

# LMS NEWSLETTER

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No. 72

October 1980

## DATES OF SOCIETY MEETINGS

Friday, 21 November 1980, Imperial College, London—D. G. Kendall (Whitehead Lecture) and C. T. C. Wall (Presidential Address); Annual General Meeting.

Friday, 16 January 1981, Burlington House (W. Moran and A. Sinclair).

Friday, 20 February 1981, Burlington House.

Friday, 20 March 1981, Burlington House.

Friday, 15 May—Saturday, 16 May 1981: Two-day meeting in Leeds.

Friday, 19 June 1981, Burlington House.

D. A. BRANNAN

## GENERAL MEETING

There will be a general meeting of the Society on Friday, 17 October 1980 at 3.30 p.m. in the Meeting Room of the Geological Society, Burlington House, Piccadilly, London W1V 0NL, to consider a proposal by the Council of the Society to delete the existing By-Laws II, 1 and II, 3 and to substitute those printed below.

The purpose of this change is to revise the annual subscription of individual Members and of Corporation and Institutional Members.

### Text of Proposed By-Law II, 1

The annual subscription of the Society shall be £5. The prices of the Society's periodicals to individual Members shall be £5 per volume.

### Text of Proposed By-Law II, 3

The annual subscription to the Society of Corporation and Institutional Members shall be £155, inclusive of one volume of the *Bulletin* and two volumes of the *Journal* and *Proceedings*; except that those Corporation and Institutional Members who have more than one Representative shall pay an additional annual subscription of £5 for each Representative in excess of one.

D. A. BRANNAN

## L.M.S. STAFF EXCHANGE SCHEME

The Society has agreed with most Universities in Britain that members who wish to exchange their positions for short periods (up to one year) may do so. The idea is to help overcome the feeling of stagnation in a time of no expansion and little natural movement of staff. The plan, in outline, is that a member on an exchange would continue to be paid by his home University, but would work in the department he was visiting; the main disadvantage is that the cost would have to be borne by

the exchangees (only one or two Universities have any funds to support this kind of venture). Anyone who is interested in the possibility of such an exchange should consult his head of department and write to me at the Department of Pure Mathematics, University of Sheffield, Hicks Building, Hounsfield Road, Sheffield S3 7RH. I will offer more information and put enquirers in contact with each other so that exchanges can be agreed.

J. S. PYM

## L.M.S. COUNCIL NEWS

At the Council meeting in June the death was reported of Professor R. Nevanlinna, an Honorary Member of the Society since 1959. Professor S. J. Taylor was appointed Proceedings Secretary, to succeed Dr. Collins; Mr. N. L. Biggs of Royal Holloway College was appointed *Newsletter* Editor, to succeed Professor B. E. Johnson, and Professor P. M. Cohn of Bedford College was appointed Joint Editor of the Monographs Series, to succeed Professor H. Halberstam. A reply was sent to Professor

Swinnerton-Dyer's Committee on the Academic Organisation of London University; and discussions were set in hand for a Reciprocity Agreement with the Société Mathématique de France. The 1980 Senior Berwick Prize was awarded to Professor C. Hooley, and 1980 Junior Berwick Prizes to Dr. J. T. Stafford and Dr. H. G. Dales. It was also agreed to nominate Professor Hassler Whitney as an Honorary Member at the October meeting of the Society.

D. A. BRANNAN

## ADMINISTRATIVE ASSISTANT

The Society intends to appoint a full-time Administrative Assistant to take care of the Society office at Burlington House, London W1. The salary will be within the universities' clerical Grade 4 or Grade 5 (depending on experience and qualifications) with London allowance. Hours are flexible.

The work involves general correspondence with members and publishers, oversight of members' subscriptions and periodicals orders, receipt and payment of cheques, some book-keeping in connection with the Society's accounts, receipts of books and journals sent for review, and general assistance to the Officers of the Society most of whom are based outside London. The office forms part of the Royal

Astronomical Society premises and relations with the R.A.S. and B.A.A. staff are excellent.

