THE LONDON MATHEMATICAL SOCIETY NEWSLETTER

No. 287 November 2000

FORTHCOMING SOCIETY MEETINGS

Friday 24 November 2000 - London
Annual General Meeting
T.C. Chinburg, M.J. Taylor (Presidential Address)
10 February 2001 - Oxford
Dame Mary Cartwright Lecture
C.S. Morawetz, K.W. Morton
Wednesday 28 February 2001 - Birmingham
Inaugural LMS Regional Meeting (Midlands)

COLLINGWOOD MEMORIAL PRIZE

The 2000 Collingwood Memorial Prize has been awarded to Paul B. Bostock, College of St Hild and St Bede, who will study for a PhD in Mathematical Physics at Durham. The Collingwood Memorial Prize, established in memory of Sir Edward Collingwood FRS, President of the Society 1969-1970, is awarded to a final year mathematics student at the University of Durham who intends to continue to a higher degree in mathematics at Durham or any other university.

ANNUAL DINNER

The Annual Dinner will be held after the Annual General Meeting on Friday 24 November at 7.15 pm at The Montague Hotel, 15 Montague Street, London WC1. The cost is £30.00 per person and members may book places for guests. The booking form, enclosed with the October *Newsletter,* should be returned together with payment to the London Mathematical Society office by **Monday 20 November.**

PUBLISH WITH THE LMS!

For the past two years, the *Journal* of the LMS has been substantially enlarged, in order to publish a massive backlog of accepted papers that had built up in the previous few years. During this period, the Editors have strictly rationed the number of new papers accepted for publication. In addition, some authors have had to endure delays in the publication of their papers.

I am happy to report that through the heroic efforts of the *Journal* Editors, Professors J.R. Partington and J.K. Truss, the backlog has been eliminated. From 2001, the *Journal* will revert to its normal size of 256 pages per issue.

Any authors who may have been deterred from submitting papers to the LMS because of the high rejection rate and publication delays are assured that the situation is now back to normal. Please consider sending your best papers to our prestigious journals!

Christopher Lance
Publications Secretary

2001 MEDAL AND PRIZES

In the year 2001, the Council expects to award the De Morgan Medal, a Senior Whitehead Prize, a Berwick Prize and up to four Whitehead Prizes. A Prizes Committee has been appointed its membership is:

Professor J.T. Stuart (Chair)	j.stuart@ic.ac.uk
Professor S.K. Donaldson	s.donaldson@ic.ac.uk
Professor T.J. Lyons	lyons@maths.ox.ac.uk
Professor A.J. Macintyre	angus@maths.ed.ac.uk
Professor U. Martin	um@dcs.st-and.ac.uk
Professor J.F. Toland	jft@maths.bath.ac.uk
Professor L.N. Trefethen	lnt@comlab.ox.ac.uk
Professor J.R. Willis	jrw@maths.bath.ac.uk

Members of the Society are invited to submit their views on possible candidates to the President-designate, Professor J.T. Stuart (The President, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS; president@lms.ac.uk) or to any other member of the Prizes Committee by **5 January 2001**. Nominations should contain explicit reference to the grounds on which the nomination is based, and brief descriptions of the criteria for each Prize are given below. Council reserves the right not to make an award of any particular Prize in the event that no candidate of sufficient merit is recommended by the Prizes Committee.

The **De Morgan Medal** is awarded for the recipient's contribution to mathematics.

The **Senior Whitehead Prize** can only be awarded to a mathematician who is normally resident in the United Kingdom on 1 January 2001. Grounds for the award may include work in, influence on or service to mathematics, or recognition of lecturing gifts in the service of mathematics. This prize may not be awarded to any person who has previously received the De Morgan Medal, the Polya Prize, the Senior Berwick Prize or the Naylor Prize.

The **Berwick Prize** is awarded to a mathematician who on 1 January 2001 is a member of the Society, is under the age of forty years (except that this age restriction may be relaxed when it appears desirable to do so in order to take fair account of broken career patterns) and is not already a Fellow of the Royal Society; it is awarded in recognition of an outstanding piece of mathematical research actually published by the Society during the eight years ending on 31 December 2000. This Prize may not be awarded to anyone who has won any of the Society's other Prizes, other than the Whitehead Prize.

The **Whitehead Prizes** are awarded to mathematicians who on 1 January 2001 are normally resident in the United Kingdom or members of the Society mainly educated in the United Kingdom, who are not already Fellows of the Royal Society, and who are under the age of forty years (except that this age restriction may be relaxed when it appears desirable to do so in order to take fair account of broken career patterns). Grounds for the award may include work in and influence on mathematics. This Prize may not be awarded to anyone who has won any of the Society's other Prizes. Members are reminded that the scope of the Whitehead Prizes includes all aspects of mathematics, and Council has emphasised that this includes applied mathematics, mathematical physics and mathematical aspects of computer science.

Details of the regulations and the procedure for awarding the Prizes may be obtained from the Administrator, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS (oakes@lms.ac.uk).

