

LMS NEWSLETTER

No. 89

May 1982

DATES OF SOCIETY MEETINGS

Friday, 7 May 1982, Burlington House
(N. L. Biggs and D. Williams).

Friday, 14 May–Saturday, 15 May 1982.
Two-day meeting at Sheffield.

Friday, 21 May–Monday, 24 May 1982.
Weekend meeting at Gregynog.

Friday, 18 June 1982, Burlington House

(P. J. Cameron and R. Bieri).

Friday, 15 October 1982, Burlington
House (B. Bollobás and J. F. C. Kingman).

Friday, 19 November 1982, Burlington
House (K. D. Elworthy and Presidential
Address).

R. A. BAILEY

GENERAL MEETING

There will be a general meeting of the Society on Friday, 18 June 1982 at 3.30 p.m. in the Meeting Room of the Geological Society, Burlington House, Piccadilly, London W1, to consider a proposal by the Council of the Society to delete the existing By-Law II, 1 and to substitute that printed below.

The new By-Law, if accepted, will keep

the 1982–83 annual subscription of individual members at the 1981–82 level.

Text of Proposed By-Law II, 1

The annual subscription of the Society for the 1982–83 session shall be £6. The prices of the Society's periodicals to individual members shall be £6 per volume.

P. R. GOODEY

COUNCIL NEWS

The LMS Council met on 19 March when the following matters were among those under consideration.

1. It was agreed that in future members should be invited to pay their subscriptions by the Direct Debit scheme. Other methods of payment would still be accepted.

2. It was noted that Royal Oak Farm, the Society's property near Oxford, had been revalued at £135,000.

3. The annual subscription for individual members for 1982–83 was discussed, and it was decided that it should remain at £6. The prices of periodicals for individual members will also be unchanged.

4. The President reported various developments concerning the ICM 1982. A delegation from the IMU has visited Warsaw and reported that the Polish mathematicians are keen that the Congress should take place. The IMU have sought assurances from the Polish authorities and their Executive Committee will meet early in April. In this country, the demand for Royal Society grants has been less than expected, and

some money is in reserve for late applications. *See also Stop Press below.*

5. It was reported that Dr. D. J. Roaf wished to resign as the Society's representative on the Joint Mathematical Council, and Mr. N. L. Biggs was appointed to replace him.

6. Programme Committee has made small grants for (i) the visit of L. Smith in January 1982; (ii) a conference on Recent Mathematical Developments in Economics to be held at Essex University; (iii) a workshop on Stochastic Differential Equations at Cambridge. Some money is available for further grants.

7. It was noted that the Polish Academy of Science had written to the President thanking the Society for recent gifts.

8. It was agreed that the President should write to the organisers of the international campaign on behalf of Professor J. L. Massera, informing them that the campaign has the support of the Council of the Society. (An extract from a recent bulletin about the campaign will appear in the next *Newsletter*.)

N. L. BIGGS

LMS POPULAR LECTURES

Two lectures have been arranged for the evening of Friday, 9 July 1982 at University College, London. Sir James Lighthill will speak on "The Mathematics of Weather Forecasting" and Dr. Keith Devlin will speak on "Infinity". The lectures are intended to be suitable for a general audience and no specific mathematical knowledge will be assumed.

Admission to the lectures will be by ticket only. The lectures will be advertised in various ways, and those interested will be

asked to apply to the LMS Office for tickets. Although the talks are not primarily intended for professional mathematicians, some members may wish to apply for tickets for friends or relatives. Such applications should be sent to Susan Oakes, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL, giving the names of the individuals for whom the tickets are intended. There is no charge for admission.

DURHAM SYMPOSIA

The programme of research symposia to be held at Durham in 1984 and later years is now being planned in outline by the Durham Symposia Committee of the London Mathematical Society. Throughout the period 1974-81, this series of symposia has been sponsored by the Society, and has enjoyed consistent support from the Science Research Council. Suggestions for possible

future topics and/or organisers will be welcomed by the Committee. Such suggestions should be sent to Professor J. R. Ringrose, School of Mathematics, University of Newcastle upon Tyne, or to Professor T. J. Willmore, Department of Mathematics, University of Durham (from whom further information may be obtained).

C. W. GILHAM 1891-1982

C. W. Gilham, a member of the Society for over 60 years, died on 22 February 1982. He gained degrees in Mathematics at London and Cambridge before serving in the 1914-1918 war. In 1920 he joined the staff of Leeds University where he remained

until his retirement in 1958, at which time he was Senior Lecturer and acting Head of Department. He published papers on the theory of algebraic forms in the *Journal* and *Proceedings* of the Society between 1922 and 1933.