An existing interest in the mathematical community would be an advantage and the post might particularly suit someone with a past or present connection with a mathematics department whether as a secretary or as a student or through informal contact. The help of members of the Society is sought in mentioning the post to likely applicants.

Further particulars of the post can be obtained from the Council Secretary: Professor D. A. Brannan, Faculty of Mathematics, The Open University, Walton Hall, Milton Keynes MK7 6AA.

## SUBSCRIPTIONS

At its meeting in June the Council decided to continue its programme of support for conferences and overseas visitors, to increase the size of the *Bulletin*, and to seek a full-time Administrative Assistant for the office in Burlington House which is at present manned only two days per week. It also decided to increase the basic subscription to £5 in 1980/81 (£2.50 for reciprocity members).

The price of the *Bulletin*, *Journal* and *Proceedings* will be held at £5 per volume in 1981 for individual members of the Society. This means that for a total outlay of £30 an individual member can obtain five volumes with a commercial price of £186. The price

of corporate membership, which includes the same five volumes, was fixed at £155 for 1981.

Subscription forms will accompany the November *Newsletter*. The recent, and probably continuing, changes in all prices combined with the substantial amount of correspondence generated by incomplete subscriptions mean that it is no longer practicable to deal with standing order payments. I would be grateful if any member who still has an outstanding standing order to the Society would ask their bank to cancel it before November.

R. L. E. SCHWARZENBERGER

## EDITOR OF THE NEWSLETTER

Professor B. E. Johnson has handed over the editorship of the *Newsletter* to Mr. N. L. Biggs, Department of Mathematics, Royal Holloway College, Egham, Surrey TW20 0EX. Items intended for inclusion in the

*Newsletter* for month  $x$  must be received by the 23rd day of month  $x-2$ . Please note that the *Newsletter* now appears monthly, except in August and September.

N. L. BIGGS

## L.M.S. PROGRAMME COMMITTEE

Council has again set aside a fund to enable the committee to support conferences. The only such support requested during 1980 was £1000, awarded to H. Halberstam and R. Odoni for the "Journées Arithmétiques" (Exeter, 13-19 April).

Three grants for 1981 have already been made: £600 to J. F. Adams, I. M. James and E. Rees for a topology symposium in Edinburgh (30 June-2 July), £600 to P. T. Johnstone for a conference on category theory in Cambridge (19-25 July), and £400 to C. M. Campbell and E. F. Robertson for a conference on group theory in St. Andrews (26 July-1 August).

The fund may also be used to support overseas visitors, in the scheme advertised a year ago. Members are reminded that in

cases accepted for support the Society pays the overseas fare and the proposing institutions are expected to cover subsistence. A condition of all grants is that lectures are advertised in the *Newsletter* and open to all Society members.

Last year three overseas visitors were supported: G. Betsch (Tübingen) visited Teesside Polytechnic and Edinburgh from 25 February to 9 March; J. Aaronson (IHES) visited Imperial College and Warwick in mid-March; A. Hulanicki (Wrocław) visited Manchester, Aberdeen, Newcastle and Cambridge during the period 8-15 May.

Enquiries about either scheme and applications for support should be addressed to the President. It is desirable to apply at an early stage. C. T. C. WALL

## ONE-DAY COMBINATORICS COLLOQUIUM

A one-day colloquium on combinatorics will be held at the University of Surrey on Friday, 31 October starting at 10.45 a.m. The speakers are expected to be N. L. Biggs (Royal Holloway), P. J. Cameron (Oxford), D. E. Daykin (Reading), F. Harary

(Michigan), B. Sherman (Adelaide) and J. A. Thas (Ghent). Further details will be available at the end of September from A. D. Keedwell, Department of Mathematics, University of Surrey, Guildford GU2 5XH.

