

THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 261

June 1998

FORTHCOMING SOCIETY MEETINGS

Friday 19 June 1998 - London

C. Soulé, J.H. Coates

Friday-Saturday 16-17 October 1998 - London

Harmonic Analysis

Friday 20 November 1998 - London

Annual General Meeting

L.C. Evans, J.M. Ball (Presidential Address)

Friday-Saturday 19-20 February 1999 - Leeds

Logic

Friday-Sunday 14-16 May 1999 - Brussels

Joint meeting with the Belgian Mathematical Society

VISIT OF DR S.S. AKBAROV

Dr Sergei Akbarov of the Bauman Moscow State Technical University, Russia, is visiting the University of Newcastle upon Tyne until 14 June 1998, supported by an LMS fSU grant. His research area is the differential geometry of infinite-dimensional groups and Pontryagin duality in the theory of topological vector spaces and in topological algebras. Further details can be obtained from Michael White (Michael.White@ncl.ac.uk) or Zinaida Lykova (Z.A.Lykova@ncl.ac.uk).

DAME MARY CARTWRIGHT

Dame Mary Cartwright, DBE, FRS, FRSE, who was elected a member of the London Mathematical Society on 12 January 1928, died on 3 April 1998, aged 97. She served on the LMS Council from 1933-38, 1961-64; she was Vice-President 1936-38, 1963-64, President 1961-63 and was awarded the De Morgan Medal in 1968.

EDUCATION COMMITTEE GRANTS

The LMS Education Committee would welcome requests for support for activities such as popular lectures, exhibitions, masterclasses, and competitions, that help to encourage joint ventures between universities and schools, or the development of projects that would improve the public image of mathematics. The Committee would like LMS members to apply for grants themselves or to encourage other appropriate individuals to do so.

To make the job of the Committee as simple as possible, any application for support should contain a brief description of the proposed event or project, with an outline of the expected expenses and details of other sources of support. The Committee meets in September, January, and April, so please apply well before the event. Requests should be sent to: Dr S. Huggett, School of Mathematics and Statistics, University of Plymouth, Drake Circus, Plymouth PL4 8AA.

LMS MEETING & RECEPTION INTERNATIONAL CONGRESS OF MATHEMATICIANS

The London Mathematical Society will be holding a Meeting and Reception, for its members, during ICM'98 at 6.30 pm on Friday 21 August at the Hotel Excelsior, Berlin. Members who wish to attend should apply for their free ticket to the Administrator, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HP (e-mail: lms@lms.ac.uk) no later than 24 July. The Society hopes to entertain as many as possible of its members who are attending the Congress, but numbers are limited by the capacity of the room.

WILLIAM W. FLEXNER

Professor William W. Flexner, who was elected a member of the London Mathematical Society on 20 May 1971, died on 4 April 1998, aged 93.

ALBERTO CALDERON

Professor Alberto Calderon died on 16 April 1998 aged 78.

PERSONAL NEWS

G.H. Hardy Junior Research Fellowship

The LMS supported G.H. Hardy Junior Research Fellowship at New College, Oxford has been awarded to Mr Ivan Smith for a three-year period from October 1998.

Departmental News Xuerong Mao of Strathclyde University has been promoted to Professor from 1 April 1998.

An Honour Professor N.J. Young (Newcastle) has been elected a Foreign Correspondent Member of the Academy of Physical, Mathematical and Natural Sciences of Venezuela.

WORKSHOP ON SKEW PRODUCT SYSTEMS

This one-day workshop at the School of Mathematical Sciences, Queen Mary & Westfield College, London, being held on 5 June, will look at aspects of the theory and application of dynamics of skew product systems. Main topics of the workshop include random dynamical systems, systems under the influence of chaotic, quasi-periodic or periodic forces, coupled systems, group extensions of dynamical systems, central limit theorems, ergodicity, mixing, decay of correlations, statistical mechanics and thermodynamic formalism. Speakers will include: W. Parry (Warwick), L. Arnold (Bremen) and P. Glendinning (QMW). In addition, there will be short talks and discussion groups by participants. Talks will start at 11 am in the Mathematics Building, room M103. The nearest underground station is Stepney Green.