John Pym
Council and General Secretary

LONDON MATHEMATICAL SOCIETY

Annual General Meeting

Friday 24 November 2000 at 3.15 pm

Professor T.C. CHINBURG
(University of Pennsylvania)
will speak at 3.30 pm on

The Geometry of Gauss Sums

Professor M.J. TAYLOR, FRS (UMIST)
will give his Presidential Address
at 5.00 pm on

L-functions and Euler Characteristics

All interested are very welcome
Tea will be served at 4.30 pm

The meeting will be held in the Darwin Lecture Theatre,
University College London, Gower Street, London WC1

Please note early start

Some funds are available to contribute in part to the expenses of members of the Society or research students who wish to attend the meeting. Requests for support should be addressed to the Meetings and Membership Secretary, London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS (requests should include an estimate of expenses and a very brief *curriculum vitae*; research students should include brief letters of endorsement from their supervisors).

Enquiries may be addressed to Miss Susan M. Oakes
(tel: 020 7637 3686, e-mail: lms@lms.ac.uk).

LONDON MATHEMATICAL SOCIETY

DAME MARY CARTWRIGHT LECTURE

Saturday 10 February 2001

Room L2, The Mathematics Institute, Oxford.

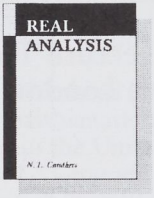
3.30-4.30 Professor Bill Morton
Evolution Operators and Numerical Modelling of Hyperbolic Equations

4.30-5.00 Tea

5.00-6.00 The Dame Mary Cartwright Lecture
Professor Cathleen Synge Morawetz
Mathematics and Flying Aeroplanes

A dinner will be held after the meeting at St Hughs College, Oxford (approximately £25 with wine). Further details will appear in the January *Newsletter*.

CAMBRIDGE



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BRITISH WOMEN IN MATHEMATICS

The next meeting will be on Wednesday 10 January 2001 at the London Mathematical Society, De Morgan House, 57-58 Russell Square, London WC1B 4HS. The main speakers will be Fay Dowker (QMW) "Unifying the Universe" and Alison Etheridge (Oxford) "How does a Probabilist solve the Heat Equation". Other speakers will be Juliette White (RHB), Nicole Snashall (Leicester), Jane Hutton (Newcastle) and Bindi Brook (Sheffield). There will also be a discussion on Mentoring led by Ursula Martin (St Andrew's). The first lecture will commence at 11.15 am. The cost will be £5 to cover coffee, tea and a buffet lunch. All are welcome (whether or not British or a woman) but those intending to come should contact Leone Oscar at the London Mathematical Society (oscar@lms.ac.uk) as numbers are limited. Some help will be available for travel expenses for research students. For more details contact Helen Robinson (h.robinson@coventry.ac.uk).

NONLINEAR MECHANICS

There will be a meeting on the theme of Nonlinear Mechanics on 6 November, at the Conference Centre, University of Bath hosted by the Bath Centre for Nonlinear Mechanics. This meeting will be a mixture of presentations and informal discussion with the aim of generating discussion between different disciplines. The meeting aims to identify clear links between applied mathematics, engineering and industry, based around a common theme of nonlinear problems. It will provide a showcase of successful applications of ideas in nonlinear systems to a wide variety of engineering problems showing clearly the importance of the underpinning by mathematical ideas. The organisers are grateful to the LMS for their generous financial support.

The speakers are as follows:

- J.M.T. Thompson *Twisted rods*
- M.A. Peletier *Global minimization, monotonicity, and complexity reduction in fourth-order ODE's*
- A. Nordmark *Non-smooth dynamics*
- K. Popp *Vibration damping using dry friction forces*
- R. Kuske *Envelope equations for heterogeneous patterns and noisy transitions.*

After the meeting discussions will continue over dinner. All are welcome and there is no registration fee. If you are interested in coming e-mail Professor Chris Budd (cjb@maths.bath.ac.uk) or Professor Giles Hunt (g.w.hunt@bath.ac.uk) before the meeting.

SLAWOMIR J. BIEL

Dr Slawomir J. Biel, who was elected a member of the London Mathematical Society on 18 March 1965, died on 1 September 2000.

53RD BRITISH MATHEMATICAL COLLOQUIUM

The 53rd British Mathematical Colloquium will take place at the University of Glasgow from 9 to 12 April 2001. The principal speakers will be Henri Berestycki, Michel Broué, Henri Darmon and Clifford Taubes. There will be special sessions on Partial Differential Equations and Modular Forms. For further information, consult the website at www.maths.gla.ac.uk/bmc2001, send an e-mail to bmc2001@maths.gla.ac.uk, or write to British Mathematical Colloquium, Department of Mathematics, University of Glasgow, University Gardens, Glasgow G12 8QW. The British Mathematical Colloquium is supported by the London Mathematical Society and the Glasgow Mathematical Journal Trust.

CONFERENCE ON LÉVY PROCESSES AND STABLE LAWS

A conference on "Lévy Processes and Stable Laws" will take place at Warwick University from 2 - 6 April 2001. Each day of this meeting will be devoted to exploring recent developments in one of the five themes: Lévy processes - basic theory, stable laws, applications (including finance and quantum theory), stochastic calculus and Lévy-type Markov processes. The list of speakers includes the following:

S.J. Taylor (Sussex), J.F. LeGall (ENS), M. Marcus (CUNY), R. Doney (Manchester), K-I. Sato (Nagoya), A. Weron (Wroclaw), J. Rosinski (Tennessee), T. Mikosch (Groningen), S. Albeverio (Bonn), E. Eberlein (Freiberg), N. Bouleau (ENPC), H. Kunita (Nanzan), J. Picard (Blaise Pascal), A. Estrade (Orleans), H. Heyer (Tubingen), R. Schilling (Sussex), Z. Chen (Seattle), V. Kolokoltsov (Nottingham Trent), O. Barndorff-Nielsen (Aarhus).