## INTERNATIONAL CONGRESS OF MATHEMATICIANS

The Organizing Committee is pleased to announce that the next International Congress of Mathematicians will be held in Warsaw, 11-19 August 1982.

The Chairman of the Organizing Com-

mittee is Professor Czesław Olech.

The First Announcement containing more detailed information will appear in summer 1981.

## COLLINGWOOD PRIZE

The Collingwood Prize which has been given by the London Mathematical Society in memory of Sir Edward Collingwood has been awarded this year to Mr. N. R. Badnell, University College, University of

Durham. Mr. Badnell obtained a First Class Honours Degree in Mathematics and is proceeding to the University of Cambridge for postgraduate study in Mathematics. E. J. SQUIRES

## SALEM PRIZE

The Salem Prize for 1980 was awarded to Stylianos Pichorides of the Nuclear Research Center "Democritus" (Athens), for his work on Littlewood's conjecture concerning the  $L^1$  norm of idempotent trigonometric polynomials. The prize established in 1968, is given every year to a young mathematician who is judged to have done an outstanding work in the field of interest of Salem, primarily on Fourier series and related topics. The recipient was Dr. Nicholas Varopoulos in 1968, Dr. Richard

Hunt in 1969, Dr. Yves Meyer in 1970, Dr. Charles Fefferman in 1971, Dr. Thomas Körner in 1972, Dr. E. M. Nikišin in 1973, Dr. Hugh Montgomery in 1974, Dr. William Beckner in 1975, Dr. M. R. Herman in 1976, Dr. S. B. Bočkarov in 1977, Dr. Björn E. Dahlberg in 1978 and Dr. Gilles Pisier in 1979. The jury consisted of Professor A. Zygmund, Professor L. Carleson, Professor J.-P. Kahane, Professor Ch. Pisot and Professor E. M. Stein.

A. C. OFFORD

## VISITING MATHEMATICIANS

<i>Name</i>	<i>Home University</i>	<i>Visiting</i>	<i>Dates of Visit</i>
J. Alperin	Chicago	Oxford	March-June 1981
N. G. Barton	N.S.W.	Imperial	July-Dec. 1980
J. S. Birman	Columbia	Oxford	April-Aug. 1981
A. Cavus	Turkey	Imperial	Sept. for 7 months
D. V. Chopra	Wichita	Imperial	Jan.-Aug. 1981
S. D. Comer	S. Carolina	Oxford	1980/1981
G. Corsi	Bologna	Oxford	Sept. 1980-Aug. 1981
D. J. Daley	Canberra	Oxford	April-Sept. 1981
B. Dawkins	Wellington	Imperial	Nov. 1980-June 1981
A. K. Dewdney	Western Ontario	Oxford	Aug. 1980-July 1981
J. Dodziuk	Pennsylvania	Oxford	Sept. 1980-July 1981
E. Dror	Jerusalem	Oxford	Jan.-May 1981
M. Fujii	Okayama	Oxford	June-July 1981
F. W. Gehring	Michigan	Imperial	Jan.-June 1981
H. Hasegawa	Tokyo	Imperial	Oct. 1980-Sept. 1981
A. A. Hirsch	Haifa	Imperial	April-July 1981
G. Holton	Harvard	Imperial	Jan.-June 1981
G. Horowitz	Santa Barbara	Oxford	Sept. 1980-Aug. 1981
Y. Hosoya	Tohoku	Imperial	Jan.-Dec. 1981
A. H. J. Hinkkanen	Helsinki	Imperial	3 years from 29.9.80
J. Juritz	Cape Town	Imperial	Dec. 1980-Jan. 1981
N. Keiding	Copenhagen	Imperial	November 1981
U. Kiehne	Yale	Oxford	Sept.-Dec. 1980
G. E. Kokolakis	Athens	Imperial	June-Oct. 1980
H. Kummer	Queen's, Ontario	Oxford	Sept.-Dec. 1980
J. Lambek	McGill	Oxford	1980/1981
P. Landrock	Aarhus	Oxford	April-June 1981
O. E. Martikainen	Helsinki	Oxford	1980/1981
Z. A. Melzak	British Columbia	Oxford	April-June 1981
P. A. P. Moran	Canberra	Oxford/Imperial	March-May 1981
W. Moran	Adelaide	Sheffield	June 1980-Jan. 1981
J. C. J. Nihoul	Liege	Imperial	Dec. 1980-Jan. 1981
A. J. O'Connor	Griffith	Oxford	July 1980-Jan. 1981
A. Olçay	Istanbul	Liverpool	April 1980-Sept. 1981
J. Palmgren	Helsinki	Imperial	Nov. 1980-Jan. 1981
L. A. Peletier	Leiden	Oxford	Oct.-Dec. 1980
C. Praeger	W. Australia	Cambridge	Oct.-Dec. 1980
D. L. Russell	Wisconsin	Sheffield	September 1980
H. Salwen	Stevens	Imperial	Sept.-Dec. 1980
H. Samara	—	Imperial	Oct. 1980-Sept. 1981
J. L. Schiff	Auckland	Liverpool	June 1980-Jan. 1981
D. A. Sibley	Pennsylvania	Oxford	April-June 1981
P. N. Stewart	Dalhousie	Leicester	Aug. 1980-July 1981
S. Swarup	Meerut	Oxford	1980/1981
T. Takashi	Yamanashi	Imperial	
M. Tasaka	Japan	Imperial	Nov.-Dec. 1980
C. Tricot	Geneva	Liverpool	Oct. 1980-Sept. 1981
I. Vaisman	Haifa	Oxford	Feb. 1981
P-C. G. Vassiliou	Greece	Imperial	July 1980-July 1981
H. L. Vasudeva	Panjab	Sheffield	March 1980-Feb. 1981
L. T. Villa	Florence	Imperial	1980/1981
A. Vitter	Tulane	Oxford	Jan.-Aug. 1981
S. Wakoh	Tokyo	Imperial	Oct. 1980-Sept. 1981
G. G. Walter	Simon Fraser	Imperial	Sept. 1980-Aug. 1981
S. M. Yahya	Dhahran	Liverpool	July 1980-June 1981
M. Yamankaradeniz	Turkey	Imperial	Oct. 1979-March 1981

## BACKLOG OF BRITISH JOURNALS

This information is published with the co-operation of the respective editorial boards. For the sake of uniformity, the same headings have been adopted as in the statements published biennially by the AMS Notices. The following explanatory statements are also so copied:

*Backlog.* This is an estimate of the number of printed pages which have been accepted but are not necessary to maintain copy editing and printing schedules.

*Waiting times.* The quartiles  $Q_1$  and  $Q_3$  are presented to give a measure of dis-

person. They do not include misleading extremes, the result of unusual circumstances arising in part from the refereeing system.

Waiting times are measured in months from receipt of manuscript in final form to receipt of final publication at the library of Liverpool University. When a paper is revised, the waiting time between an editor's receipt of the final revision and its publication may be much shorter than is the case otherwise, so these figures are low to that extent.

C. T. C. WALL

JOURNAL	No. of issues per year	Approx. no. of pages per year	Backlog 30/6/80	Estimated time for paper submitted currently to be published (in months)	Observed waiting time in latest publ. issue (months)		
					$Q_1$	Median	$Q_3$
Camb. Phil. Soc.	6	1088	80	8-11	8	9	11
Edinburgh Math. Soc.	3	350	80	16	22	23	24
Glasgow Math. J.	2	200	120	14-20	14	16	18
L.M.S. Bulletin	6	576	80	6-10	6	9	12
Journal	6	1152	383	11-13	13	15	17
Proceedings	6	1152	12	22	18	21	23
Mathematika	2	300	0	6-18	11	12	14
Oxford Q. J. M.	4	512	60	14	13	17	18
R.S. Edin. Proc. A.	6	1080	0	9	6	7	9

## COMPARATIVE PRICES OF MATHEMATICAL JOURNALS

Members of the Society may be interested in the results of a survey of prices of mathematical journals recently undertaken on behalf of the European Mathematical Council. Editors of over 100 different journals were asked to co-operate by completing a short questionnaire and the majority did so. Although the survey was primarily concerned with journals published in Europe a proportion of non-European journals have been included for purposes of comparison (also it is not always clear in what country an international journal is actually published).

