This is my last diary so perhaps I might be allowed a few final thoughts and an opportunity to thank the many members of Council who have commented, criticized and helped to make the diary more accurate. However, I must accept all responsibility for the comments made and the errors committed. It would also be appropriate to send my best wishes to my successor, Tony Scholl. First a diary of the November council meeting.

Some themes return and keep returning. One is the need to persuade politicians that mathematics is not just about counting. This is a problem in Britain and probably in the rest of the world. The LMS is trying to impress upon the government the importance of mathematics teaching and members could help by approaching their local Members of Parliament. Perhaps at the forthcoming ICM in Berlin national associations could get together to see how these issues could be addressed globally. There is much discussion of the ‘global economy’ and mathematics is a global discipline. This provides mathematicians with a justification to raise these issues with politicians.

In response to a request from the Director of the Newton Institute, LMS Council considered how the Newton Institute could improve its coverage of the mathematical sciences, in particular in the light of an assessment of the strengths and weaknesses of UK mathematics. Council welcomed this opportunity, and a lively discussion ensued, concentrating on the importance of the Scientific Steering Committee being open to the views of the wider mathematical community, of achieving a more widely representative subject balance on this committee, and of improving UK participation rates. The President was asked to write to the Director summarising the suggestions made.

The Treasurer reported on negotiations for a new building. Some of the working group had gone to look at yet another building which might be suitable. Council is hopeful that decisions can soon be made and that a report will be made to all members. However, buying a large building is a complex business, especially when VAT and refurbishment costs all have to be considered together with the price of the building.

Related in a somewhat curious way is the problem of the backlog on some publications. As has been mentioned before the LMS cannot continue to rely on the goodwill of members and their institutions. Council is considering the appointment of a Publications Manager, or rather, it is considering what such a job would involve. This might well relieve editors of
administrative tasks so that they could concentrate on academic issues. This involves office accommodation and takes us back to buildings. Publications are a very important part of the total activities of the LMS and provide the funding for many of the grants.

The Librarian brought to our attention the possibility of creating an historical collection. It would be good if such a collection could be housed in the new building. The reason for the proposal is that there are opportunities being discussed at the moment concerning two interesting collections.

Many members are affected by the Research Assessment Exercise, which is carried out by the funding councils in Britain. They are asking for views on how to improve the process. The LMS will be responding. However, the funding councils are trying to make the process of consultation as wide as possible and we urge everybody to contribute directly. All the details are available at the web site of the HEFCE (Higher Education Funding Council for England).

It has been a very interesting experience being on Council and writing the Diary. Before that I had served for six years on the Education Committee and have seen the LMS change the role it plays. Some of the activity has been forced upon the LMS by changes made in education and research, both in politics and finance. The new positive approach is one that I welcome and believe has created a base from which mathematics can gain great strength. The LMS is in a very strong position to continue to lead the wider mathematics community forward. Members of Council work very hard to make the LMS successful and most of the time Council gets it right. We all make mistakes but it would help if there was a more positive response from members. We tend to take silence for assent but sometimes, perhaps, it is apathy. This leads Council to be a little insular and to select new participants from those who are known to members of Council. It would be good to see more involvement in elections and policies from the members.

Alan Camina

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**MEETING OF THE SOCIETY**

A meeting was held on Friday 21 November 1997 at the Scientific Societies' Lecture Theatre, New Burlington Place, Professor J.M. Ball, FRS, President, in the Chair. There were present about 60 members and visitors. Dr A.R. Pears and Dr D.J. Collins were appointed Scrutineers for the election of Council Members and collected the ballot papers. The Treasurer, Professor A. O. Morris presented his annual report, which is published in this issue of the Newsletter. Messrs. Fraser Russell were appointed as auditors.


Dr M.R. Jerrum gave a lecture entitled 'Coupling techniques in the design and analysis of experiments'. After tea the Scrutineers announced the election results which are published in this issue of the Newsletter. The President, on Council's behalf, presented the 1997 Naylor Prize Certificate to Professor F.P. Kelly FRS, who then gave the 1997 Naylor Prize Lecture on 'Pricing and rate control for communication networks'. The meeting adjourned for the Annual Dinner, which was held at the Naval and Military Club and attended by 61 people.

**RICHARD D. RESCO**

Professor Richard D. Resco, who was elected a member of the London Mathematical Society on 21 March 1986, died on 28 September 1997, aged 47.
LONDON MATHEMATICAL SOCIETY

TWO-DAY MEETING

FRIDAY 20th & SATURDAY 21st FEBRUARY 1998

UNIVERSITY OF SOUTHAMPTON

Hyperbolic Geometry

Friday
1.45-2.45  Alex Lubotzky (Hebrew University, Jerusalem)
A non-arithmetic super-rigid group; a contra example to Platonov’s conjecture
3.15-4.15  Yair Minsky (SUNY)
Kleinian length functions and the complex of curves
4.30-5.30  Werner Ballmann (Bonn)
Groups acting isometrically on Hadamard spaces

Saturday
9.00-10.00  Brian Bowditch (Southampton)
Boundaries of hyperbolic groups
10.30-11.30  Caroline Series (Warwick)
How to draw quasifuchsian space for once punctured tori
12.00-13.00  Misha Kapovich (Utah)
Hyperbolic groups with one-dimensional boundaries

All lectures will be in Law Lecture Theatre A,
Nuffield Theatre Complex, Highfield Campus

There will be a dinner on the Friday evening:
for further details see the web page
(http://www.maths.soton.ac.uk/pure/LMSFeb.html)
History of Mathematics

Lectures in the History of Mathematics
Henk J. M. Bos, Mathematics Institute, Utrecht, Netherlands
Volume 7; 1993; 197 pages; Hardcover; ISBN 0-8218-9001-8; List $86; Individual member $52; Order code HMATH/7LMS

Ramanujan: Letters and Commentary
Bruce C. Berndt, University of Illinois, Urbana, and Robert A. Rankin, University of Glasgow, Scotland

This commendable collection ... has brought together precious documents scattered in many places and provides the reader with a wealth of interesting matters related to one of the luminaries in the world of mathematics. [And] through brief and insightful notes and commentaries, the work throws light on many an interesting side street connecting to the grand avenue of knowledge on which we are riding. With resuscitations of some fading photographs and an impressive list of more than 300 references, this book is a very valuable addition to the literature.

