1977.

J. F. Adams
J. M. Anderson
M. F. Atiyah
I. N. Baker
F. F. Bonsall
R. Brown
D. A. Burgess
M. C. R. Butler

R. W. Carter
J. W. S. Cassels
D. R. J. Chillingworth
J. G. Clunie
M. J. Collins
R. H. Dye
D. A. Edwards
A. J. Ellis
W. D. Evans
F. G. Friedlander
A. Fröhlich
P. Heywood
B. E. Johnson
J. F. C. Kingman
D. G. Larman
C. St. J. A. Nash-Williams
J. B. Paris
J. C. Robson
D. B. Scott
C. T. C. Wall
B. A. F. Wehrfritz
T. J. Willmore

S. A. ROBERTSON

SYMPOSIUM ON FREE AND MOVING BOUNDARY PROBLEMS

A Durham symposium on free and moving boundary problems in heat flow and diffusion will be held on 17–27 July 1978. The aim is to bring together pure mathematicians, numerical analysts and scientists and engineers with practical problems in the area of free and moving boundaries. Attendance is primarily by invitation, but interested readers who have not been invited and who would like to attend should write to Professor J. Crank, Head of the School of Mathematical Studies, Brunel University, Uxbridge UB8 3PH, who will put their names on a waiting list.

UNIVERSITY MATHEMATICS TEACHING CONFERENCE

The Joint Mathematical Council of the U.K. has decided to sponsor a further conference on the teaching of mathematics in universities this year, which will concentrate on methods of teaching and assessment. As before, the London Mathematical Society is a co-sponsor.

The Conference will be held in the University of Nottingham starting on the evening of Saturday, 17 December 1977 and finishing at mid-day on Tuesday, 20 December. This time has been chosen to follow on from the Hardy Centenary meeting of the London Mathematical Society in Cambridge. As in the past the style will be participatory, with each

member of the Conference joining one of a number of Working Groups which will study and report on an explicit problem (e.g. " Topics " and " Methods "). The evenings will be devoted to plenary sessions whose purpose is to exchange information of interest to all the participants. The objectives are down-to-earth and practical —to explore ways of teaching university mathematics more efficiently, more effectively or less expensively and to bring together those who have tried, or are interested in trying, experiments in this field, for an exchange of ideas and experience. The concern is not with educational gimmickery or fancy hardware, but with practical day-to-day possibilities. It is envisaged that in some cases participants may wish to try out these ideas in universities in the course of the following year. The Shell Centre will provide a framework for continued contact between those working on related approaches, if there is an explicit demand for this.

As in previous years, participants will come from different types of institution. If a mathematics department has not received an invitation, intending participants should write for details to the conference co-ordinator, Prof. Hugh Burkhardt, Shell Centre, Nottingham, from whom copies of the Proceedings of the last Conference may also be purchased (price £1·50). It is expected that the accommodation charge for the conference will be about £26.

<div align="right">H. B. GRIFFITHS</div>

BRITISH COMBINATORIAL COMMITTEE

At a Business Meeting held during the Sixth British Combinatorial Conference on 11–15 July 1977, it was decided that the British Combinatorial Committee should be more formally constituted than hitherto. The following were agreed:

(a) The aim of the Committee shall be to encourage the study of Combinatorial Mathematics.

(b) The Committee and its Chairman shall normally be elected every two years at a Business Meeting of the Conference, and empowered to act in accordance with the Rules and subject to the general consensus of the Business Meeting.

(c) The Conferences (normally held every two years) shall aim to cover a fairly wide range of topics in Combinatorial Mathematics. Anybody who wishes to participate shall be able to do so on payment of the necessary fees and subject to adequate accommodation being available. There shall normally be some invited speakers whose expenses are paid for them. Each individual conference shall aim to be self-financing.

(d) Any incidental profits from the Conferences and other activities may be invested and used for the general support of Combinatorics in Britain. Priority shall be given to guaranteeing the continuation of the series of conferences, to financial support for the *British Combinatorial Bulletin*, and to the sponsorship of one-day colloquia.