The meeting is supported by a scheme 3 grant of the London Mathematical Society (Joint Research Group in the dynamics of skew product systems) and by the Mathematics Research Centre at QMW. Some limited funds for travel within the UK are available. If you would like to participate, send an e-mail to c.beck@qmw.ac.uk or write to Dr C. Beck, School of Mathematical Sciences, Queen Mary and Westfield College, Mile End Road, London E1 4NS. In case you would like to contribute a short talk, please provide a title and an abstract. Please bring this workshop to the attention of any colleagues that you think may be interested.

FUTURE BMC's

29 March - 1 April 1999 - University of Southampton

17 - 20 April 2000 - University of Leeds

9 - 12 April 2001 (tentative date) - University of Glasgow

LONDON MATHEMATICAL SOCIETY

FRIDAY 19 JUNE 1998

Professor C. Soulé (IHES)
will speak at 3.30 pm on

Perfect forms and the Vandiver conjecture

Professor J.H. Coates, FRS (Cambridge)
will speak at 5.00 pm on

Euler characteristics and elliptic curves
(1997 Senior Whitehead Prize Lecture)

Tea will be served at 4.30 pm

The meeting will be held at
Harkness Hall 1, Birkbeck College
Malet Street, London WC1

All interested are very welcome

BMC AND BAMC

Some discussion took place at the AGM of the 50th British Mathematical Colloquium (BMC), held at the University of Manchester on 7 April 1998, on the timing of future BMC meetings, and on the relation between the BMC and the British Applied Mathematics Colloquium (BAMC).

It was noted that the lack of synchronisation between university calendars has resulted in congestion of conferences in the two weeks immediately before and after Easter. These include specialist meetings such as the British Topology Conference and LMS Invited Lectures, as well as the BMC and BAMC. These two colloquia were held concurrently (at Manchester and Brunel) in 1998, and this caused problems for exhibitors, which included EPSRC and the Computers in Teaching Initiative as

well as publishers. Several of those present felt that amalgamation of the two meetings was in any case desirable as a long term aim on mathematical grounds.

It was suggested that some form of joint meeting with the BAMC might be held as an experiment, beginning with the meeting planned to be held at the University of Warwick in 2002. One suggestion was that two parallel conferences might be held at the same time and place, with free transfer between the two. There could be a common theme for such parallel meetings, with perhaps a special session or some plenary lectures in common. Several speakers supported vigorous consultation with the BAMC in order to seek a way to carry these ideas forward.

Grant Walker
Secretary, 50th BMC

NEW
BOOK

DYNAMICS OF TRANSCENDENTAL FUNCTIONS

Edited by Xin-Hou Hua and Chung-Chun Yang

In this extensive work, the authors give a complete self-contained exposition on the subject of classic function theory and the most recent developments in transcendental iteration. They clearly present the theory of iteration of transcendental functions and their analytic and geometric aspects. Attention is concentrated for the first time on the dynamics of transcendental functions to complement the growing body of work on rational functions. The subjects covered in detail include the fixed point theory, basic properties of Fatou and Julia sets, components of Fatou sets, the geometry of Julia sets and the Hausdorff dimension of the Julia set.

Mid 1998 • 242pp • Cloth • ISBN: 90-5699-161-2 • US\$70 / £45 / ECU64

Asian Mathematic, Series Vol. 1 • ISSN 1028-1428

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BLMS'99

*Joint meeting of the London Mathematical Society
and the Belgian Mathematical Society*

*Université Libre de Bruxelles
May 14-16, 1999*

First Announcement

Scientific programme

There will be four plenary lectures (on Saturday and Sunday morning) and four parallel sessions of eight 40-minutes lectures (on Friday and Saturday afternoon).

Sessions and organizers

- Algebraic geometry and mathematical logic: J. Denef (K.U. Leuven), W.A. Hodges (Queen Mary and Westfield College, London) and C. Michaux (U.M.H., Mons).
- Combinatorics and finite geometries: P. Cameron (Queen Mary and Westfield College, London) and J. Thas (U. Gent).
- Differential geometry and mathematical physics: N.J. Hitchin (Oxford) and L. Lemaire (U.L. Bruxelles).
- Stochastic mathematics: M. Hallin (U.L. Bruxelles), W.S. Kendall (Warwick) and N. Veraverbeke (L.U.C., Diepenbeek)

Local organizing committee L. Lemaire, J. Leroy, M. Parker, Campus Plaine ULB., Boulevard du Triomphe, C. P. 218/01, B-1050 Bruxelles (e-mail: leroy@ulb.ac.be; tel: (32)(2)650.58.45; fax: (32)(2)650.58.67).