—Choice

Delightful reading ... a useful reference on English analysts and number theorists of Hardy’s time ... has many pictures, some of them quite marvelous ... What Berndt and Rankin have done is to make a great deal of primary material available.

—Zeitschrift für Mathematik

Berndt and Rankin have produced a book that should appeal to everyone with an interest in mathematics ... what better way to understand the man behind the mathematician Ramanujan than to read letters written by him and about him? Berndt, with the experience he has gained editing Ramanujan’s notebooks, and Rankin, one of the veterans in this field, who knew Hardy, Littlewood, Watson, and other British contemporaries of Ramanujan, have combined perfectly to produce this book.

—American Mathematical Monthly

[The] filling in of details previously overlooked is one of the merits of the ... book ... Those who helped Ramanujan have our gratitude, for he found many things which we still would not have discovered without his deep insight into the structure of formulas. This book helps us realize who helped and how in more detail than was possible before reading some of the letters.

—Mathematical Reviews

Highly recommended to anyone with an interest in Ramanujan.

—Bulletin of the LMS

Volume 9; 1995; 347 pages; Hardcover; ISBN 0-8218-0287-9; List $59; All AMS members $47; Order code HMATH/9LMS

Beginning with Volume 4, History of Mathematics is co-published with the London Mathematical Society. Members of the LMS may order directly from the AMS at the AMS member price. The LMS is registered with the Charity Commissioners.

All prices subject to change. Charges for delivery are $3.00 per order. For optional air delivery outside of the continental U. S., please include $6.50 per item. Prepayment required. Order from: American Mathematical Society, P. O. Box 5094, Boston, MA 02205-5094, USA. For credit card orders, fax (401) 455-4046 or call toll free 800-321-4AMS (4267) in the U. S. and Canada, (401) 455-4000 worldwide. Or place your order through the AMS bookstore at http://www.ams.org/bookstore/. Residents of Canada, please include 7% GST.

AMS and LMS members may order through Oxford University Press and receive their member discounts: fax +44 (0) 1865 267782 or email at science.books@oup.co.uk
TREASURER’S REPORT TO THE ANNUAL GENERAL MEETING 1997

As a published version of the Annual Report and Accounts is available to members on request and as a version will be deposited in the Society’s Archives on the World Wide Web, it is only necessary to highlight a few basic facts.

In the Financial Year September 1st 1996 - August 31st 1997

- The Fixed Asset Investments of the Society increased from £7,939,689 to £9,110,739. Financial markets continued to be strong during this period and this is reflected in the growth in the Society’s assets.
- Credit Suisse (UK) Limited were appointed as Investment Managers with discretionary powers for the Society in November 1996. A new Investment Policy was agreed with them.
- At the end of the financial year on August 31st 1997 the total in the Ordinary Share Fund was £5,127,663 (£2,770,581), in the Fixed Interest Fund was £1,353,542 (£2,353,463) and in Bank and Building Society Deposits was £2,547,534 (£2,712,645) - last year’s figures in brackets.
- These figures reflect the restructuring of the Society’s investment portfolio to bring it more in line with that of the average charity - for example, the Society’s holding in Index Linked Funds have been considerably reduced.
- The Printing and Publication Reserve Fund and the Building and Development Reserve Fund have been increased to £1,000,000 and £1,500,000 respectively.
- The Council has decided that the time has come to purchase its own premises in Central London and is now actively looking for suitable accommodation.
- Again this year, the Society’s publishing activities have flourished both academically and financially, generating a surplus of £518,920.
- The Society received a generous bequest of more than £40,000 from the late Professor S. Verblunsky, Queen’s University, Belfast.
- Total expenditure on conferences and the various schemes to support research increased to £157,764 (almost doubling the expenditure in previous years).
- Further expenditure in support of the main objects of the Society also increased to £116,935 (last year £69,740).
- Total membership (including Institutional Members) increased to 2,444, the subscriptions received totalled £31,913.
- In spite of increased activities on all fronts, administrative costs decreased during the year.

I would again this year wish to express my thanks to Susan Oakes, the Society’s Administrator, and her staff for their efficiency and unfailing support during the year.

It is my pleasure to recommend the Annual General Meeting

1. to approve the Society’s Accounts for the financial year September 1st 1996 - August 31st 1997.
2. to re-appoint Messrs Fraser Russell, Chartered Accountants, as Auditors for the financial year September 1st 1997 - August 31st 1998.

A.O. Morris
Treasurer

ANNUAL LMS SUBSCRIPTION

The Society is appreciative of those members who have paid their 1997/98 subscriptions. May we remind those who have not yet paid that subscriptions were due on 1 November 1997. Prompt payment ensures continuity of publications and avoids the need for time-consuming reminders. The Society reserves the right to discontinue the supply of periodicals and Newsletters to members whose subscription remains unpaid by 31 January 1998. The methods of payment are either by a sterling cheque drawn on a UK bank, a US$ cheque drawn on a US bank, Direct Debit, Credit Card, Eurocheque quoting your card number on the reverse or by Giro. If you have misplaced your renewal of subscription form, contact the LMS office, e-mail: lms@lms.ac.uk; tel: 0171 437 5377; fax: 0171 439 4629.
EPSRC-LMS SHORT COURSE  
ON FUCHSIAN GROUPS  

This course is being held at Lancaster University from 22 - 28 March 1998, mainly funded by EPSRC, but with a contribution from the LMS. It is intended to provide research students with the tools for their own investigations and to bring them together for the opportunity of discovering a common purpose. The lectures will be of an MSC standard and students from all areas of mathematics and mathematical physics will be encouraged to attend; no special knowledge will be assumed. The programme is organised by FM Neumann (Oxford) and consists of three 7-hour lecture courses.