Further details can be found on the website (http://science.ntu.ac.uk/msor/conf/Levy/). To participate in the conference contact Peta McAllister (tel: 024 7652 4403, fax: 024 7652 3548, peta@maths.warwick.ac.uk). The organisers thank the London Mathematical Society and the European Union for financial support. In particular there is funding available for suitably qualified graduate students at UK universities.

YORKSHIRE DIFFERENTIAL GEOMETRY DAY

A Yorkshire Differential Geometry Day is to be held at the University of York on Wednesday 29 November, supported by an LMS Scheme 3 grant. The speakers include: Professor Jim Eells (Cambridge), Professor Henrik Pedersen (Odense, visiting Oxford), Dr Martin Sleight (Leeds). All are welcome to attend, and further information can be found on the website (http://www-users.york.ac.uk/~cmw4/ydgd.html).

RAISING PUBLIC AWARENESS OF MATHEMATICS IN EUROPEAN SCIENCE AND TECHNOLOGY WEEK

Using related actions and printed posters in public transport during the week 6-13 November 2000(RPAMath) this EC:DGXII-supported project (see http://www.sees.bangor.ac.uk/public/cpm/rpamath/) is led by Professor Mireille Chaleyat-Maurel of the Société Mathématique de France, and includes also Professor Vagn L. Hansen (Lyngby), representing the European Mathematical Society (EMS), and Professor Ronnie Brown (Bangor) for Bangor's Centre for the Popularisation of Mathematics. The RPAMath cross-platform CDRom resulting from this project is based on successful web sites at Bangor, but reprogrammed by Mike Yates to systematize, to run large animations, and with extra material, such as posters resulting from the Paris and EMS work. It will be launched at Obidos, Portugal, on 11 November. Copies of the CDRom will be distributed to members of the Sociedade Portuguesa de Matematica (SPM) with the autumn issue Bulletin of the SPM. For further information, contact Ronnie Brown (r.brown@bangor.ac.uk).

2000 TWENTE CONFERENCE ON LIE GROUPS

2000 Twente conference on Lie Groups will be held from 18-20 December 2000 at the University of Twente, The Netherlands. The list of speakers so far are: U. Bunke (Göttingen), R. Camporesi (Turin), B. Enriquez (Paris), S. Gindikin (Rutgers), A.G. Helminck (Brandeis), T. Kobayashi (Tokyo), D. Krammer (Basel), V. Molchanov (Tambov), K-H. Neeb (Darmstadt), C. Ohn (Reims), M. Primc (Zagreb), V. Tarasov (St Petersburg), A. Vershik (St Petersburg), G. Zhang (Stockholm). More information can be obtained at the website (http://www.math.utwente.nl/~lie), where you can also register.

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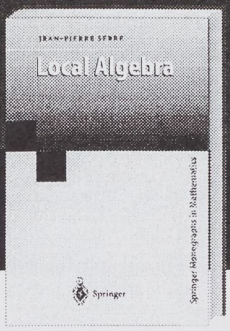

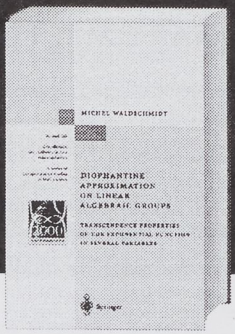

J-P. Serre

Local Algebra

This is an English translation of the now classic "Algèbre Locale - Multiplicités". It gives a short account of the main theorems of commutative algebra, with emphasis on modules, homological methods and intersection multiplicities ("Tor-formula"). Many modifications to the original French text have been made by the author for this English edition: They make the text easier to read, without changing its intended informal character".

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F. Lemmermeyer

Reciprocity Laws

From Euler to Eisenstein

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Z. Mei

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RECORDS OF PROCEEDINGS AT MEETINGS

ORDINARY MEETING

held on Friday 23 June 2000 at University College London. About 27 members and visitors were present for all or part of the meeting.

The meeting began at 3:30 pm, with Professor M.J. TAYLOR, FRS, in the Chair. Fifteen people were elected to Ordinary Membership: M.M. Anttila, J.M. Ford, P. Garcia, C.J. Howls, A.F. Jarvis, V.N. Kolokoltsov, C.M. Linton, P.N.I.D. Matteucci, G.P. Parry, I. Rivin, M.S. Ruderman, N. Shah, Y.D. Shikhmurzaev, A.M. Stuart, C.P. Walkden.

A lecture was given by Professor M.D. Buhmann on 'Radial basis functions: existence and variational properties'.

After tea, a

GENERAL MEETING

was held with Professor M.J. TAYLOR, FRS, in the Chair. On a motion proposed by Council, it was agreed to replace the existing By-Laws by new ones. These had been circulated to members earlier.

The Ordinary meeting then resumed. Two members signed the book and were admitted to the Society.