Accommodation

1. Hotel accommodation: Special rates for participants are available in some hotels located in the centre of Brussels (near the Grand-Place) with direct bus and/or underground connection to the University Campus. Prices per night per person range from BEF 2,300 to BEF 2,600 for a single room, and from BEF 2,700 to BEF 3,200 for a double room.
2. Accommodation at budget prices: Rooms at the following budget prices are available in the University Sports Centre, with an easy underground connection to the University Campus (10 minutes) and to the centre of the city (20 minutes). For two nights, breakfast included: single room BEF 1,460 per person, double room BEF 1,120 per person, quadruple room BEF 960 per person. These rooms have no private facilities.

All these prices can only be guaranteed for reservations made before 31 December 1998, although every effort will be made to accommodate later registrations with the same conditions.

Registration and information

A second announcement with further details about the programme will be sent sometime in October 1998. To receive this announcement send a request to: Jules Leroy, Campus Plaine ULB, C. P. 218/01, Boulevard du Triomphe, B-1050 Brussels (e-mail: leroy@ulb.ac.be; tel: (32)(2)650.58.45; fax: (32)(2)650.58.67).

IZVESTIYA VYSSHIKH UCHEBNYKH ZAVEDENII: MATEMATIKA

This well-known established journal from Kazan (covering pure and applied mathematics) is anxious to let mathematicians in UK and Europe know how to subscribe directly, at a saving of around 50% on the rate via subscription agencies. Each annual volume contains 12 monthly issues of 88-120 pages each. This discounted annual subscription costs US\$399 for the 1998 volume; a subscription to any further year from 1992 to 1997 is then available at a special rate of US\$250. For further information or to order, write to Alexander G. Romanov, Room 011, 17 Universitetskaya str., Kazan, 420008, Russian Federation (e-mail: ttagiroy@ksu.ru).

MATFIT WORKSHOPS AND SUMMER SCHOOLS 1998

The following events are being sponsored by the EPSRC/LMS MathFit initiative in 1998. All have been designed to contain an instructional or introductory interdisciplinary component and all interested, whether on the computational or mathematical side, are welcome to attend: free or subsidized research student places are available. For further details of individual workshops see <http://www-theory.dcs.st-and.ac.uk/~um/mathfit.html> or contact the organisers at the addresses given below.

- Recent Advances in Foundations for Concurrency: semantics and type theory and their industrial applications. Dr R. Nagarajan, Imperial College London (r.nagarajan@doc.ic.ac.uk) 7 - 9 July 1998.
- Random Walks and Sampling Algorithms: a series of lectures by Laszlo Lovasz. Dr Imre Leader, University College London (i.leader@ucl.ac.uk) 20 -

24 July 1998 (see Newsletter No. 260).

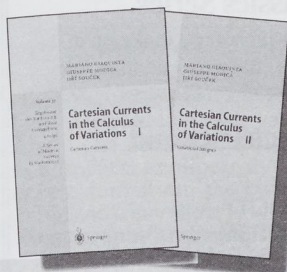
- Randomised Algorithms and Stochastic Simulation: a tutorial and workshop on randomised algorithms, perfect simulation, and related areas. Dr Leslie Goldberg, University of Warwick (leslie@dcs.warwick.ac.uk) 26 - 30 July 1998 (see Newsletter No. 260).
- Phase-Transition Phenomena in Combinatorial Problems: an interdisciplinary workshop bringing together AI, statistics and algorithms. Dr Paul Dunne, University of Liverpool (ped@csc.liv.ac.uk) 25 - 27 January 1999.