**Geometry and Topology** Alan Beardon (Cambridge)  
Hyperbolic geometry of the disc and half-plane. Matrices and Mobius maps, trace, conjugacy classes and geometric action. Discrete groups and discontinuous actions. Fundamental domains; basic properties. Cusps. Generators and relations from fundamental regions. Geometric constraints on Fuchsian groups. Quotient spaces. Riemann surfaces, the Uniformisation theorem.

**Groups and Combinatorics** Gareth Jones (Southampton)  

**Number Theory and Modular Forms** Richard Taylor, FRS (Harvard)  

There will also be daily seminars, at which students can discuss the course material with an experienced tutor T.K. Carne (Cambridge) or David Singerman (Southampton).

Travel and accommodation charges will be paid for all EPSRC postgraduate students. Those who can find their own support will also be welcome. Further details and application forms are available from: John Gilbert, Department of Mathematics and Statistics, Lancaster University, Lancaster LA1 4YF (tel: 01524 593941, e-mail: j.gilbert@lancaster.ac.uk).
G. Pólya, G. Szegő
Problems and Theorems in Analysis I
Series, Integral Calculus, Theory of Functions.
Softcover £ 26.00
ISBN 3-540-63640-4

G. Pólya, G. Szegő
Problems and Theorems in Analysis II
Theory of Functions, Zeros, Polynomials, Determinants.
Number Theory, Geometry
Softcover £ 26.00
ISBN 3-540-63686-2

From the reviews:
"The work is one of the real classics of this century; it has had much influence on teaching, on research in several branches of hard analysis, particularly complex function theory, and it has been an essential indispensable source book for those seriously interested in mathematical problems. These volumes contain many extraordinary problems and sequences of problems, mostly from some time past, well worth attention today and tomorrow. Written in the early twenties by two young mathematicians of outstanding talent, taste, breadth, perception, perseverance, and pedagogical skill, this work broke new ground in the teaching of mathematics and how to do mathematical research.
Bulletin of the American Mathematical Society

S. Sakai
C*-Algebras and W*-Algebras
Softcover £ 26.00
ISBN 3-540-61633-1

From the reviews:
"This book is an excellent and comprehensive survey of the theory of von Neumann algebras. It includes all the fundamental results of the subject, and is a valuable reference for both the beginner and the expert.
Math. Reviews
"The specialist in this and allied areas will find the wealth of recent results and new approaches throughout the text especially rewarding.
American Scientist
"The title of this book at once suggests comparison with the two volumes of Dixmier and the fact that one can seriously make this comparison indicates that it is a far more substantial work that others on this subject which have recently appeared"

T.A. Springer
Jordan Algebras and Algebraic Groups
Softcover £ 26.00
ISBN 3-540-63632-3

From the reviews:
"...presents an important and novel approach to Jordan algebras. Springer's work will be of service to research workers familiar with linear algebraic groups who find they need to know something about Jordan algebras and will provide Jordan algebraists with new techniques and a new approach to finite-dimensional algebras over fields.
American Scientist
"By placing the classification of Jordan algebras in the perspective of classification of certain root systems, the book demonstrates that the structure theories associative, Lie, and Jordan algebras are not separate creations but rather instances of the one all-encompassing miracle of root systems. ..."
Math. Reviews
REPORT ON THE 1997 LMS/HoDMS SURVEY

This year the questionnaire was presented in a new format. Although 66 responses were received, this is only a 50% response rate; some major departments did not reply. There was an increase in the number (46 rather than 26) of departments that had responded in two consecutive years, thus making comparisons easier to make. Unlike previous years, no distinction was made, in the analysis of the data, between ‘Old’ and ‘New’ universities; if there are clear differences in practice they seem to be mainly between universities with traditional courses and those with ‘modular’ courses. Some of the main features of the responses were:

1. Student Numbers
   - Undergraduate numbers (from 62 responses) were:
     - Undergraduate numbers (from 62 responses) were:
       
       |                         | Total  | Graduating 1996 |
       |-------------------------|--------|-----------------|
       | Single honours          | 7750   | 1474 (20.0%)    |
       | Combined                | 4122   | 579 (14.7%)     |
       | HND                     | 226    | 78 (34.5%)      |
       | General degree          |        | 103             |
       
       [To obtain the percentages, the numbers graduating with a general degree have been distributed between the honours degrees.]

   - There seems to be a high ‘wastage’ rate: those that enter intending to pursue a mathematics degree but do not complete the degree. Figures on the proportion of these students that qualify for another degree as opposed to those who fail to graduate, are difficult to obtain but the next survey may include relevant questions.

   - A continuing drift away from single honours to combined honours degrees

   - The bulk of service teaching remains in Engineering and Science. Figures from 62 responses were:
     
     | Numbers of Students | % of time on Mathematics |
     |----------------------|--------------------------|
     | Engineering          | 31,993                   | 9.5                       |
     | Computing            | 6,069                    | 12.6                      |
     | Other Science        | 17,963                   | 13.6                      |
     | Social Science       | 14,240                   | 7.0                       |
     | Others               | 10,880                   | 7.9                       |

   - Postgraduate numbers remain steady

   - Taught M.Sc. course numbers (from 65 responses) were: UK:283, Other EU: 62, Non EU: 65, Part time: 227

   - Ph.D. student numbers (from 64 responses) were:
     
     |                         | Pure | Applied | Statistics |
     |-------------------------|------|---------|------------|
     | UK                      | 192  | 335     | 127        |
     | Other EU                | 42   | 53      | 27         |
     | Non EU                  | 75   | 126     | 104        |
     | Part time               | 15   | 58      | 72         |