The President, on Council's behalf, proposed that Professor Freeman J. Dyson, FRS, be elected to Honorary Membership of the Society. This was approved by acclaim. The President read a short version of the citation to be published in the *Bulletin.*

The President announced the awards of the Polya Prize to Professor T.J. Lyons of Oxford University, the Senior Berwick Prize to Professor J.F. Toland, FRS, of Bath University, the Naylor Prize to Professor A.S. Fokas of Imperial College, London, and Whitehead Prizes to Dr M.A.J. Chaplain of Durham University, to Dr G.M. Stallard of the Open University, to Professor A.M. Stuart of Warwick University and to Dr B.J. Totaro of Cambridge University. The President read short versions of the citations to be published in the *Bulletin.*

A lecture was then given by Professor M.J.D. Powell, FRS, on 'The accuracy of radial basis function interpolation'

ORDINARY MEETING

held on Thursday 13 July 2000 at the Palau de Congressos, Barcelona, during the Third European Congress of Mathematics, Professor M.J. TAYLOR, FRS, President, in the Chair. There were present about 60 members and visitors. Six people were elected to Ordinary Membership: M. Ainsworth, E.V. Ferapontov, M.R. Green, T. Honda, A. Parker, H. Zhao; two were elected to Associate Membership: J.T. Fairley, A. Reuter; and two were elected to Reciprocity Membership: R.-P. Mages (Soc. Math. de France) and R.R. Mortini (Amer. Math. Soc.).

The President gave a short address welcoming members and visitors to the meeting, expressing his delight that members not resident in the United Kingdom could meet representatives of the Society, and giving a particular welcome to the President and Secretary of the Local Organising Committee, and to the President and members of the Executive Committee of the European Mathematical Society. Fifteen members signed the membership book and were admitted to the Society.

LMS PROGRAMME AND CONFERENCE FUND

Programme Committee has recently awarded grants to support the following conferences and meetings. These are open to members. If you wish to attend, or would like more information, please contact the organiser.

Date/Venue	Title	Organizer/e-mail
6 November 2000 Bath	Nonlinear Mechanics	C.J. Budd cjb@maths.bath.ac.uk
24 January 2001 Open	Open University Winter Combinatorics Meeting	B. Maenhaut b.m.maenhaut@open.ac.uk
2-6 April 2001 Warwick	Lévy Processes and Stable Laws	D.B. Applebaum dba@maths.ntu.ac.uk
7-9 April 2001 ICMS or Edinburgh	16th British Topology Meeting	P. Turner paul@ma.hw.ac.uk
9 April 2001 Glasgow	Alfred Goldie 80th Birthday Conference	K.A. Brown k.brown@maths.gla.ac.uk
May or June 2001 Warwick	Stochastic PDEs in Mathematical Finance	K.D. Elworthy kde@maths.warwick.ac.uk
2-5 June 2001 Gregynog	The Heritage of I. Schur's 1901 Dissertation	A.O. Morris aom@aber.ac.uk
25-28 June 2001 Newcastle	Banach Algebras and Cohomology	N.J. Young n.j.young@ncl.ac.uk
1-6 July 2001 Sussex	18th British Combinatorial Conference	P. Rowlinson p.rowlinson@stirling.ac.uk
19-21 July 2001 Oxford	Applied Nonlinear Analysis and Differential Equations	S.D. Howison howison@maths.ox.ac.uk
22-23 September 2001 Oxford	History of Mathematical Table Making	R. Flood raymond.flood@conted.ox.ac.uk
26-27 July 2002 Gregynog	Conference to mark the 65th Birthday of Professor M.S.P. Eastham	W.D. Evans evanswd@cf.ac.uk
7-10 April 2003 Birmingham	British Mathematical Colloquium 2003	R.A. Wilson r.a.wilson@bham.ac.uk

ICM/2002 BEIJING

The London Mathematical Society has been invited to suggest names for the plenary lectures for the International Congress of Mathematicians in Beijing in 2002. Suggestions from members, with brief justifications, should be sent, for consideration, to the President at De Morgan House (president@lms.ac.uk) to reach him by **1 December 2000.**

ACADÉMIE DES SCIENCES

Professor J.D. Murray, FRS, has been elected a Foreign Member of the Académie des Sciences.

DEPARTMENTAL NEWS

University of Essex Peter M. Higgins has been promoted from Reader to Professor as from October 1st.

UNIVERSITY OF CAMBRIDGE

STATISTICAL LABORATORY

Professorship of Statistical Science

Applications are invited for the Chair of Statistical Science in the University of Cambridge. The successful candidate will be a scientist with a distinguished research record in an area of statistics or stochastics. Areas of interest to the University include statistical science (theoretical and applied) and the applications of statistical and probabilistic methods to cognate fields including biology, genetics, economics, and mathematical finance. The person appointed will be expected to carry out his or her duties within the Statistical Laboratory, in the Department of Pure Mathematics and Mathematical Statistics. The Statistical Laboratory was awarded the highest grade of 5* in the last Research Assessment Exercise.

The Statistical Laboratory is responsible for teaching courses in Probability, Statistics and the Mathematics of Operational Research within the University's Mathematical Tripos, and for teaching the MPhil in Statistical Science. There are over 200 students in each of the three undergraduate years of the Tripos; in addition there are usually about 12 graduate students following the MPhil and about 20 research students.