Proposals for one-day colloquia should be sent in the first instance to the Secretary. However, the Committee will expect any Institution making such a proposal to provide partial support from its own funds.

Further details (including the Rules) will be published in the *British Combinatorial Bulletin*, copies of which are distributed free of charge (within Britain) to mathematicians known to be interested in combinatorics and to others who have requested them. The present Honorary Editor is Dr. M. J. Ganley, Department of Mathematics, University of Glasgow G12 8QW.

The present Honorary Officers of the British Combinatorial Committee are: *Chairman:* R. Rado, (Reading); *Secretary:* A. D. Keedwell, (Surrey); *Treasurer:* J. W. P. Hirschfeld, (Sussex).

THE NORTH BRITISH DIFFERENTIAL EQUATIONS SEMINAR

The North British Differential Equations Seminar was set up in 1972 to encourage research in differential equations, especially in areas where pure and applied mathematicians could cross-fertilise each other, and to help workers in differential equations keep abreast of recent developments in the subject. The Seminar was founded by pure and applied mathematicians from five Scottish universities, Dundee, Edinburgh, Glasgow, Heriot-Watt and Strathclyde, together with the University of Newcastle.

It was developed out of the North British Differential Equations Year organised jointly by the six founder universities in the session 1971–72 and sponsored by the Science Research Council and out of the Conferences on the Theory of Ordinary and Partial Differential Equations organised by the University of Dundee. The membership of the Seminar was enlarged to include, in 1975, the Universities of Manchester and Sheffield and, in 1977, the University of Bradford.

Each year the Seminar invites two distinguished workers in differential equations to address it and usually also to visit the mathematics departments of the member universities. Because of the distance between the universities in the Seminar the speakers give two one-hour lectures to a meeting of the Seminar in Edinburgh and then again to a meeting in Bradford, Manchester or Sheffield. The speakers so far have been European mathematicians who have usually spent about two weeks in the U.K. at the invitation of the Seminar, mathematicians from British universities and others who have been visiting British universities from overseas. The Inaugural meeting of the Seminar was in Edinburgh in November 1972, when the speaker was Professor G. Fichera (Rome). Subsequent speakers have been J. B. McLeod (Oxford), A. Pleijel (Uppsala), F. V. Atkinson (Toronto), E. M. de Jager (Amsterdam), H. Brézis (Paris), T. B. Benjamin (Essex), L. E. Payne (Cornell), C. M. Dafermos (Brown), J. K. Hale (Brown), H. Amann (Bochum), and W. Wendland (Darmstadt). The interests of the speakers give some idea of the interests covered by the Seminar. The Seminar is funded from subscriptions paid by the member universities and is run by a committee whose members come from the participating universities.

The meetings of the Seminar are open to anyone interested. The Secretary is Professor A. Jeffrey, Department of Engineering Mathematics, University of Newcastle upon Tyne, Newcastle NE1 7RU, from whom information about future meetings in Edinburgh can be obtained. Information about meetings of the Bradford–Manchester–Sheffield branch of the Seminar can be obtained from Professor W. D. Collins, Department of Applied Mathematics and Computing Science, University of Sheffield, Sheffield S10 2TN. The next meetings of the Seminar are in May, 1978, when the speaker will be Professor I. Stakgold (Delaware).

I.H.E.S.

The Institut des Hautes Etudes Scientifiques at Bures-sur-Yvette, near Paris, which receives an annual contribution from the Science Research Council, has the purpose of supporting research in pure mathematics and theoretical physics at the highest level. There are six permanent Professors at the Institut and, in addition, a large number of visiting scientists from all over the world who stay for periods ranging from one year to a few weeks. Many of these visitors are very distinguished mathematicians and theoretical physicists. In order that researchers in the U.K. might know about, and perhaps take advantage of, the relative proximity of such people whilst they are visiting the IHES a list of visitors for the 1977–78 academic year is given below. The address of the IHES is 91440, Bures-sur-Yvette, France.