     Of these almost exactly half are funded from standard Government sources, EPSRC: 389 (44%) being the main source, 116 (13%) funded by university scholarships, 52 (6%) from industrial sources.
2. Staff Numbers

- Teaching/research staffing numbers (from 65 responses) were:

<table>
<thead>
<tr>
<th></th>
<th>Pure</th>
<th>Applied</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent</td>
<td>369 / 8</td>
<td>567 / 37</td>
<td>384 / 10</td>
</tr>
<tr>
<td>Temporary</td>
<td>26 / 19</td>
<td>42 / 27</td>
<td>45 / 19</td>
</tr>
<tr>
<td>Outside Funds</td>
<td>1 / 41</td>
<td>24 / 111</td>
<td>10 / 69</td>
</tr>
<tr>
<td>Total</td>
<td>396 / 68</td>
<td>633 / 175</td>
<td>439 / 98</td>
</tr>
<tr>
<td>New in 95/96</td>
<td>18 / 18</td>
<td>43 / 33</td>
<td>32 / 27</td>
</tr>
</tbody>
</table>

Of the total of 171 new appointments, 21 were from other EU countries and 38 from non-EU countries.

Departing staff totalled 58 of whom 34 had permanent positions and 15 of the other 24 were non-UK nationals.

The number of staff expected to retire before 2001 are:

Totals for support staff were:
248 Secretarial, 69 Computing Officers, 60 technicians and 8 others.

3. Library Resources

- 50 responded about library resources and their average expenditure was £29.6K per annum (£22.8K of this on journals).

Maths Reviews is the only reviewing journal taken by more than half the responding departments. Of 66 responders, 21 take it in hard copy only, 9 on CD-ROM and 9 have on-line access.

### NORTH BRITISH FUNCTIONAL ANALYSIS SEMINAR

A meeting of the North British Functional Analysis Seminar will be held at the University of Newcastle-upon-Tyne from 2.30 pm until 5.00 pm on Monday 2nd March 1998. The speaker will be Professor A.G. O’Farrell (Maynooth), who will lecture on ‘Algebras of Smooth Functions’. For further information please contact Dr G. Blower, Lancaster University (e-mail: g.blower@lancaster.ac.uk).

### THE DYNAMICS OF SKEW PRODUCTS

The second meeting of the LMS Scheme 3 network “The dynamics of skew products” will take place at the Department of Mathematics and Statistics, University of Surrey on 23rd January 1998. For details please contact Dr P. Ashwin (p.ashwin@surrey.ac.uk).

### VISIT OF PATTY SOLOMON

Patty Solomon of the University of Adelaide will be visiting Biomathematics and Statistics Scotland in Edinburgh from March to May 1998. Her research interests include survival analysis, AIDS research and topics in components of variance. For further information please contact Rob Kempton, Biomathematics & Statistics Scotland, University of Edinburgh (e-mail: rob@bioss.sari.ac.uk).

### VISIT OF DR M.K. MURRAY

Dr Michael Murray of the University of Adelaide will be visiting the University of Edinburgh for March, April and May 1998, as an EPSRC Visiting Fellow. His interests are in differential geometry and mathematical physics, and he is an expert on magnetic monopoles, gerbes and anomalies, and applications to statistics of differential geometry. For further information please contact Michael Singer, Department of Mathematics and Statistics, University of Edinburgh (e-mail: michael@maths.ed.ac.uk).
Russian Mathematical Surveys is the English translation of the Russian bi-monthly journal Uspekhi Matematicheskikh Nauk, founded in 1936. Until the last issue of 1997, Russian Mathematical Surveys was published jointly by the London Mathematical Society and the British Library. Starting from the first issue of 1998, the journal will be published jointly by the London Mathematical Society, Turpion Ltd, and the Russian Academy of Sciences. The English language version is a cover-to-cover translation of all the material: that is, the survey articles, the Communications of the Moscow Mathematical Society, and the biographical material.

Contents Include

This is a high prestige journal covering a wide area of mathematics. The Russian original is rigorously refereed within the Russian Academy of Sciences and the translations are carefully scrutinised and edited by the London Mathematical Society. The survey articles on current trends in mathematics are generally written by leading experts in the field at the request of the Editorial Board.

Audience

Postgraduate students, research fellows, postdoctoral workers, lecturers and researchers across many branches of mathematics, mechanics, and mathematical physics.

Facts & Features

- A volume contains about 25 surveys and over 100 communications in around 1400 pages.
- Core of mathematics from the Russian Federation.
- REFERRED BY LEADING EXPERTS.
- Our goal is to reduce the gap between the Russian and English versions to three months in 1998.
- Archival CD-ROM with a flexible search tool will be distributed with the last issue of 1998 to print-version subscribers at no additional cost.
- Abstracts and table of contents available via Internet: http://turpion.ioc.ac.ru/
- Full text online at no extra cost to current volume subscribers.

For more and updated information please visit us at: http://turpion.ioc.ac.ru
At the Annual General Meeting of the Society held at the Scientific Societies’ Lecture Theatre on Friday 21 November 1997, the following were elected to the Council of the Society: Professor J.M. Ball, FRS (President); Professor K.A. Brown, FRSE and Professor A.J. Macintyre, FRS (Vice-Presidents); Professor A.O. Morris (Treasurer); Professor J.S. Pym (Council and General Secretary); Dr D.J.H. Garling (Meetings and Membership Secretary); Professor E.C. Lance (Publications Secretary); Dr J.A. Erdos (Librarian); Professor U. Martin, Professor P.T. Saunders, Professor M.J. Taylor, FRS (Members-at-Large 1-year terms); Dr C.A. Hobbs, Professor M.A.H. MacCallum, Dr I.A. Stewart (Members-at-Large 2-year terms).