ROYAL SOCIETY OF EDINBURGH

After the election held on Monday, 1 March 1982 the following mathematicians were elected to Fellowship of the Society: Michael Stephen Patrick Eastham (Professor of Mathematics, Chelsea College, University of London); Elmer Gethin Rees (Professor of Mathematics, The University of Edinburgh).

W. N. EVERITT

READING COMBINATORICS COLLOQUIUM

A one-day Colloquium on Combinatorics will be held at the University of Reading on Wednesday, 19 May 1982, beginning at 10 a.m. The speakers will include: D. R. Woodall (Nottingham), K. Walker (Keele), C. A. Rogers (UCL), H. A. Priestley (Oxford), J. Pach (Hungary), P. J. Owens (Surrey), C. St. J. A. Nash-Williams (Reading), A. J. Mansfield (Oxford), P. J. Cameron (Oxford), N. L. Biggs (RHC). Further details may be obtained from D. E. Daykin, Department of Mathematics, University of Reading, Reading RG6 2AX.

RICHARDSON CENTENARY LECTURE

Professor B. Mandelbrot will deliver the Richardson Centenary Lecture at Paisley College on Wednesday, 19 May at 2.15 p.m. His title will be: Richardson Scaling and its Increasing Importance in the Sciences (= Fractals). Professor Mandelbrot's visit is partly supported by the LMS. Further details may be obtained from Professor R. R. Burnside, Paisley College of Technology, Paisley, Renfrewshire PA1 2BE.

POLAND

Following are some items of news relating to the situation of mathematicians in Poland. All these items have been reported through reliable sources, but the Editor has no means of verifying them. They are believed to give a true reflection of the situation as at 2 April 1982.

1. The Polish Mathematical Society has been suspended.

2. Several mathematicians and students of mathematics have been interned or arrested. In particular, Janusz Onyszkiewicz, a leading member of Solidarity, is reported to be in Bialoleka prison, near Warsaw. He is a mathematical logician who spent the two years 1977-79 at the University of Leeds. The Polish authorities wish to point out that he has not been imprisoned for his activities as a logician. Stanislaw Hartman, who had been interned, was released on 6 February.

3. On 17 February the mathematical societies of Denmark, Finland, Iceland, Norway and Sweden sent a statement to the Polish authorities. They referred to their high regard for the mathematical tradition in Poland and their keen anticipation of the ICM. However, they said that they would find it hard to participate under the circumstances then obtaining, and pointed out that an improvement in conditions would be necessary in order to facilitate the organisation of the Congress.

4. On 21 January two members of the British Logic Colloquium had a long interview at the Polish Embassy in London. A summary appears on page 7 of the issue of *Nature* dated 4-10 March.

N. L. BIGGS

THE LOGIC TRUST—1982 PRIZE

The Trustees of the Logic Trust announce the establishment of a prize for an account of recent and original research in mathematical logic. The value of the prize in 1982 will be £500. Eligibility is confined to those of British birth or residence who obtained their first degree in or after June 1976.

The Trustees have appointed as adjudicators: Dr. N. J. Cutland, Department of Pure Mathematics, University of Hull; Dr. J. B. Paris, Department of Mathematics, University of Manchester; Dr. A. R. D. Mathias, Peterhouse, Cambridge.

An entry for the competition should take the form of an essay giving an account of original work by the entrant that has not

previously been published. Illegible entries will be disqualified, and it is accordingly recommended that entries be typed. No limits on the length of an essay have been set. Entries must be submitted in triplicate, *one* copy being despatched to *each* adjudicator, to reach him by 1 November 1982. Enquiries concerning these rules may be addressed to the adjudicators.

The establishment of this prize has been made possible through the generosity of the British Logic Colloquium, Mrs. E. M. Jenkin-Jones and other donors, to whom the Trustees record their gratitude.

A. R. D. MATHIAS

IUTAM SYMPOSIA 1983

The International Union of Theoretical and Applied Mechanics (IUTAM) sponsors a number of symposia each year. The aim of any symposium sponsored by IUTAM is to assemble a group of active scientists within a well-defined field for the development of science within that field. In order to achieve an effective communication within this group it is necessary to limit the number

of active participants sufficiently. Those wishing to participate actively in a IUTAM symposium are therefore advised to contact the Chairman of the Scientific Committee under the address given below far in advance of the meeting.