The new Professor will join a Laboratory of about twenty teaching and research staff. Interests cover the broad area of Applicable Mathematics, and currently include a number of fruitful collaborations with outside groups in industry and commerce, as well as other academic departments and research units. Links with these groups include applied projects for the MPhil and joint supervision of research students, as well as collaborative research.

The Laboratory has recently moved to a purpose-designed pavilion adjacent to the Isaac Newton Institute in Clarkson Road, as part of the relocation of the entire Faculty of Mathematics to new accommodation of the highest quality. In addition to the offices, meeting rooms, and common rooms, there is an excellent computer network utilizing a mixture of PCs and HP workstations. Information about the Laboratory may be obtained via http://www.statslab.cam.ac.uk.

Further information may be obtained from the Secretary General of the Faculties, The General Board Office, The Old Schools, Cambridge CB2 1TT, to whom applications should be sent, together with the names of two referees, so as to reach him not later than **20 November 2000**. Informal enquiries may be made to Professor Geoffrey Grimmett, Statistical Laboratory, Centre for Mathematical Sciences, Wilberforce Road, Cambridge, CB3 0WB (e-mail: g.r.grimmett@statslab.cam.ac.uk, telephone +44 1223 337958).

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Created in 1958, the IHÉS is a Private Foundation of international standing with the purpose of "favouring and developing theoretical research in Pure Mathematics, Theoretical Physics, Human Sciences Methodology and every other discipline which could be linked to those". The IHÉS is financed by the French Ministère de la Recherche et de la Technologie, some European research agencies such as the Engineering and Physical Sciences Research Council in the United Kingdom, the US National Science Foundation, the European Union, and several French and foreign foundations and companies. In February 2000, the European Commission acknowledged the IHÉS as a Large European Research Infrastructure centre.

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WILLIAM HODGE FELLOWSHIPS

The Engineering and Physical Sciences Research Council has now been supporting the IHÉS for a number of years and recently decided to foster closer links between British Institutions and French research centres of excellence. British mathematicians and theoretical physicists are invited to apply to the IHÉS to visit and additionally perhaps to use the opportunity to visit research groups in the Paris region. More information is given on the IHÉS website. In addition, the EPSRC and the IHÉS are offering annually two 1-year fellowships under the name of Sir William Hodge, the eminent British mathematician whose main interests were in algebraic and differential geometry. The fellowships will enable outstanding young mathematicians and theoretical physicists to spend time at the IHÉS.

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How to apply The application file should be sent under the name of "Hodge Fellowships" through the IHÉS website (www.ihes.fr) and should include: a motivation letter, a CV, a publication list, a research project and two or three letters of recommendation.

Deadline for applications: December 31, 2000.

Information IHÉS, 35 route de Chartres, F-91440 Bures-sur-Yvette (FRANCE)
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432 pp; $44.00, £30

This story of the logician Jean van Heijenoort, who also served as secretary and bodyguard to Leon Trotsky, captures the personal drama and the professional life of this important mathematician.

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ISBN 1-56881-025-3; Hardcover;
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This authoritative biography of Kurt Gödel relates the life of the eminent logician to the development of the field.

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BSHM CHRISTMAS MEETING 2000

The Christmas meeting of the British Society of the History of Mathematics will be held on Thursday 21 December 2000 at University College London. The following talks will be given:

- Professor Bernhard Neumann *An ancient mathematician remembers*
- Professor Robert Rankin *Hugh Blackburn: a little known mathematical colleague of Lord Kelvin*
- Dr Adrian Rice *G.H. Hardy, the London Mathematical Society, and the rise of British pure mathematical research in the first half of the 20th century*

All members of the London Mathematical Society and others, are very welcome. For further information about attending the meeting contact Chris Weeks (cjw6@tutor.open.ac.uk) or the BSHM website (http://www.dcs.warwick.ac.uk/bshm/meetings.html).

SEMINAIRE DE MATHEMATIQUES SUPERIEURES NATO Advanced Study Institute

A Seminar on Modern Methods in Scientific Computing and Applications will be held at the Université de Montréal, from 9-20 July 2001. Main speakers: Zh. Bai (UC at Davis), A. Bertozzi (Duke), A. Bourlioux (Montréal), G.H. Golub (Stanford), G. Haase (Linz), L. Halpern (Paris 13 /EP Paris), A.R. Humphries (Sussex), U. Langer (Linz), K. Mikula (TU Bratislava), F. Nataf (EP Paris), G. Papanicolaou (Stanford), J. Sethian (Berkeley), R. Sircar (Princeton), P. Souganidis (Texas at Austin), A.M. Stuart (Warwick), T. Witelski (Duke).

Partial financial support will be available. Priority will be given to graduate students. Requests for participation must be received before 28 February 2001. For further information contact G. David, Coordonator SMS, Departement de Mathematiques et de Statistique, Université de Montréal, CP 6128/Centreville, Montréal (Qc), Canada H3C 3J7 (tel: (514) 343-6710, fax: (514) 343-5700, e-mail: sms@dms.umontreal.ca, web: www.dms.umontreal.ca/sms).

UNCERTAINTY IN GEOMETRIC COMPUTATIONS

Professor Mahesan Niranjan and Dr Joab Winkler of the Department of Computer Science at the University of Sheffield are arranging a MathFIT workshop 'The Representation and Management of Uncertainty in Geometric Computations', to be held in Sheffield during 4-6 July 2001. The workshop is supported by the Engineering and Physical Sciences Research Council (EPSRC) and the London Mathematical Society. It will be of interest to researchers in computer graphics, computer-aided geometric design and pattern recognition. We are particularly keen to attract computer scientists, mathematicians and engineers in order to foster new links for collaboration, thereby bringing new insights and methods to outstanding research issues. Please see http://www.shef.ac.uk/~geom2001/ for more details, including an "indication of interest", and details of submission of a paper. Several studentships, supported by the EPSRC, are available to eligible UK students. Please contact the organisers for more details (m.niranjan@dcs.shef.ac.uk or j.winkler@dcs.shef.ac.uk).

EPSRC POSTDOCTORAL FELLOWSHIPS

The closing date for applying for EPSRC Postdoctoral Fellowships is 12 January 2000. Information can be found at www.epsrc.c.uk/fellow

HONORARY DEGREE

Professor John Howie, FRSE, CBE, a member of the London Mathematical Society, was awarded an honorary degree (DUniv) by the Open University earlier this year.

Mathematics Institute
University of Warwick

Symposium 2000/2001
September 2000 - August 2001

STOCHASTIC PARTIAL DIFFERENTIAL EQUATIONS & RELATED TOPICS

Organisers: David Elworthy, Andrew Stuart & Roger Tribe
Scientific Committee: Arnaud Debussche, Istvan Gyongy, Mark Freidlin & Nic Krylov
Leverhulme Visiting Professor: Jerzy Zabczyk

WORKSHOPS

- **19-24 March 2001** Discrete and Continuous Stochastic Evolutions
  Including short courses by: R. Durrett, T. Kurtz
  Organisers: David Elworthy & Roger Tribe
- **26-31 March 2001** Computational Stochastic Differential Equations
  Invited Speakers include: A. Chorin, A. Debussche, A. Majda
  Organiser: Andrew Stuart
- **2-6 April 2001** Lévy Processes
  Organisers: David Applebaum, *et al.*
- **16-27 July 2001** Stochastic Partial Differential Equations
  Organisers: David Elworthy, Andrew Stuart, Roger Tribe

MINI-SESSIONS

These sessions will have a learning element, with expository talks suitable for non-experts. Dates and venues should be confirmed - not all will be at Warwick.

- **10 & 11 November 2000** Functional Stochastic Differential Equations
  Speakers include: S. Mohammed, X-R. Mao, B. Oksendal
- **17 & 18 November 2000** Schrödinger Equations with Random Forcing
- **1 & 2 December 2000** Ergodicity for Spatial Dynamics
- **19 & 20 January 2001** Stochastic Fluid Equations
- **2 & 3 February 2001** Homogenization
- **16 & 17 February 2001** Approximation Methods for SPDEs
- **9 & 10 March** SPDEs as Random Dynamical Systems
- **May/August 2001** Further sessions to be arranged; possible topics include: SPDE in Mathematical Finance; Noisy Travelling Waves.

The Symposium is supported by the EPSRC and also by the LMS via the Warwick British Visitors fund which supports certain categories of UK visitors with especial encouragement to graduate students at UK Universities. There are also Marie Curie Fellowships which can enable EU graduate students to participate for a minimum period of 3 months.

For further information contact: Peta McAllister, Mathematics Research Centre, University of Warwick, Coventry CV4 7AL (tel: +44 (0)24 7652 4403; fax: +44 (0)24 7652 4182, e-mail: peta@maths.warwick.ac.uk, website: http://www.maths.warwick. ac.uk/).

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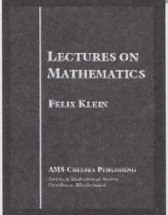


Lectures on Mathematics

Felix Klein

Klein's look at mathematics at the end of the 19th Century remains compelling today, both as history and as mathematics. It is delightful and fascinating to observe from a 100-year retrospect, the musings of one of the masters of an earlier era.

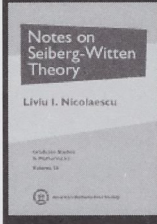
Chelsea Publications No. 339.H
2000, 109 pages, Hardback, 0-8218-2733-2, £11.50

Handbook of Logic in Computer Science

Volume 5: Algebraic and Logical Structures
Edited by S. Abramsky, Dov M. Gabbay, and T. S. E. Maibaum

Contents: Martin Lof's Type Theory; Categorical Logic; A Uniform Method for Proving Lower Bounds on the Computational complexity of Logical Theories; Algebraic specification of abstract data types; Computable Functions and Semicomputable Sets on Many-sorted Algebras.

2000, 528 pages, Hardback, 0-19-853781-6, £130.00



Notes on Seiberg-Witten Theory

Liviu. I. Nicolaescu

This book presents in great detail and with many examples, a basic collection of principles, techniques, and applications needed to conduct independent research in gauge theory and its use in geometry and topology.