Dr R.J. Archbold, Dr A.G. Chetwynd, Professor F.C. Kirwan, Professor E.G. Rees, FRSE, Professor A.J. Scholl and Professor J.F. Toland are Members-at-Large whose terms expire in 1998.

Applications are invited for about 12 University Research Fellowships in all branches of the natural sciences, including mathematics, tenable from 1 October 1998 (or later in the academic year 1998-99). Applicants must be citizens of the EU who are either currently employed in the UK or who, if not employed, have at some point been resident in the UK for a continuous period of three years other than for the sole purpose of receiving full-time education. Applicants should have a PhD or equivalent research experience, should be at least 26 but should not have passed their 40th birthday on 1 October 1998 and must have between two and seven years' postdoctoral experience by that date. Application forms and further information are available from the Research Appointments Department, The Royal Society, 6 Carlton House Terrace, London SW1Y 5AG (fax: 0171 930 2170; e-mail: ukresearch.appointments@royalsoc.ac.uk; WWW: http://www.royalsoc.ac.uk). The closing date for applications is 23 January 1998. Application forms are not available after 9 January 1998 and applications arriving after 4 pm on 23 January will not be considered.

This will be held at Coventry University on 16 April 1998. The main speakers will be Sarah Rees (Newcastle) and Gillian Raab (Napier). Other lectures will be given by Sarah Whitehouse (Paris), Sharon Seddougui (Birmingham), Helen Wilson (Cambridge) and Patricia Dominguez (Imperial) There will also be a Panel Discussion. The meeting is open to all members of the mathematical public, and there will be a registration fee of £5. The meeting is supported by the LMS and there are some funds available to support women research students who wish to attend. For further details contact Helen Robinson, School of MIS, Coventry University, Priory Street, Coventry CV1 5FB or mtx057@coventry.ac.uk.

Ce prix de la Société Mathématique de France, décerné tous les deux ans, récompense un article, un livre, une émission de radio ou de télévision, un scénario de film ou toute autre réalisation, initiative ou projet, destinés à mieux faire comprendre les mathématiques et leurs développements récents. Il sera décerné au printemps 1998 et remis au(x) lauréat/e(s) lors de l’Assemblée Générale de la S.M.F. en juin 1998. Les candidatures peuvent être soumises par les candidats eux-mêmes ou par toute autre personne physique ou morale. Les dossiers de candidature ou lettres de recommandation sont à adresser à: S.M.F. (Prix d’Alembert), IHP, 11 rue Pierre et Marie Curie, 75231 Paris cedex 05 avant le 15 février.
Both of these software packages take the drudgery out of maths and let you explore freely with confidence. DERIVE is the easiest to use. It does about 80% of A-level maths (the rest is thought) and gets you from A-B securely and quickly. Think of it like a shopping car that also wins Grand Prix and never lets you down. (Why walk when you can DERIVE?)

MACSYMA on the other hand is the absolute top of the range model. It does all the maths you could ever need, with unparalleled accuracy, has the most sophisticated state of the art interface, is so smart you can even converse with it in English and costs just a fraction of other high level inferior packages!

EVERY PROFESSIONAL MATHEMATICIAN SHOULD OWN THESE AWESOME TOOLS

DERIVE for Windows makes mathematics more enjoyable by eliminating the drudgery of tedious error-prone mathematical derivations. It gives you the freedom to explore different approaches to problems - approaches that you probably would not even consider trying if you had to do the calculations by hand.

This powerful and tireless mathematical assistant intelligently applies the rules of algebra, trigonometry, calculus, and matrix algebra to solve a wide range of mathematical problems. This nonnumeric approach goes far beyond the capabilities of mere statistics packages and equation solvers that use only approximate numerical techniques.

Macsyma

Quite simply, Macsyma is the best maths software you can buy. In the most comprehensive test ever published for maths software, Dr. Michael Wester of Cotopaxi Inc., tested seven packages on a large suite of problems (see http://www.macsyma.com). At the time, Macsyma scored 106, Maple V3 scored 90.5 and Mathematica 2.2 scored 88. Macsyma now claims to score in the 120s on this test. Available for Windows PCs or Unix.

Maths Power and Reliability

- ALGEBRA & CALCULUS
  Macsyma 2.2 gets more problems right than any other maths software. Only Macsyma gets a perfect score on the Aslaksen test.

- LINEAR ALGEBRA
  Provides nearly all the linear algebra and language features of Matlab™ and Macsyma does linear algebra numerically and symbolically.

- DIFFERENTIAL EQUATIONS
  Macsyma 2.2 offers you the most complete suite of symbolic and numerical ODE solvers, including numerical methods for stiff systems. And for PDEs, Macsyma and its finite element companion PDEase form an unbeatable team.

Graphics

Editable, animated scientific graphics. You control viewpoint, zoom, clipping, rendering, labels, and lighting. Over 250 attributes in a typical 3D plot - right in the notebook. View animated movies of solutions to dynamic problems. Click on a point to see its coordinates. Display the plotted area in a DataViewer.

Halve the time and energy to solve maths problems by switching to the new Macsyma 2.2. It understands plain English so you can get on with your maths straightaway without the need to learn a command language.

Understands Plain English!

Describe a task in your own words and Macsyma returns executable 'tips.'

Notebooks

Combine formatted text, textbook-quality maths displays, striking scientific graphics. Re-execute commands in place, or entire notebooks. Add your own hypertext links to jump within or between notebooks to any document or URL.

Data Acquisition

The new DataViewer lets you import, export, view, edit, analyse, filter and graph large numerical data sets. Plenty of data analysis tools, such as nonlinear least-squares fit, data smoothing, and interpolation.

Incredible Value

- Macsyma with Numkit (W'95, NT) £250
- Macsyma (W3.1, 95, NT) £180
- Macsyma (limited documentation) £140
- Macsyma Lite (restricted version) £45
(N x 0.5 x price for N licences)
1998 LMS PRIZES

The Council proposes to award, in Summer 1998, a De Morgan Medal, a Senior Berwick and one or more Junior Whitehead Prizes. Accordingly, it has appointed J.M. Ball, T.J. Lyons, G. Segal, M.J. Taylor and O. Penrose to the 1998 Prizes Committee.