The EPSRC/LMS MathFit program in Mathematics for Information Technology supports instructional meetings, responsive mode research grants and visiting fellowships: further details can be found at <http://www.epsrc.ac.uk:80/progs/technology/it-cs/mfitcall.htm> or by contacting one of the coordinators: for the EPSRC Mrs Anne Farrow (anne.farrow@epsrc.ac.uk) or Dr Dominic Semple (dominic.semple@epsrc.ac.uk) and for the LMS Professor Ursula Martin (um@dcs.st-and.ac.uk).

SECANTS

The ninth SECANTS meeting (South of England Computational and Algorithmic Number Theory Seminars) will take place at Royal Holloway on Saturday 6 June 1998, with support from the London Mathematical Society and Hewlett-Packard. The programme will consist of three lectures: R. Brent (Oxford) "Integer factorisation algorithms illustrated by the factorisation of Fermat numbers"; W. Bosma (Nijmegen) "Brauer relations and the computation of equivalent fields"; R. Lewis (Sussex) "A conjecture of Cooper and Hirschhorn". For more details, see: <http://www.maths.ex.ac.uk/~cremona/secants/secants9.html>.

Springer for Mathematics



M. Giaquinta, G. Modica, J. Souček **Cartesian Currents in the Calculus of Variations I** Cartesian Currents

1998. Approx. 736 pp. 28 figs.
(Ergebnisse der Mathematik und ihrer
Grenzgebiete. 3. Folge / A Series of
Modern Surveys in Mathematics, Vol. 37)
Hardcover £ 88.00
ISBN 3-540-64009-6

This two-volumes monograph deals
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arising in geometry, and in
physics. The presentation is self-contained
and accessible to non specialists.
Topics are treated as far as possible
in an elementary way, illustrating
results with simple examples; in
principle, chapters and even sections
are readable independently of
the general context, so that parts can
be easily used for graduate courses.

M. Giaquinta, G. Modica, J. Souček **Cartesian Currents in the Calculus of Variations II** Variational Integrals

1998. Approx. 651 pp. 19 figs.
(Ergebnisse der Mathematik und ihrer
Grenzgebiete. 3. Folge / A Series of
Modern Surveys in Mathematics, Vol. 38)
Hardcover £ 88.00
ISBN 3-540-64010-X

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D. Goss **Basic Structures of Function Field Arithmetic**

1st ed. 1996. Corr. 2nd printing 1998.
XV, 424 pp.
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ISBN 3-540-63541-6

From the reviews:

"...The arithmetic of function fields is
a universe filled with beautiful sur-
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classical number theory reappear in
new guises, and in which entirely new
objects play important roles.
Goss' clear exposition and lively style
make this book an excellent intro-
duction to this fascinating field."

Math. Reviews

E.B. Saff, V. Totik **Logarithmic Potentials with External Fields**

1997. XV, 505 pp. 18 figs.
(Grundlehren der mathematischen Wissen-
schaften / A Series of Comprehensive
Studies in Mathematics, Vol. 316)
Hardcover £ 61.00
ISBN 3-540-57078-0

J. Jost **Riemannian Geometry, Geometric Analysis**

2nd ed. 1998. XIII, 455 pp. (Universitext)
Softcover £ 30.00
ISBN 3-540-63654-4

Includes new material on Ginzburg-
Landau, Seibert-Witten functionals,
spin geometry, Dirac operators.

From the reviews:

"... a very readable introduction to
Riemannian geometry and geometric
analysis. The book is made more
interesting by the perspectives in
various sections where the author
mentions the history and development
of the material and provides the
reader with references."

Math. Reviews



S. Kobayashi **Hyperbolic Complex Space**

1998. XIII, 471 pp. 8 figs.
(Grundlehren der mathematischen Wissen-
schaften / A Series of Comprehensive
Studies in Mathematics, Vol. 318)
Hardcover £ 64.50
ISBN 3-540-63534-3

This book gives a comprehensive
and systematic account on the Cara-
théodory and Kobayashi distances,
hyperbolic complex spaces and hy-
perbolic mappings with geometric
methods. A very complete list of
references should be useful for pro-
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UK Dynamics Days 1998

June 28 - July 1, 1998

**International Centre for Mathematical Sciences
University of Edinburgh**

<http://www.fen.bris.ac.uk/engmaths/research/nonlinear/ddays.html>

UK Dynamics Days 1998 brings together, for the first time in the UK, researchers of all ages interested in a wide variety of phenomena associated with nonlinear dynamics systems. The conference will cover a range of topics within theoretical, numerical and experimental nonlinear dynamics, such as large dimensional systems, neural dynamics, pattern formation, piecewise smooth systems, mathematical biology, quantum chaos and bifurcation theory; with applications in Physics, Engineering, Biology, Chemistry, Oceanography and many other areas. It is hoped that cross-disciplinary interaction will be a major feature of the event.