Graduate Studies in Mathematics No. 28
January 2001, 448 pages, Hardback, 0-8218-2145-8, £36.00

Mathematical Logic: A course with exercises

Part 1: Propositional Calculus, Boolean Algebras, Predicate Calculus, Completeness Theorems
Rene Cori and Daniel Lascar. Translated by Donald Pelletier

This book provides students with a clear and accessible introduction to this important subject. The concept of model underlies the whole book, giving the text a theoretical coherence whilst still covering a wide area of logic.

2000, 352 pages, Hardback, 0-19-850049-1, £60.00

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FORTHCOMING CONFERENCES

Assessing Credit Risk in Retail Financial Services
Bank of England, 14 November 2000

Millennium Event in Conjunction with World Mathematics Year
University College London, 28 November 2000

Fifth Mathematics in Signal Processing
University of Warwick, 18 - 20 December 2000

Third Spatial Patterns in Permeable Rocks
Churchill College, Cambridge, 27 - 29 March 2001

Fourth Modelling in Industrial Maintenance and Reliability
University of Salford, 9-11 April 2001

Second Wind-Over-Waves: Fundamentals, Forecasting and Applications
Cambridge, 3-5 September 2001

ECCOMAS 2001: Computational Fluid Dynamics
Swansea, 4 - 7 September 2001

Mathematical Modelling and Statistical Analysis of Infectious Diseases
Cardiff University, 11-13 September 2001

Advanced Simulation and Control for Automotive Applications
Keble College, Oxford, 24 - 26 September 2001

Eighth Cryptography and Coding
Royal Agricultural College, Cirencester, 17-19 December 2001

Further details from: Pamela Bye, Conference Officer, The Institute of Mathematics and its Applications, Catherine Richards House, 16 Nelson Street, Southend-on-Sea, Essex SS1 1EF.

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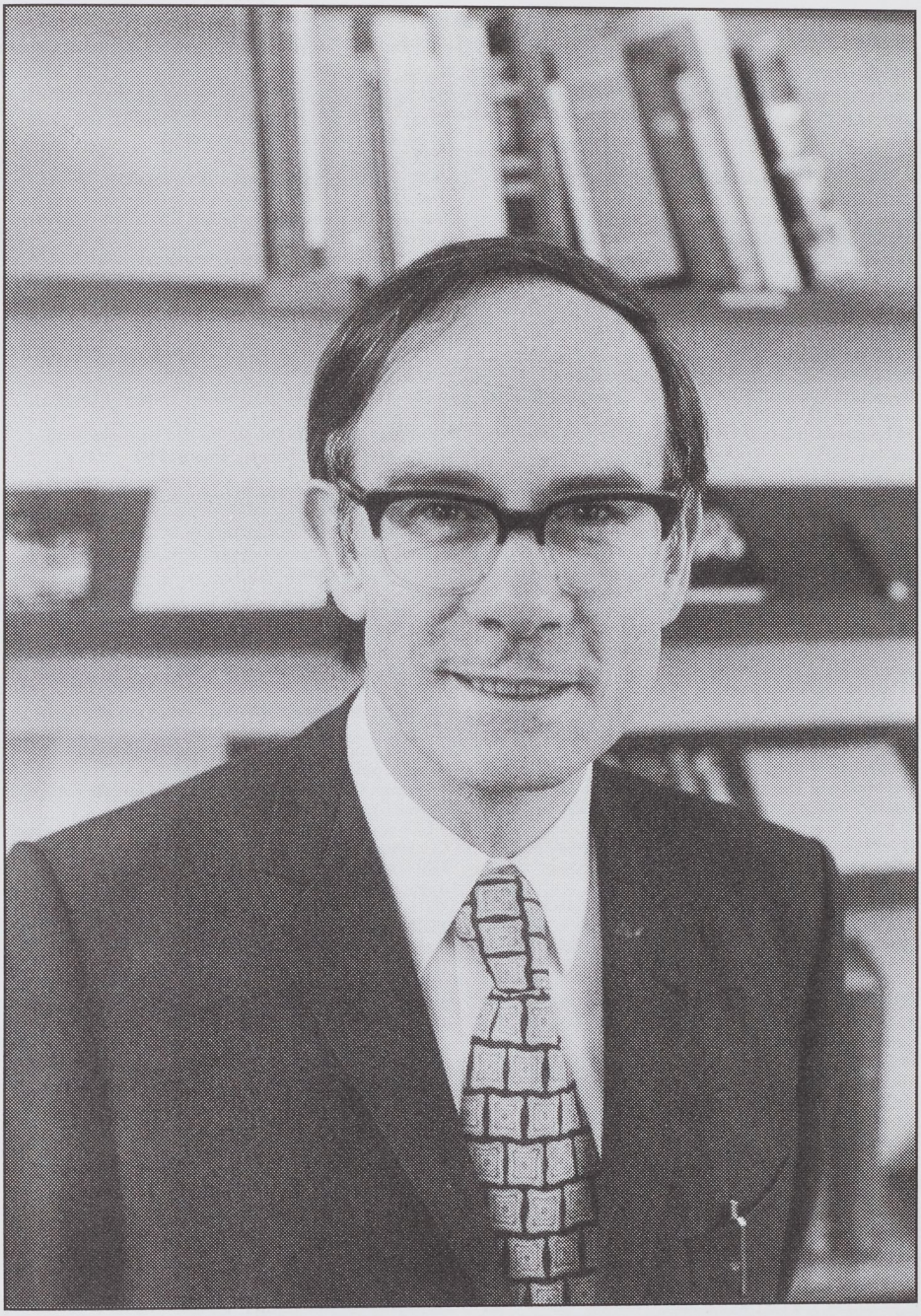

F. HIRZEBRUCH
HONORARY MEMBER 1975

DIARY

The diary lists Society meetings and other events publicized in the *Newsletter*. Further information can be obtained from the appropriate LMS Newsletter whose number is given in brackets. A fuller list of meetings and events is given in the Society's web site (http://www.lms.ac.uk/meetings/diary.html).