The Council invites members of the Society to submit their views on possible candidates for the award of these Prizes confidentially in writing to any member of the Prizes Committee by 1 March 1998. In each case, nominations should contain explicit reference to the grounds on which the nomination is based. The Prizes Committee would particularly welcome suggestions of possible candidates for the award of the Senior Berwick Prize and the Junior Whitehead Prize(s), in view of the condition (explained below) concerning publication which applies to the former and the age condition which applies to the latter. Council reserves the right not to make an award in the event that no candidate of sufficient merit is recommended by the Prizes Committee for a particular Prize.

The De Morgan Medal is to be awarded to a mathematician who is normally resident in the United Kingdom on 1 January 1998. The sole grounds for the award of the Medal is the candidate’s contribution to mathematics.

The Senior Berwick Prize is to be awarded to a mathematician who is a member of the Society on 1 January 1998, in respect of a definite piece of mathematical research work actually published by the Society during the period from 1 January 1990 to 31 December 1997; it may not be awarded to any person who has previously received the De Morgan Medal.

The Junior Whitehead Prizes are to be awarded to mathematicians who on 1 January 1998 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.

No person may be awarded a given Prize more than once, and the President of the Society and the members of the Prizes Committee are ineligible for any of the awards. The detailed regulations and procedure for the award of each Prize can be obtained from the Administrator, London Mathematical Society, Burlington House, Piccadilly, London W1V 0NL (lms@lms.ac.uk).

J.S. Pym
Council and General Secretary

COMMUTATIVE ALGEBRA

There will be a Conference on Commutative Algebra in Honour of David Rees’s 80th Year. This will take place at the University of Exeter during 13 - 16 August 1998, just before the 1998 International Congress of Mathematicians meets in Berlin. The organisers are P. Vamos (Exeter, local organiser) and R.Y. Sharp (Sheffield). Among those who have already accepted invitations to speak are C. Huneke (Purdue), D. Katz (Kansas), D. Kirby (Southampton), L. O’Carroll (Edinburgh), N.V. Trung (Hanoi), G. Valla (Genoa) and J.K. Verma (India). The conference is supported financially by a grant from the London Mathematical Society. This will be used to cover part of the costs of attendance by the invited speakers and some graduate students. Participants from developed countries will be expected to pay a registration fee of £35.

EWM WORKSHOP

A European Women in Mathematics Workshop on Moduli Spaces in Mathematics and Physics will be held in Oxford on 2 and 3 July 1998. Full details will be published in the next issue of the Newsletter; preliminary information can be obtained from Frances Kirwan (kirwan@maths.ox.ac.uk).
Representation Theory and Algebraic Geometry
Edited by A. Martsinkovsky and G. Todorov
The variety of topics covered here include commutative algebra and algebraic geometry, homological algebra and representation theory.
£20.95 PB 0 521 57789 6 131 pp. 1997
London Mathematical Society Lecture Note Series 238

Wavelets
Calderón–Zygmund Operators and Multilinear Operators
Yves Meyer and Ronald Coifman
Translated by David Salinger
The new theory of Calderón–Zygmund operators is described for the first time in English. This volume follows naturally from Wavelets and Operators and describes where and when wavelet bases should be used.
£40.00 HB 0 521 42001 6 334 pp. 1997
Cambridge Studies in Advanced Mathematics 48

Geometric Control Theory
Velimir Jurdjevic
Geometric control theory concerns the differential equations described by non-commuting vector fields. It is applicable to a wide range of problems from differential geometry, applied mathematics, physics and engineering.
£60.00 HB 0 521 49502 4 520 pp. 1997
Cambridge Studies in Advanced Mathematics 52

Lectures on Vector Bundles
J. le Potier
Translated by Antony Maciocia
This work consists of two courses on the moduli spaces of vector bundles. The first is introductory, and assumes very little background; the second is more advanced and takes the reader into current areas of research.
£40.00 HB 0 521 48182 1 259 pp. 1997
Cambridge Studies in Advanced Mathematics 54

Cambridge books are available from good bookshops, alternatively phone UK + 44 (0)1225 585 832 or fax UK +44 (0)1223 325152. For further information, please email Giulia Williams at Giulia.Williams@cam. ac.uk. Worldwide Web server http://www.cup.cam.ac.uk
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<thead>
<tr>
<th>Qty</th>
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E-mail: science@cup.cam.ac.uk
The Society’s Programme and Conference Fund is used to give financial support to various mathematical activities in the UK. Grants are made under five main headings, which are set out in summary form below.

<table>
<thead>
<tr>
<th>Type of Grant</th>
<th>General Purpose</th>
<th>Amount</th>
<th>Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Grant</td>
<td>Support of conferences within the UK. The grant may be either a substantial contribution to a small meeting or a small contribution to a large meeting</td>
<td>Up to £2500</td>
<td>31 January, 31 May and 31 August.</td>
</tr>
<tr>
<td>Scheme 2</td>
<td>Support for a foreign visitor who will give lectures at three places in the UK</td>
<td>Return travel to UK up to a maximum of £1000</td>
<td>At least three months before the visit</td>
</tr>
<tr>
<td>Scheme 3</td>
<td>Support of incidental costs for collaborative work by research groups from three (or more) different places</td>
<td>Travel or other costs up to £1000 for one year</td>
<td>31 January, 31 May and 31 August</td>
</tr>
<tr>
<td>Scheme 4</td>
<td>Support of travel and subsistence costs incurred by a UK member or their collaborator in carrying out joint research.</td>
<td>Up to £300</td>
<td>31 January, 31 May and 31 August</td>
</tr>
<tr>
<td>fSU Scheme</td>
<td>Support of visits to UK by fSU mathematicians and support of visits to fSU UK mathematicians</td>
<td>Basic travel and living expenses up to £1000</td>
<td>At least three months before the visit</td>
</tr>
</tbody>
</table>