The numerical index opposite the title of each journal may be thought of as "cents per thousand words". To be precise the index is obtained by *dividing* the cost in U.S. cents of the 1979 volume(s) to an institutional subscriber by the *product* of the total number of pages in the volume(s) and the word capacity of each page. This last is an estimate of the average number of

thousands of words of plain English text which could appear on a page. For example, a journal costing \$100 for a 1000 page volume with 500/1000 word capacity pages would have index of 20.

As will be seen, the indexes range widely, with an average of about 30. (It should be pointed out that this index is different from the one used in a trial run last year, which was based on the observed word capacity of an average page, making some allowance for formulae. This proved to be too much effort to calculate on the scale required.)

Obviously there are many considerations which affect journal prices, such as extent of circulation, quality of printing, and so forth. The index is simply a very crude measure of relative cost. Nevertheless it is hoped that the results of this survey (which may be repeated from time to time) may be found of some use by editors, librarians and publishers.

I. M. JAMES

Acta Arithmetica	.. ..	32	Aequationes Mathematicae	.. ..	49
Acta Mathematica	.. ..	31	American Journal of Mathematics	.. ..	9
Advances in Applied Probability	.. ..	22	Annales Academiæ Scientiarum Fennicæ Ser. A I Mathematica	.. ..	22
Advances in Mathematics	.. ..	35			

Annales de L'Institute Fourier ..	21	Journal of London Mathematical Society .. .. .	15
Annals of Mathematics .. .. .	11	Journal of the Mathematical Society of Japan .. .. .	17
Annals of Probability .. .. .	6	Journal de Mathématiques Pures and Appliquées .. .. .	26
Annals of Statistics .. .. .	5	Journal of Number Theory .. .. .	24
Archiv für matematik .. .. .	23	Journal of Pure & Applied Algebra ..	38
Archiv für mathematische Logik und Grundlagenforschung .. .. .	25	Journal für die reine und angewandte Mathematik .. .. .	60
Bollettino dell'Unione Matematica Italiana .. .. .	9	Linear Algebra and its Applications ..	32
Bulletin de l'Academie Polonaise des Sciences .. .. .	25	Mathematica Scandinavica .. .. .	19
Bulletin Am. Math. Soc. .. .. .	4	Mathematical Proceedings of the Cambridge Philosophical Society .. .. .	16
Bulletin of the Greek Mathematical Society .. .. .	15	Mathematika .. .. .	10
Bulletin of London Math. Soc. .. .. .	12	Mathematics of Computation .. .. .	8
Bulletin des Sciences Mathématiques ..	52	Mathematische Annalen .. .. .	50
Bulletin de la Société Mathématique de Belgique .. .. .	18	Mathematische Zeitschrift .. .. .	50
Bulletin de la Société Mathématique de France .. .. .	25	Michigan Mathematical Journal .. .. .	11
Canadian Journal of Mathematics .. ..	7	Monatshefte für Mathematik .. .. .	65
Commentarii Mathematici Helvetici ..	26	Nagoya Mathematical Journal .. .. .	36
Communications in Mathematical Physics .. .. .	39	Osaka Journal of Mathematics .. .. .	29
Communications in Pure & Applied Mathematics .. .. .	20	Pacific Journal of Mathematics .. .. .	6
Compositio Mathematica .. .. .	41	Proceedings of American Math. Soc. ..	13
Duke Mathematical Journal .. .. .	16	Proceedings of London Math. Soc. ..	19
L'Enseignement Mathématique .. .. .	38	Publications Mathématiques IHES ..	28
Glasgow Mathematical Journal .. .. .	22	Quarterly of Applied Mathematics .. ..	8
Illinois Journal of Mathematics .. .. .	11	Quarterly Journal of Mathematics .. ..	20
Israel Journal of Mathematics .. .. .	26	Rendiconti del Circolo Matematico di Palermo .. .. .	17
Journal d'Analyse Mathématique .. .. .	22	Reports on Mathematical Physics .. ..	18
Journal of Applied Probability .. .. .	21	Rocky Mountain Journal of Mathematics .. .. .	25
Journal of the Australian Mathematical Society, Series A .. .. .	17	Studia Mathematica .. .. .	27
Journal of Combinatorial Theory (A) ..	18	Tohoku Mathematical Journal .. .. .	33
Journal of Differential Equations .. ..	26	Topology .. .. .	21
		Topology and its Applications .. .. .	34
		Transactions Am. Math. Soc. .. .. .	14
		Wiadomosci Matematyczne .. .. .	6