NOVEMBER 2000

3-4 North British Functional Analysis Seminar, Glasgow University (286)

6 Nonlinear Mechanics Meeting, Bath University (287)

10-11 Stochastic Functional Differential Equations Mini Workshop, Warwick University (286)

15-16 Topological Methods in the Physical Sciences Discussion Meeting, Royal Society London (285)

17 Edinburgh Mathematical Society Meeting, Strathclyde University (285)

18 Belfast Functional Analysis Day 2000, Queen's University Belfast (285)

18-22 Mathematics for Living Conference, Jordan (280)

20 Differential Geometry in Fluid Dynamics and Dynamical Systems, BRIMS Day, Isaac Newton Institute, Cambridge (282) (285)

24 London Mathematical Society AGM and Meeting, London (287)

29 Yorkshire Differential Geometry Day, York University (287)

DECEMBER 2000

15 Edinburgh Mathematical Society Meeting, Napier University (285)

16-21 Applications of Singularity Theory to Geometry Conference, Liverpool University (283)

18-20 Mathematics in Signal Processing, Warwick University (279)

18-20 Lie Groups Conference, Twente University, The Netherlands (287)

21 BSHM Christmas Meeting, University College London (287)

JANUARY 2001

8-12 Wave Motion LMS/EPSRC Short Course, Birmingham University (285)(286)

8-18 Nonlinear Partial Differential Equations ICMS Instructional Conference, ICMS Edinburgh (284)

10 British Women in Mathematics Meeting, London (287)

12 Edinburgh Mathematical Society Meeting, Edinburgh University (285)

FEBRUARY 2001

9 Edinburgh Mathematical Society Meeting, Edinburgh University (285)

10 Mary Cartwright Lecture, LMS Meeting, Oxford (287)

28 Inaugural LMS Regional Meeting (Midlands), Birmingham

MARCH 2001

9 Edinburgh Mathematical Society Meeting, Aberdeen University (285)

18-24 Geometric Analysis and Index Theory Conference, Trieste, Italy (286)

19-24 Discrete and Continuous Stochastic Evolutions Workshop, Warwick University (287)

26-29 Quantum Field Theory, Noncommutative Geometry and Quantum Probability Workshop, Trieste, Italy (286)

26-29 Numerical Methods for Fluid Dynamics Conference, Oxford University (286)

26-31 Computational Stochastic Differential Equations Workshop, Warwick University (287)

APRIL 2001

2-5 British Applied Mathematics Colloquium, Reading University

2-6 Lévy Processes and Stable Law Conference, Warwick University (287)

7-9 British Topology Meeting, Edinburgh and Heriot-Watt Universities (286)

9-12 British Mathematical Colloquium, Glasgow University (287)

MAY 2001

4 Edinburgh Mathematical Society Meeting, Stirling University (285)

6-13 Symmetry and Perturbation Theory Workshop (SPT2001), Sardinia (284)

28 -1 June Harmonic Morphisms and Harmonic Maps Conference, CIRM, Luminy, France (284)

JUNE 2001

1 Edinburgh Mathematical Society Meeting, St Andrews University (285)

8-10 Belgian Mathematical Society/Deutsche Mathematiker Vereinigung joint meeting, Liège University, Belgium (284)

19-22 Computational Intelligence: Methods and Applications Congress (CIMA 2001) University of Wales, Bangor (283)

19-23 Calculus of Functors, T. Goodwillie, LMS Invited Lectures, Aberdeen University (286)

JULY 2001

1-6 British Combinatorial Conference, Sussex University (276)

4-6 Uncertainty in Geometric Computations MathFIT Workshop, Sheffield University (287)

5-7 British Congress of Mathematics Education, Keele University (286)

9-13 Stochastic Processes and their Applications Conference, Cambridge (275)

9-20 Modern Methods in Scientific Computing and Applications Seminar, Université de Montréal, Canada (287)

15-20 Algorithms for Approximation IV Symposium, Huddersfield University (286)

16-27 Stochastic Partial Differential Equations Workshop, Warwick University (287)

29-2 Aug Teaching of Mathematical Modelling and Applications (ICTMA 10), Tsinghua University, China (284)

AUGUST 2001

12-19 Homological Conjectures for Finite-Dimensional Algebras Summer School, Nordfjordeid, Norway (275)

APRIL 2002

7-12 Joint BMC/BAMC, Warwick University

AUGUST 2002

20-28 ICM2002, Beijing, China (272)

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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Printed by Armstrong Press Ltd, Southampton 023 8033 3132