Only Society members are eligible for Scheme 4 grants. Otherwise, any mathematician working in the UK is eligible for a grant; applications from non-members must be countersigned by a Society member. Applications for conference grants must be submitted on the appropriate form, available either from the Society’s Office (lms@lms.ac.uk), or from the Society’s ftp (ftp.lms.ac.uk). In all other cases, applications should be made by letter, including (as appropriate) the academic case, details of participants and activities, places to be visited, the proposed timetable and a budget of estimated costs. Applications should be sent to the Administrator, Miss Susan Oakes, at Burlington House, Piccadilly, London W1V 0NL (tel: 0171 437 5377; e-mail: lms@lms.ac.uk; fax: 0171 439 4629). Further information and advice can be obtained from her or from the Meetings and Membership Secretary, Dr D.J.H. Garling, Department of Pure Mathematics and Mathematical Statistics, 16 Mill Lane, Cambridge CB2 1SB (e-mail d.j.h.garling@pmms.cam.ac.uk; fax 01223 337920; tel: 01223 337978). The information is on the Society’s home page on the world wide web at http://www.lms.ac.uk/grants/. Grants awarded since June 1997:

<p>| CONFERENCE |
| Topic | Applicant | Grant |
| Conference on Commutative Algebra in honour of David Rees’ 80th year | R Y Sharp &amp; P Vamos | £2,500.00 |
| Numerical Analysis and Computers - 50 Years of Progress | N J Higham | £550.00 |
| Scottish Computational Mathematics Symposium 1997 | D B Duncan | £743.00 |</p>
<table>
<thead>
<tr>
<th>Event</th>
<th>Organiser/Speaker</th>
<th>Grant</th>
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<tr>
<td>Diophantine Geometry and Differential Equations - Sir N G Lloyd</td>
<td>£1,800.00</td>
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<tr>
<td>Peter Swinnerton-Dyer’s 70th Birthday</td>
<td>F Kirwan &amp; F Tsou</td>
<td>£1,250.00</td>
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<td>Moduli Spaces in Mathematics and Physics - A Workshop organised by European Women in Mathematics</td>
<td>K A Jane White</td>
<td>£1,000.00</td>
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<tr>
<td>The Mathematical Biology of Pattern and Process</td>
<td>P R Turner</td>
<td>£2,500.00</td>
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<tr>
<td>13th British Topology Meeting</td>
<td>G Walker</td>
<td>£5,500.00</td>
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<tr>
<td>50th British Mathematical Colloquium</td>
<td>R M Whitaker</td>
<td>£1,600.00</td>
</tr>
<tr>
<td>Postgraduate Combinatorial Conference 1998</td>
<td>W M Oxbury &amp; P E Newstead</td>
<td>£2,480.00</td>
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<tr>
<td>Vector Bundles and Principally Polarised Abelian Varieties</td>
<td>I M James</td>
<td>£1,650.00</td>
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<tr>
<td>The Life and Work of G H Hardy</td>
<td>H D Robinson</td>
<td>£1,200.00</td>
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<td>British Women Mathematicians’ Day, 1998</td>
<td>A P Fordy</td>
<td>£2,500.00</td>
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<tr>
<td>Nonlinear Evolution Equations and Dynamical Systems (NEEDS ‘98)</td>
<td>A A Wheeler</td>
<td>£2,400.00</td>
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<tr>
<td>31st European Study Group with Industry - ESGI ‘98</td>
<td>A A Astolfi</td>
<td>£1,500.00</td>
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<tr>
<td>Silver Anniversary of Nonlinear Geometric Control Theory</td>
<td>A Movchan</td>
<td>£2,000.00</td>
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<tr>
<td>Singular Perturbations and Nonlinearities in Continuum Mechanics</td>
<td>C H Chu</td>
<td>£560.00</td>
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<tr>
<td>Jordan Structures in Analysis and Geometry</td>
<td>J Saxl &amp; R T Curtis</td>
<td>£2,500.00</td>
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**SCHEME 2**

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<tr>
<th>Applicant</th>
<th>Visitor</th>
<th>Places to Visit</th>
<th>Grant</th>
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<tbody>
<tr>
<td>G R Everest</td>
<td>C Deninger</td>
<td>East Anglia, Nottingham, Cambridge</td>
<td>£450.00</td>
</tr>
<tr>
<td>J R Hubbuck</td>
<td>M Mimura</td>
<td>Sheffield, Aberdeen, Oxford</td>
<td>£500.00</td>
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<tr>
<td>D B Duncan</td>
<td>G Kriegsmann</td>
<td>NBDES Institutions</td>
<td>£500.00</td>
</tr>
<tr>
<td>J Roe</td>
<td>J Rosenberg</td>
<td>Oxford, Manchester, Edinburgh</td>
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<tr>
<td>M MacCallum</td>
<td>P Chrusciel</td>
<td>Oxford, QMW, Southampton</td>
<td>£360.00</td>
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<tr>
<td>S E Rees</td>
<td>A Szczechanski</td>
<td>Southampton, Warwick, Newcastle, St Andrews</td>
<td>£250.00</td>
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<tr>
<td>P Ashwin</td>
<td>H Crauel</td>
<td>Surrey, Warwick, UMIST</td>
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**SCHEME 3**