Invited Speakers

- V. Apishcenko** (Saratov State University, Russia)
- M. Berry** (University of Bristol)
- L. Arnold** (University of Bremen, Germany)
- M. Feigin** (Nizhni Novgorod State University, Russia)
- M. Fink** (Universit  Denis Diderot, France)
- J. Keener** (University of Utah)
- Y. Kuramoto** (Tomoku University, Japan)
- R. Mackay** (University of Cambridge)
- T. Mullin** (University of Manchester, UK)
- K. Popp** (University of Hanover, Germany)
- D. Rand** (University of Warwick)
- S. Scott** (University of Leeds, UK)

Oral and poster communication will form a key part of the event. Contributions on any current research topic, in which nonlinear dynamics plays a key role, are welcomed. There will be a limited number of 15-minute contributed talks, as well as several poster sessions.

This meeting has been made possible by generous donations from the London Mathematical Society and with invaluable assistance from the International Centre for Mathematical Sciences, Edinburgh.

For further details visit the web site above. Copies of the registration form can be found at: <http://www.ma.hw.ac.uk/icms/> or contact the organisers directly:

John Hogan, Department of Engineering Mathematics, University of Bristol, BS8 1TR.
tel: +44 (0)117 928 7752; fax: +44 (0)117 925 1154; e-mail: s.j.hogan@bristol.ac.uk

John Brindley, Department of Applied Mathematics, University of Leeds, LS2 9JT.
tel: +44 (0)113 233 5134; fax: +44 (0)113 242 9925; e-mail: amjtib@amsta.leeds.ac.uk

Tracey Dart, International Centre for Mathematical Sciences, Edinburgh EH3 6EZ.
tel: +44 (0)0131 220 1777; fax: +44 (0)0131 220 1053; e-mail: icms@maths.ed.ac.uk

National University of Ireland, Galway Galway, Ireland

Junior Lecturer in Statistics

Applications are invited for the position of Junior Lecturer in Statistics (within the Department of Mathematics).

The successful candidate should have a PhD in Statistics or a related area and a proven research record or evidence of strong research potential. He or she will have an interest in teaching and will contribute to the teaching programmes of the Department.

At present the Department runs full degree programmes in the Arts and Science Faculties and is a major contributor to the denominated degree in Computing/Mathematical Science. Service course in Mathematics and Statistics are additionally given in the Engineering, Commerce and Medical Faculties. A full degree programme in Financial Mathematics and Economics will commence in September 1998. Master's and PhD programmes are also available.

The Department home page is at <http://www.maths.ucg.ie>.

For informal information contact Professor T. Hurley; tel: +353 91 750442; fax +353 91 750542; e-mail: Ted.Hurley@ucg.ie.

The closing date for receipt of applications is **Friday 3 July 1998**.

Temporary Teaching Appointment in Mathematics

Applications are also invited for a contract appointment in the Department of Mathematics beginning 1 September 1998 for a period of 12 months at a salary of £1427 per month.

The closing date for receipt of applications is **Friday 12 June 1998**.

Full information on both posts may be obtained from: Personnel Office, National University of Ireland, Galway, Galway, Ireland; tel: +353 91 750360; fax: +353 91 750523; e-mail: personnel@mis.ucg.ie.

FLUID FLOWS WORKSHOP

A half-day workshop on Nonlinear Pulmonary and Cardiovascular Fluid Flows will be held at the University of Surrey on Wednesday 3rd June 1998, organised by Tom Bridges and David Gammack. The workshop is supported by a grant from the London Mathematical Society.

The workshop will have a talk by a leading expert, Professor T. Pedley FRS (Cambridge), and the remainder of the talks will be given by Postdoctoral Fellows and Postgraduate Students. Scheduled talks include Andrew Hazel (Cambridge), Matthias Heil (Cambridge/Manchester) and Susan Todd (Surrey). All interested participants are welcome and some funds are available to help with travel costs. Further information can be obtained by contacting the local organiser, David Gammack (d.gammack@mcs.surrey.ac.uk) and updated information, including abstracts of talks and directions to the university, will be posted on the web (<http://www.eim.surrey.ac.uk/maths/research/maths/Centre.html>).

FERMAT PRIZE

The Fermat Prize rewards research work in

- Statements of Variational Principles
- Foundations of Probability and Analytical Geometry
- Number Theory

The amount of the Fermat Prize is FF100,000. It is sponsored by the Matra Marconi Space Company and is awarded once every two years by the Université Paul Sabatier, Toulouse. The sixth award will be announced in October 1999. Rules governing the award are available from the organizing secretariat (Prix Fermat de Recherche en Mathématiques, Université Paul Sabatier, 118 route de Narbonne, 31062 Toulouse Cedex 4, France) or on the web (<http://www.ups-tlse.fr/PrixFermat>). The closing date for applications is 30 June 1999.

MATHEMATICS AND PHYSICS OF HIGHER-DIMENSIONAL SOLITONS

The 1998 LMS Durham Symposium will be held from 20-28 July 1998. Organisers: R. S. Ward, W. J. Zakrzewski (Durham). Key speakers: M. Ablowitz (Boulder), L. Faddeev (St Petersburg), R. Jackiw (MIT), N. Papanicolaou (Crete), D. Stuart (Davis), K. Uhlenbeck (Texas), E. Weinberg (Columbia).

NEEDS98

The 12th International Workshop "Nonlinear Evolution Equations and Dynamical Systems" (NEEDS) will be held at Tetley Hall in Leeds, from Sunday 21 June (arrival day) to Sunday 28 June 1998 (departure day). The previous 11 workshops of this series have taken place in Kolymbari (Crete) in 1980, 1983, 1989 and 1997; in Gallipoli (Italy) in 1985, 1991 and 1993; in Balaruc-les-Bains (France) in 1987; in Dubna (Russia) in 1990 and 1992; in Los Alamos (USA) in 1994.

The Workshop will, as usual, be interdisciplinary in character, focusing on integrable, near-integrable and non-integrable dynamical systems (nonlinear ODEs, PDEs, integral equations, maps, automata, etc.), both on their theory and on applications in classical and quantum physics (condensed matter, fluids, plasmas, elementary particles, statistical mechanics, etc.) and in other fields (oceanography, biophysics, population dynamics, etc.). The methods discussed will range from pure mathematics and numerical computations to applicable theories and experiments.

This workshop has been supported by the LMS. Full details can be found on the web page (<http://www.amsta.leeds.ac.uk/events/needs98>). For any enquiry you may contact the organisers: A.P. Fordy (allan@amsta.leeds.ac.uk) or A.V. Mikhailov (sashamik@amsta.leeds.ac.uk), Applied Mathematics Department, University of Leeds, Leeds, West Yorkshire LS2 9JT; fax: 44-113-242 9925.

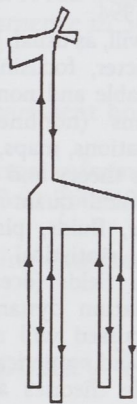
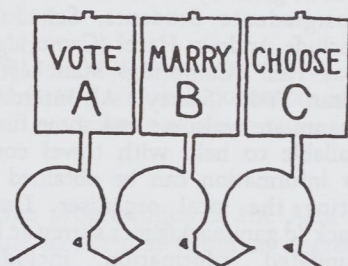
LONDON MATHEMATICAL SOCIETY 1998 POPULAR LECTURES

Liverpool University - Wednesday 10th June
Strathclyde University - Tuesday 16th June
Institute of Education, London University - Tuesday 23rd June

Dr Tom Körner

Marrying, Voting, Choosing

'Mathematics cannot tell us how to marry, vote or choose, but it can cast an interesting light on these problems.'



Professor Tim Pedley

Giraffe Blood Flow and Pattern-forming Bacteria

'Why is a giraffe's heart so huge, and why do swimming bacteria form patterns? Biological fluid dynamics has the answers.'

LIVERPOOL Commences at 2.30 pm, refreshments at 3.30 pm, ends at 5.00 pm. Admission is free. Enquiries to Dr I.R. Porteous, Department of Mathematical Sciences, University of Liverpool, Liverpool L69 3BX (tel: 0151 794 4066/4043, e-mail: porteous@liverpool.ac.uk).

STRATHCLYDE Commences at 2.00 pm, refreshments at 3.00 pm, ends at 4.30 pm. Admission is free. Enquiries to Professor A. McBride or Dr P. Davies, Department of Mathematics, Strathclyde University, Livingstone Tower, 26 Richmond Street, Glasgow G1 1XH (tel: 0141 548 3647/3416, e-mails: a.c.mcbride@strath.ac.uk, penny.davies@strath.ac.uk).

LONDON Commences at 7.00 pm, refreshments at 8.00 pm, ends at 9.30 pm. Admission is free, with ticket in advance. Apply by Friday 19 June to Miss S.M. Oakes, London Mathematical Society, 57-58 Russell Square, London WC1B 4HP (e-mail: lms@lms.ac.uk). A stamped addressed envelope would be appreciated.

ISAAC NEWTON INSTITUTE FOR MATHEMATICAL SCIENCES

Call For Proposals

The Isaac Newton Institute for Mathematical Sciences is a national research institute in Cambridge. It aims to bring mathematical scientists from UK universities and leading experts from overseas together for concentrated research on specialised topics in all branches of the mathematical sciences from pure mathematics, applied mathematics, and statistics, to engineering, computer science, theoretical physics and mathematical biology. At any time there are two visitor programmes in progress, each with about twenty scientists in residence. Included within these programmes are periods of more expanded activity including instructional courses and workshops.

The Institute now invites new proposals for programmes for 2000 onwards, particularly from areas which have been under-represented so far (eg. Partial Differential Equations, Analysis, Computational Mathematics, Combinatorics). From 1999, a choice of six-month or four-month programmes will be available. **In addition, from 2000, short programmes of three weeks duration will be available during July and August each year. These short programmes are intended for more narrowly focused topics or for subjects that may be at an embryonic stage of development, and for which a longer programme might not be as yet justified.**

Proposals should be addressed to the Director, Professor H.K. Moffatt, Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge CB3 0EH; proposers should state whether they would prefer a four-month, six-month or three-week programme. The Institute is pleased to receive proposals at any time. Proposals for consideration at the next meeting of the Scientific Steering Committee should be received by 31st July 1998.

Submission guidelines, and information about forthcoming programmes already selected, are available at <http://www.newton.cam.ac.uk/callprop.html>.

Further information is also available from the Director (tel: 01223 335999; e-mail: info@newton.cam.ac.uk) who will answer any enquiries.

Integrability: the Seiberg-Witten and Whitham Equations

Edinburgh 14-18 September 1998

Organising Committee: H.W. Braden (Edinburgh), D.B. Fairlie (Durham), I. Krichever (Columbia), I.A.B. Strachan (Hull), G. Wilson (I.C. London).

The International Centre for Mathematical Sciences is hosting a five-day workshop in Edinburgh, starting on Monday 14th and finishing in the afternoon of Friday 18th September 1998.

The intention is to bring together mathematicians and mathematical physicists with interests in integrability and its applications.

The general objectives are:

- To discuss the general algebro-geometric and geometric structures underlying integrability and specifically to clarify the appearance of integrable structures in Seiberg-Witten theory.
- To discuss the Whitham equations and their application in the generalized WKB analysis of (integrable) systems, particularly their appearance in connection with Seiberg-Witten theory.
- To discuss systems of hydrodynamic type, Frobenius manifolds and algebras.
- To develop interdisciplinary links and establish new connections between different areas that employ facets of integrability.
- To enhance collaborative research by bringing together participants from different areas of pure mathematics, applied mathematics and theoretical physics.

See the web site for updated information and a registration form.

ICMS: 14 India Street, Edinburgh EH3 6EZ, tel: (0)131 220 1777; fax: (0)131 220 1053;
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S. Lefschetz
Honorary Member 1954

DIARY

The diary lists Society meetings and other events publicized in previous issues of the Newsletter. For further information, refer to the figure in brackets, which is a cross reference to the LMS Newsletter number.

JUNE 1998

- 4-10 Advances in Homotopy Theory
Euroconference (BCAT), Barcelona, Spain (257)
- 5 Edinburgh Mathematical Society Meeting, St Andrews University (252)
- 7-19 Arithmetic and Geometry of Algebraic Cycles NATO ASI, Alberta, Canada (255)
- 10 LMS 1998 Popular Lectures, Liverpool University (260)
- 16 LMS 1998 Popular Lectures, Strathclyde University (260)
- 16-17 Numerical Analysis and Computers: 50 Years of Progress, Manchester University (259)
- 20 History of Cryptography Conference, Bletchley Park, Milton Keynes (260)
- 21-27 Astrophysical Discs, EC Summer School, Isaac Newton Institute, Cambridge (258)
- 21-28 Nonlinear Evolution Equations and Dynamical Systems Workshop, Tetley Hall, Leeds (260)
- 22-26 Groups of Finite Morley Rank Conference, Greece (255)
- 22-26 Positivity in Applications Meeting, Ankara, Turkey (256)
- 22-27 European Consortium for Mathematics in Industry (ECMI 98), Göteborg, Sweden (252)
- 23 LMS 1998 Popular Lectures, Institute of Education, London (260)
- 25-26 STATMECH-14, King's College London (260)

JULY 1998

- 2-3 European Women in Mathematics Workshop on Moduli Spaces in Mathematics & Physics, Oxford (256) (257)
- 3-6 Teaching of Mathematics Conference, Samos, Greece (257)
- 5-9 Mathematics Colloquium, Victoria University of Wellington, New Zealand (254)
- 13-24 Symplectic Topology Workshop, Warwick University (255)
- 19-25 Galois Representations in Arithmetic Geometry Meeting, Crete (256)
- 20-24 Dimensions and Dynamics Conference, Miskolc, Hungary (254)
- 20-24 Domain Decomposition Methods Conference, Greenwich University (254)
- 20-24 Random Walks and Sampling Algorithms

- MathFIT Summer School, University of Warwick (260)
- 23-31 Computation and Geometric Aspects of Modern Algebra, ICMS Workshop, Heriot-Watt University (258) (259)
- 26-30 Randomised Algorithms and Stochastic Simulation Tutorial and Workshop, University of Warwick (260)
- 27-7 Aug Nonlinear Analysis, Differential Equations and Control Seminar, Montreal, Canada (254)

AUGUST 1998

- 6-10 Stokes Summer School, Skreen, County Sligo (260)
- 13-16 Commutative Algebra Conference in Honour of David Rees's 80th Birthday, University of Exeter (257)
- 18-28 International Congress of Mathematicians, Berlin, Germany (238) (242) (253)
- 24-26 Hele-Shaw Problem Workshop, Oxford (260)
- 27-31 Discrete Groups and Conformal Geometry Conference, Malardalen University, Sweden (259)
- 30-5 Sept Algebraic Number Theory and Diophantine Analysis Conference, Graz, Austria (249)
- 31-5 Sept Representation Theory of Algebras, University of Bielefeld, Germany (258)

SEPTEMBER 1998

- 6-11 British Association for the Advancement of Science Festival, Cardiff (257)
- 7-11 Infinite Length Modules, University of Bielefeld, Germany (258)
- 10-11 Meeting to Mark the Retirement of Geoffrey Horrocks, Newcastle upon Tyne University (259)
- 14 Physical Interpretations of Relativity Theory, Imperial College London (258)

OCTOBER 1998

- 16-17 Two-day London Mathematical Society Meeting - Harmonic Analysis

NOVEMBER 1998

- 20 London Mathematical Society Meeting - Annual General Meeting

The Newsletter is published monthly except in August. Items and advertisements for inclusion in the Newsletter should be sent to the Editor, Susan Oakes, by e-mail, fax or post to the LMS office (addresses below), to arrive before the first day of the month prior to publication.

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