The list of symposia planned for 1983 follows.

IUTAM/IUPAP Symposium on Electromagnetic Solid Continua

Place: Paris, France
Date: June-July 1983
Chairman: Professor G. A. Maugin
Université Paris VI
Tour 66-4, Place Jussieu
F-75230 Paris Cedex 5, France

IUTAM Symposium on Experimental Techniques in Two-phase Flow

Place: Nancy, France
Date: July 1983
Chairman: Dr. J. M. Delhayé
Centre d'Etudes Nucléaires de Grenoble
85 X
F-38041 Grenoble, France

IUTAM/ICA Symposium on Mechanics of Hearing Processes

Place: Delft, The Netherlands
Date: July 1983
Chairman: Professor E. de Boer
Academisch Ziekenhuis bij de Universiteit van Amsterdam
Eerste Helmersstraat 104
1054 EG Amsterdam, The Netherlands

IUTAM/IUGG Symposium on Atmospheric Dispersion of Heavy Gases and Small Particles

Place: Delft, The Netherlands
Date: 29 August–2 September 1983
Chairmen: Professor G. Ooms
Laboratory for Aero- and Hydrodynamics
Department of Mechanical Engineering
Delft University of Technology
Rotterdamseweg 145
26 28 AL Delft, The Netherlands
Dr. H. Tennekes
Royal Netherlands Meteorological Institute
PO Box 201
37 30 AE De Bilt, The Netherlands

IUTAM/IUGG Symposium on Sea-bed Mechanics

Place: Newcastle upon Tyne, UK
Date: September 1983
Chairman: Professor B. Denness
The University of Newcastle upon Tyne
School of Marine Technology
Ocean Engineering
Armstrong Building
Queen Victoria Road
Newcastle upon Tyne NE1 7RU, UK

IUTAM Symposium on Turbulence and Chaotic Phenomena in Fluids

Place: Kyoto, Japan
Date: 1983
Chairman: Professor T. Tatsumi
Department of Physics
Kyoto University
Kitashirakawa-Oiwake, Sakyo-ku
Kyoto, 606 Japan

STOP PRESS: NO ICM THIS YEAR

The Executive Committee of the IMU decided at its meeting on 2 April 1982 that the International Congress of Mathematicians will not be held this year. The committee will meet again in November to decide whether the Congress can take place in 1983. (This information was circulated to LMS Local Representatives by the Meeting and Membership Secretary on 7 April 1982.)

LMS LECTURE NOTE SERIES

61 The Core Model

A. DODD

The core model, K , is a generalisation of Gödel's constructible universe of set theory; K is used to produce the 'fine structural' results of a less restrictive kind. This book introduces the core model to those with a basic knowledge of axiomatic set theory.

0 521 28530 5

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63 Continuous Semigroups in Banach Algebras

ALLAN M. SINCLAIR

An expanded version of lectures given by the author at the University of Edinburgh in 1980, these notes provide an account of the abstract theory of analytic one-parameter semigroups in Banach algebras, with the Gaussian, Poisson and fractional integral semigroups in convolution Banach algebras serving as motivating examples.

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Part I Members' price £7.50 net

Part II Members' price £8.25 net

67 Classification Problems in Ergodic Theory

WILLIAM PARRY and SELIM TUNCEL

Much research on the isomorphism problem of ergodic theory has been pursued in the abstract measure-theoretic setting of pure ergodic theory. Recently there has been growing interest in isomorphisms of a more restrictive and, perhaps, more realistic nature which recognise and respect the state structure of processes in various ways. This is an account of some of these developments.

0 521 28794 4

Members price £5.63 net

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LONDON MATHEMATICAL SOCIETY

MR. N. L. BIGGS (Royal Holloway)

CUBIC GRAPHS

PROFESSOR D. WILLIAMS (Swansea)

**MARKOV CHAIN THEORY: KALEIDOSCOPE
AND CHALLENGE**

FRIDAY, 7 MAY at 3.30 p.m.

**Linnean Society,
Burlington House,
Piccadilly, London W1**

All interested are very welcome

This is the meeting postponed from January

Please note the change of room

LONDON MATHEMATICAL SOCIETY

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FRIDAY, 18 JUNE 1982

**Geological Society's Meeting Room,
Burlington House,
Piccadilly, London W1**

All interested are very welcome
Tea will be served at 4.30 p.m.