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<tr>
<th>Applicant</th>
<th>Institution</th>
<th>Topic</th>
<th>Grant</th>
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<tr>
<td>R J Sharp</td>
<td>Manchester</td>
<td>Dynamical Systems</td>
<td>£1,000.00</td>
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<tr>
<td>J Gray</td>
<td>Open University</td>
<td>History of Mathematics</td>
<td>£500.00</td>
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<tr>
<td>N M Stephens</td>
<td>Goldsmiths College</td>
<td>Computational Number Theory</td>
<td>£750.00</td>
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<tr>
<td>N Snashall</td>
<td>Leicester</td>
<td>Representation Theory of Algebras</td>
<td>£1,000.00</td>
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<tr>
<td>P K Maini</td>
<td>Oxford</td>
<td>Order and Disorder in Tissues</td>
<td>£1,000.00</td>
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<td>G Gaeta</td>
<td>Loughborough</td>
<td>Mathematical Physics</td>
<td>£1,000.00</td>
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<tr>
<td>J Brodzki</td>
<td>Exeter</td>
<td>K-Theory and Analysis</td>
<td>£1,000.00</td>
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<tr>
<td>R S Mackay</td>
<td>Cambridge</td>
<td>The United Kingdom Spatially</td>
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<td>D E Evans</td>
<td>Swansea</td>
<td>Extended Dynamics Organisation</td>
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<tr>
<td>R Baddeley</td>
<td>Leicester</td>
<td>Mathematical Physics - Physical Mathematics</td>
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<tr>
<td>M J Nicol</td>
<td>UMIST</td>
<td>Permutation Group Theory</td>
<td>£1,000.00</td>
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<tr>
<td>D R J Chillingworth</td>
<td>Southampton</td>
<td>The Dynamics of Skew-Product Systems</td>
<td>£1,000.00</td>
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<tr>
<td>G K Sankaran</td>
<td>Bath</td>
<td>Bifurcation and Symmetry</td>
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<td>COW Seminar - Algebraic Geometry</td>
<td>£1,000.00</td>
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SCHEME 4
Applicant
J R Partington
M van den Berg
C T H Baker
N G Lloyd
C H Lai
R A Wilson
L O’Carroll
T Ward
J F Toland

Collaborator
I Chalender
E Bolthausen &
F den Hollander
A Tang
J P Françoise
K Chen
I Suleiman
H Flenner
M Einsiedler
E N Dancer

Applicant Institution Collaborator
Leeds Bristol
Manchester
Aberystwyth
Greenwich
Birmingham
Edinburgh
East Anglia
Bath

Institution
Zurich Nijmegen
China
Paris VI
Liverpool
Mu’tah, Jordan
Bochum
Vienna
Sydney

Grant
£300.00
£300.00
£300.00
£300.00
£300.00
£300.00
£300.00
£263.00

fSU SCHEME
Applicant
A A Lacey
N Vorobjov
A Pickering
T J Lyons
T J Lyons
I G Graham
Dr A Grigor’yan
E C Lance
D A Jordan
M Nazarov
L Fradkin
J D P Meldrum
Y M Suhov
A E Zalesskii
A Hone
E G Rees

Visitor
I A Molotkov
S V Duzhin
N Kudryashov
M Kleptsyna
A Piatniskii
D Natroshvili
E E Tyrtyschnikov
A D Bendikov
A Lebedev
V Bavula
V Tarasov
E V Glushkov
K Kaarli
A Komech

Institution
Troitsk, Moscow
Pereslavl-Zalessky
Moscow
Moscow
Moscow
Republic of Georgia
Moscow
Rostov
Minsk
Kiev
Steklov
Kuban State
Tartu, Estonia
Moscow

Grant
£800.00
£1,000.00
£990.00
£1,000.00
£2,250.00
£1,000.00
£1,000.00
£1,000.00
£1,000.00
£380.00
£380.00
£1,000.00
£400.00
£600.00
£1,000.00

Places to Visit
Heriot-Watt,
Nottingham, Bath &
St Andrews
Bath, Liverpool,
Oxford
Kent, Glasgow, Leeds
Imperial & Warwick
Imperial & Warwick
Salford, Bath,
Strathclyde
Salford, Manchester, Oxford
Salford, Manchester, Brunel
Imperial
Leeds, Edinburgh,
Aberdeen
Sheffield & Edinburgh
Durham, Leeds, York
South Bank
Edinburgh, Glasgow
&/or St Andrews
Cambridge &
Heriot-Watt
Minsk
Landau Summer School
Solitons, Geometry

Grant
£1,000.00
£1,000.00
£1,000.00
£1,000.00
£380.00
£1,000.00
£400.00
£600.00
£1,000.00

LANDAU SUMMER UNIVERSITY

I would like to express my gratitude to the London Mathematical Society for providing me with a grant to cover the teaching fee at the Landau Summer University (LSU). This was held at the Landau Institute in Chernogolovka.

Regarding practical aspects of travel there were no particular problems. Chernogolovka is about an hour away from Moscow by car, but the Institute has its own bus and car, and all LSU participants were picked up at the airport on arrival and taken back to Moscow on departure. There are also regular buses (usually at least one every hour) between Chernogolovka and Schelkovskaya (at the end of one of the Moscow metro lines), which I used to make visits to Moscow at
weekends. The metro service in Moscow is efficient and very cheap (the equivalent of twenty pence for a single journey anywhere on the network), and compared very favourably with the London Underground - particularly when I was kept waiting for 25 minutes on the tube coming back from Heathrow.

The standard of accommodation and catering for the LSU was generally pretty good. Like most of the participants, I had one of the best rooms in the Chernogolovka hotel, with a fridge, TV and telephone. There was a light breakfast in the Institute every morning, and lunches were in the canteen of the Institute of Chemical Physics; the latter took a bit of getting used to, but were mostly edible. In the evenings we had meals cooked for us in a private flat, and these were very good. Chernogolovka has a market nearly every day with fresh fruit and vegetables, as well as various shops and kiosks, and a few bars. However, there are no restaurants, so more sophisticated culinary needs can only be met in Moscow.

The academic programme of the LSU was excellent. The course of Mikhailov on soliton theory was particularly enjoyable for me, since although most of the material was familiar it gave me a different perspective on my doctoral research. