

LMS NEWSLETTER

No. 51

September 1978

DATES OF SOCIETY MEETINGS

Friday, 13 October 1978, Burlington House.

Friday, 17 October 1978, Burlington House, Annual General Meeting and Presidential Address.

Friday, 19 January 1979, Newcastle, Joint meeting with E.M.S.

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

HARDY LECTURER—1979

The Council is pleased to announce that the Hardy Lecturer for 1979 is Professor E. B. Dynkin of Cornell University. Professor Dynkin is well known for his work on the theory of Lie groups and on the theory of Markov processes and its applications (especially in relation to the control of stochastic systems). He will be spending about six weeks in the U.K. (and possibly Ireland) during May and June 1979. He will give about 10 lectures including the 1979 Hardy Lecture to the Society on

15 June and a lecture to the Edinburgh Mathematical Society.

Institutions wishing to be included on Professor Dynkin's itinerary should address invitations to me by 5 November. A host institution should expect to have Professor (and possibly Mrs.) Dynkin for two to four days and will be responsible for their accommodation and food for this period. Travel expenses are covered by the Society.

D. B. SINGMASTER

PERSONAL ITEMS

Two members of the Society were recently elected to the Royal Society: Professor B. E. Johnson (Newcastle upon Tyne) and Professor Emeritus R. Rado (Reading).

Professor M. F. Atiyah (Oxford) has been elected a foreign associate by the Académie Française des Sciences.

D. B. SINGMASTER

DIFFEOMORPHISMS, WITH APPLICATIONS TO FOLIATIONS

The S.R.C. has agreed to support a symposium on the above subject during May, June, July (and possibly August) 1979 at the Mathematics Institute, University of Warwick. Invitations to attend have been accepted by M. Herman (Paris), F. Sergeraert (Poitiers), and G. Hector (Lille). Others invited include J. Mather (Princeton), W. Thurston (Princeton), J. Moser (Courant), D. Sullivan (IHES), V. Poenaru (Orsay), M. L. Gromov (Stonybrook),

A. Douady (Orsay), and V. I. Arnold (Moscow).

British participants are encouraged to attend, if possible for prolonged periods. Travel expenses and living expenses are available for those holding teaching positions at U.K. universities. Anyone interested should contact D. B. A. Epstein, Mathematics Institute, University of Warwick, Coventry CV4 7AL. Telephone (0203)-24011.

LEEDS/SHEFFIELD ALGEBRA DAY

There will be a one-day Algebra Conference in the University of Sheffield on Wednesday, 27 September 1978 starting at 10.00 a.m. There will be three one-hour

talks and a session of short informal talks. Further details can be obtained from D. A. Jordan, Department of Pure Mathematics, The University, Sheffield S3 7RH.

D.M.V. JAHRESTAGUNG

This year's Jahrestagung der Deutschen Mathematiker Vereinigung will take place in Aachen on 2-7 October 1978. Invited addresses will be given by F. Hirzebruch (Bonn), F. Barth (München), H. J. M. Bos (Amsterdam), A. Engel (Frankfurt), U. Felgner (Tübingen), E. Kunz (Regensburg), P. Lax (New York), J. L. Lions (Paris), H.

Mäurer (Darmstadt), R. Walter (Dortmund), D. Wolke (Freiburg), F. Takens (Groningen), W. R. Van Zwet (Leiden).

Further details can be obtained from the organisers Institut für Geometrie und Praktische Mathematik, Örtliche Tagungsleitung, 5100 Aachen, Templergraben 55, W. Germany.

CHARITY COMMISSION

Charities administered by The London Mathematical Society.

The Charity Commissioners have made a Scheme for this charity. Copies can be

obtained from them at 14 Ryder Street, London SW1Y 6AH (ref: 252660-Al-Ll).

I. M. JAMES

MATHEMATICAL SPECTRUM

Mathematical Spectrum, which is published by the Applied Probability Trust, is a magazine primarily intended for students of mathematics in sixth forms and in higher education, but many of its readers are teachers in schools, colleges and universities. It covers all branches of mathematics and its articles usually deal with topics that do not figure in standard mathematical syllabuses. Although most of the authors are professional mathematicians, contributions from sixth-formers and students are encouraged. There are also book reviews, problems, and letters to the editor.

Each volume of *Mathematical Spectrum* consists of about 100 pages and is published

in three parts, in September, January and May. The current issue, Volume 11, Number 1, contains articles on J. E. Littlewood, the factorisation of large numbers, the determination of Easter, probability in social research, and modelling. The price for Volume 11, postage included, is £1.30 for subscribers in the U.K. and Europe, and £2.30 elsewhere. Orders (with cheques payable to *Mathematical Spectrum*) should be sent to The Editor, *Mathematical Spectrum* (Ref. L), Hicks Building, The University, Sheffield S3 7RH. All back issues are available; a price list will be sent on request.

H. BURKILL

ROLLO DAVIDSON TRUST

The Trustees of the Rollo Davidson Trust announce that they have awarded a Rollo Davidson Prize to Hou Chen-Ting of Changsha, China, for his paper published in volume XVII of *Scientia Sinica* in 1974, in which he established the necessary and sufficient condition for a Q -matrix to determine a unique Markov process without

instantaneous states.

This is the third award made by the Trust, which is supported by royalties associated with the two books *Stochastic Analysis* and *Stochastic Geometry* published as a memorial tribute to Rollo Davidson in 1973 and 1974.

D. KENDALL

SALEM PRIZE

The Salem Prize for 1978 was awarded to Björn E. J. Dahlberg, of the University of Gothenburg, for his work on harmonic functions and harmonic measures. 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 jury consisted of A. Zygmund, L. Carleson, J.-P. Kahane, Ch. Pisot and E. M. Stein.
C. OFFORD

VISITING MATHEMATICIANS

The following mathematicians are expected to visit Britain. The Editor plans to publish a main list of visitors in the September issue and supplementary lists in December and June. The Editor relies on all members, particularly local representatives, informing him of visitors to their departments.

<i>Name</i>	<i>Home University</i>	<i>Visiting</i>	<i>Dates of Visit</i>
J. Anderson	Penn. State	Newcastle	May 79
C. J. Ashman	Newcastle N.S.W.	Reading	Dec. 77-Dec. 78
J. A. Belward	Queensland	East Anglia	Jan.-Dec. 78
W. Brisley	Newcastle, N.S.W.	Oxford	Jan.-Dec. 78
O. R. Burggraf	Ohio State	U.C., London	July-Dec. 78
N. Cameron	Monash	Strathclyde	Aug.-Dec. 78
		Glasgow	Jan.-April 79
L. R. A. Casse	Adelaide	Chelsea and Westfield, London	May 78-Feb. 79
J. E. Drummond	Australian National	Aston	Jan.-Dec. 78
D. R. A. Harvey	Rhodes	Oxford	Dec. 78-Nov. 79
H. Herbert	Western Australia	Sheffield	Jan.-Dec. 78
J. G. Kaniewski	Warsaw	U.C., London	July 78-Sept. 79
I. I. Kotlarski	Oklahoma State	Sheffield	Jan.-May 79
G. McCool	Toronto	Birmingham	Aug. 78-July 79
S. A. Maslowe	McGill	U.C., London	Aug. 78-Sept. 79
A. Meir	Edmonton	U.C., London	Aug.-Dec. 78
J. B. Miller	Monash	U.C., London	Sept.-Dec. 78
W. O. J. Moser	McGill	U.C., London	July-Dec. 78
R. Phelps	Washington	U.C., London	Sept. 77-Sept. 78
R. H. Rochberg	St. Louis	U.C., London	Sept. 78-Aug. 79
A. K. Roy	Calcutta	Swansea	Oct. 78-Jun. 79
D. B. Sawyer	Otago	U.C., London	Aug. 78-Jan. 79
J. Steinig	Geneva	U.C., London	July 78-March 79
A. W. Sudbury	Monash	Oxford	July-Dec. 78
W. W. Wood	Melbourne	U.C., London	Sept.-Dec. 78

I.M.A. CONFERENCES

The Institute of Mathematics and its Applications will hold the following conferences. Further details can be obtained from the Institute of Mathematics and its Applications, Maitland House, Warrior Square, Southend on Sea, Essex.

<i>Conference</i>	<i>Date</i>	<i>Place</i>
Optimisation of Stochastic Systems	6-8 September 1978	Oxford
Modelling of Turbulent Diffusion	11-13 September	Liverpool
Presidential Address	20 September	London
Mathematics for Computer Graphics	28 September	Leicester
Statistics in Schools	30 September	London
Effect of Noise and Vibrations on Human Beings	8 December	Southampton
Ordinary Differential Equations	18-20 December	Manchester
Mathematical Modelling	4 January 1979	Hatfield
Assessment in Mathematics	4-5 January	Aston
Black Holes	5 January	Chelsea
Mathematical Modelling of Accidents	20 March	Cambridge
Mathematics of Road Traffic	9-11 April	Surrey
Mathematical Modelling of the Environment inside buildings	May	London
Power from Sea Waves	26-28 June	Edinburgh
Statistical Aspects of Pollution	October	To be announced

1979 OBERWOLFACH PROGRAMME

1-6 January. Arbeitsgemeinschaft Salzmann (H. Salzmann).

7-13 January. Mathematische Hilfsmittel für die Softwarekonstruktion (H. Langmaack, E. Neuhold, M. Paul).

14-20 January. Charakteristikfreie Darstellungstheorie symmetrischer Gruppen (A. Kerber, G. Rota).

21-27 January. Mathematische Wirtschaftstheorie (H. Föllmer, W. Hildenbrand, D. Sondermann).

28 January-3 February. Stochastic Programming (P. Kall).

28 January-3 February. Boolesche Algebren (S. Koppelberg, D. Monk).

4-10 February. Mehrdimensionale konstruktive Funktionentheorie (W. Schempp, K. Zeller).

11-17 February. Funktionentheorie (G. Frank, K. Strebel, H. Wittich).

18-24 February. Medizinische Statistik (K. Dietz, H. J. Jesdinsky).