AUSTRALIAN APPLIED MATHEMATICS CONFERENCE

This conference, organised by the Australian Mathematical Society, will be held on 5–8 February 1978 at Broadbeach, Queensland. Invited speakers include G. Carrier, C. Garatt, N. Golub and J. Keller. Further details can be obtained from R. D. Braddock, Mathematics Department, University of Queensland, St. Lucia 4067, Queensland, Australia.

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 and Home University		*Visiting*	*Dates of Visits*
A. Adler	(British Columbia)	Bristol	Sept. 77–Sept. 78
D. Aharonov	(Haifa)	Queen Elizabeth, London	Sept. 77–Aug. 78
J. Allard	(British Columbia)	Oxford	Uncertain
S. Alpern	(Bryn Mawr)	L.S.E., London	Sept. 77–Jul. 78
M. Barratt	(North Western)	Oxford	Mar.–Jun. 78
G. W. Bennett	(Seattle)	Cambridge	Apl.–Jun. 78
W. Brisley	(Newcastle, N.S.W.)	Oxford	Jan.–Dec. 78
P. J. Browne	(Calgary)	Dundee	Aug. 77–Jul. 78
C. E. Burgess	(Utah)	Warwick	Aug. 77–Jul. 78
N. Cameron	(Monash)	Glasgow	Aug. 78–May 79
M. J. Clark	(Wellington)	Southampton	Jan.–Jun. 78
E. J. Cockayne	(Victoria, B.C.)	Cambridge	Sept. 77–Jun. 78
F. W. Crawford	(Stanford)	Oxford	Sept. 77–Jul. 78
F. Croom	(Sewanee, Tennessee)	Cambridge	Sept. 77–Jun. 78
F. N. David	(Berkeley)	Oxford	Dec. 77–Jun. 78
J. L. Davison	(Laurentian)	Warwick	Sept. 77–Jul. 78
L. Ford	(Milwaukee)	King's, London	Oct. 77–Jul. 79
E. Friedlander	(North Western)	Oxford	Sept. 77–Jun. 78
S. Friedlander	(North Western)	Oxford	Sept. 77–Jun. 78
D. M. Gabbay	(Bar-Ilan)	Oxford	Mar.–Jul. 78
T. W. Gamlin	(U.C.L.A.)	Oxford	Sept. 77–Jul. 78
R. Green	(Riverside)	Oxford	Jul. 77–Jun. 78
J. Haverhals	(Bradley)	Oxford	Jan.–Jun. 78
D. K. Harrison	(Oregon)	King's, London	Jan.–Jun 78
J. G. Hocking	(Michigan State)	Dublin	Sept. 77–Aug. 78
A. S. B. Holland	(Calgary)	St. Andrews	Aug. 77–Jul. 78
S. A. Illman	(Helsinki)	Oxford	Feb.–Jun. 78
W. Johnson	(Bowdoin, Brunswick)	Cambridge	Sept. 77–Jun. 78
W. M. Kantor	(Oregon)	Oxford	Jan.–Jun. 78
P. Keast	(Toronto)	Dundee	Aug. 77–Jun. 78
J. F. Kennison	(Clark University)	Sussex	Sept. 77–Jun. 78
M. K. Ko	(Pittsburgh)	Oxford	Sept. 77–Jun 78
K. Lamotke	(Cologne)	Oxford	Feb.–Mar. 78
G. O. Losey	(Manitoba)	Warwick	Oct. 77–Aug. 78
N. E. Losey	(Manitoba)	Warwick	Oct. 77–Aug. 78
L. D. Meeker	(Durham, New Hampshire)	Heriot-Watt	Sept. 77–Jun 78
D. A. Moran	(Michigan State)	Bangor	Apl.–Jun. 78
M. F. Norman	(Pennsylvania)	Oxford	Sept. 77–Jul. 78
J. Peres	(Sao Paulo)	Bedford, London	Jul. 77–Sept. 78
S. Scheinberg	(Irvine)	Cambridge	Oct. 77–Mar. 78
J. P. Seldin	(Southern Illinois)	Oxford	Sept. 77–Jun. 78
V. N. Semenuta	(Rostov)	Oxford	Oct. 77–Jun. 78
M. Slemrod	(Renasselaer)	Heriot-Watt	Jan.–May. 78
M. R. Stein	(North Western)	King's, London	Aug. 77–Jul. 78
D. Van Osdol	(Durham, New Hampshire)	Sussex	Nov. 77–Mar. 78
F. Wattenberg	(Massachusetts)	Warwick	Jan.–Jun. 78

OVERSEAS MATHEMATICIANS VISITING EUROPE

Name	Visiting	Period of Visit
M. Adachi	I.H.E.S.	Nov. 77–Apl. 78
J. Alexander	Bonn	Sept. 77–Jul. 78
E. L. Allgower	Bonn	Jul. 77–Aug. 78
F. W. Anderson	Aarhus	Dec. 77–Jun. 78
J. Auslander	I.H.E.S.	Aug. 77–Jul. 78
W. W. Boone	Bonn	Aug. 77–May. 78
K. Brown	I.H.E.S.	Sept. 77–Jul. 78
M. G. Buntinas	Stuttgart	Sept. 77–Jul. 78
R. B. Burkel	Saarland	Aug. 77–Aug. 78
J. A. Carlson	I.H.E.S.	Jan. 78–Jun. 78
I. M. Chakravarti	Paris	Jan. 78–Jun. 78
J. Cheeger	I.H.E.S.	Feb. 78–May 78
P. Cohen	Mittag-Leffler Institute	Jul. 77–Jul. 78
W. W. Comfort	Athens	Feb. 78–May 78
C. D. Dade	Strasbourg	Aug. 77–May 78
E. C. Dade	Strasbourg	Aug. 77–May 78
M. L. Eaton	Copenhagen	Sept. 77–Jun. 78
L. Geissinger	Ulm	Aug. 77–Jul. 78
C. J. A. Halberg	Lund	Aug. 77–Aug. 78
A. D. Kydoniefs	Technical University, Athens	Mar. 78–Jun. 78
H. B. Lawson	I.H.E.S.	Sept. 77–Jun. 78
C. E. Lemke	E.T.H., Zürich	Feb. 78–Jun. 78
H. Levine	C.N.R.S.	Apl. 78–Oct. 78
R. G. McLenaghan	Brussels	Sept. 77–Aug. 78
M. E. Mayer	I.H.E.S.	Apl. 78–Jul. 78
W. Meyer	Münster	Sept. 77–Aug. 78
P. Mikulski	Berne	Sept. 77–Jul. 78
J. S. Milne	Rennes	Jan. 78–May 78
Y. Mozrzymas	I.H.E.S.	Sept. 77–Jul. 78
A. Ogus	I.H.E.S.	Sept. 77–Jul. 78
A. Phillips	Paris 7	Aug. 77–Aug. 78
H. C. Pinkham	I.H.E.S.	Sept. 77–May 78
R. R. Rao	E. T. H., Zürich	Apl. 78–Jul. 78
I. Satake	Nancy	Sept. 77–Jun. 78
L. Schumaker	Berlin	Jan. 78–Dec. 78
A. L. Shields	I.H.E.S.	Jan. 78–May 78
M. Shiota	I.H.E.S.	Oct. 77–Jul. 78
Z. Siebenman	I.H.E.S.	Sept. 77–Jul. 78
B. Stark	I.H.E.S.	Sept. 77–Jul. 78
H. Stark	Paris	Sept. 77–May 78
R. J. Stern	I.H.E.S.	Sept. 77–Mar. 78
C. Stewart	I.H.E.S.	Oct. 77–Jul. 78
T. Thickstun	I.H.E.S.	Jan. 77–J7l. 78
S. Ushiki	I.H.E.S.	Jan. 77–Jul. 78
J. M. Van Buskirk	Madrid	Jan. 78–Jun. 78

J. E. LITTLEWOOD MEMORIAL SERVICE

There will be a Memorial Service for the late Professor J. E. Littlewood in Trinity College Chapel, Cambridge on Saturday 26 November at 2 p.m.

J. W. S. Cassels