## MATHÉMATIENS D'EXPRESSION LATINE

The VIe Congrès International du Groupement des Mathématiciens d'Expression Latine will take place in Luxembourg, 7-12 September 1981.

The Congress will comprise (1) a commemoration of the work on Fuchsian functions by Poincaré; (2) several general conferences; (3) short individual communications.

At this moment, the provisional and in-

complete list of speakers is: J. Aroca, A. Conte, J. Dieudonné, A. Haefliger, P. J. Hilton, L. Nachbin, L. Santalo, D. Sullivan, J. Tits.

Information is available from the Groupement des Mathématiciens d'Expression Latine, Séminaire de Mathématique, Centre Universitaire de Luxembourg, 162A Avenue de la Faiencerie, Luxembourg.

## CURRENT NEWS ITEMS

Professor Feit hopes to be in this country 10-19 October, and to speak at Oxford (5 p.m. on 15 October) and Warwick (date to be agreed) as well as to the Society.

At the November A.G.M. there will be a number of Members-At-Large of Council whose two-year terms have not yet expired and so who do not come up for re-election. All the Officers' posts have to be filled

annually. Council hopes to nominate more names for the balance of (two-year) Members-At-Large than there will be vacancies.

The Annual Dinner on 21 November will be at 6.30 p.m. for 7 p.m. in South Side, Imperial College. The price will be £9 per person; full details will appear in the next *Newsletter*.

## FIFTH SYMPOSIUM ON GENERAL TOPOLOGY AND ITS RELATIONS TO MODERN ANALYSIS AND ALGEBRA 1981

Since 1961 every five years a Symposium on General Topology and its Relations to Modern Analysis and Algebra has been held in Prague. The Fifth Symposium should take place in Prague in 1981 and it is tentatively scheduled from 24 August to August 28. The Symposium will provide a forum for the presentation and discussion of recent research results in general topology

and its applications. Algebraic topology will not be included. The programme will consist of invited lectures and sessions for contributed papers. Further information may be obtained from the Chairman of the Organizing Committee, J. Novák, Matematický ústav CSAV, Žitná 25, 11567 Praha 1, Czechoslovakia.

# LONDON MATHEMATICAL SOCIETY

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**FRIDAY, 21 NOVEMBER 1980**

**ANNUAL GENERAL MEETING at 3.00**

PROFESSOR D. G. KENDALL will give the  
1980 Whitehead Lecture at 3.20 on

**THE STATISTICS OF SHAPE**

PROFESSOR C. T. C. WALL will give his  
Presidential Address at 5.00 on

**STABILITY, PENCILS AND POLYTOPES**

Tea will be served at 4.20

The meeting will be held in Lecture Room 340 of the  
Mathematics Department, Imperial College,  
London SW7 2AZ

**THE ANNUAL DINNER**

will be in South Side Refectory, Imperial College,  
at 6.30 for 7.00

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All interested are very welcome

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