25 February-3 March. Partielle Differentialgleichungen (E. Heinz, G. Hellwig).

4-10 March. Mathematische Stochastik (H. Föllmer).

18-24 March. Numerische Methoden der Approximationstheorie (L. Collatz, G. Meinardus, H. Werner).

25-31 March. Algebraische Zahlentheorie (W. Jehne, H. W. Leopoldt, P. Roquette).

1-7 April. Gewöhnliche Differentialgleichungen (H. W. Knobloch, R. Reißig).

8-14 April. Algebraische Gruppen (T. A. Springer, J. Tits).

15-21 April. Arbeitsgemeinschaft Geyer-Harder.

22-28 April. Mathematische Logik (W. Felscher, E. Specker).

29 April-5 May. Gruppentheorie (W. Gaschütz, K. W. Gruenberg).

6-12 May. Mathematische Optimierung (H. König, B. Korte, K. Ritter).

13-19 May. Kommutative Algebra und algebraische Geometrie (H. J. Nastold, E. Kunz, L. Szpiro).

20-26 May. Mathematical Problems in the Theory of Gases (H. Neunzert, D. C. Pack).

27 May-2 June. Diophantische Approximationen (Th. Schneider).

3-9 June. Differentialgeometrie im Großen (S. S. Chern, W. Klingenberg).

10-16 June. Arbeitsgemeinschaft Algebra (H. P. Kraft, C. M. Ringel).

17-23 June. Funktionalgleichungen (J. Aczel, W. Benz, A. Ostrowski).

24-30 June. Riesz Spaces and Order Bounded Operators (W. A. J. Luxemburg, H. Schaefer).

1-7 July. Masstheorie (D. Köizow).

8-14 July. Kategorien (H. Schubert).

15-21 July. Universelle Algebra (W. Felscher, G. Grätzer, W. R. Wille).

22-28 July. Harmonische Analyse und Darstellungstheorie topologischer Gruppen (H. Leptin, E. Thoma).

5-11 August. Graphentheorie (G. Ringel).

12-18. Algebraische Zahlentheorie (P. Roquette).

19-25 August. Jordan-Algebren (K. McCrimmon, K. Meyberg, H. P. Petersson).

28 August-1 September. Topologie (T. tom Dieck, K. Lamotke, C. B. Thomas).

2-8 September. Topologie (Spezialtagung) (Th. Bröcker, D. Eisenbud, E. Looijenga).

9-15 September. Komplexe Analysis (H. Grauert, R. Remmert, K. Stein).

16-22 September. IUTAM—Symposium Laminar—Turbulent Transition (R. Eppeler).

23-29 September. Geometrie (K. Leithweiss, K. Voss).

30 September-6 October. Funktionalanalysis: Operatorfunktionen und Spektraltheorie (I. Gohberg, B. Gramsch, H. Schaefer).

7-10 October. Dynamische Systeme (W. Schiehlen, W. Wedig, F. Weidenhammer).

14-10 October. Arbeitsgemeinschaft Geyer-Harder.

21-27 October. Komplexitätstheorie (C. P. Schnorr, A. Schönhage, V. Straßburger).

28 October-3 November. Didaktik (A. Kirsch).

4-10 November. Angewandte mathematische Statistik (K. Behnen, G. Neuhaus).

18-24 November. Numerische Behandlung von Integralgleichungen (J. Albrecht, L. Collatz).

25 November-1 December. Fortbildungslehrgang für Studienräte.

2-8 December. Nichtlineare Funktionalanalysis und ihre Anwendung auf partielle Differentialgleichungen (H. Amann, B. Buchtemper, P. Hess).

9-15 December. Informationstheorie (R. Ahlswede).

16-22 December. Arbeitstagung Stochastik (H. Rost).

Transcendence Theory

Advances and Applications

edited by A. Baker and D. W. Masser

1977, 246 pp., £11/\$21.50 0.12.074350.7

Transcendence theory is currently one of the most active areas of mathematical research. New, effective methods have been developed, which are potentially applicable to the solution of several hitherto impenetrable problems. This volume, an account of the proceedings of a conference held at the University of Cambridge in 1976, tells the reader of the latest advances made in the area. It consists of sixteen papers, contributed by leading mathematicians in the field and containing detailed expositions of their most recent researches. A wide variety of original results is published here, and the developments from which these papers were taken.

CONTENTS

- A. Baker, The Theory of Linear Forms in Logarithms
A. J. van der Poorten, Linear Forms in Logarithms in the p -adic Case
T. N. Shorey, A. J. van der Poorten, R. Tijdeman, and A. Schinzel,
Applications of the Gelfond-Baker Method to Diophantine Equations
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K. K. Kubota, Linear Functional Equations and Algebraic Independence
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This new series aims to encourage interdisciplinary study of the areas of mathematics, philosophy, history and philosophy of science, and linguistics, in which formal or mathematical logic can play a role. It will provide materials for the study of logic at an intermediate level, in an attempt to bridge the gap between elementary and advanced books and to try to show how to *apply* logic and formal semantics.

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This monograph presents a coherent and virtually complete account of the conceptual side of the theory of choice sequences, a theory which has already proved its value in metamathematical research into intuitionism. £4.95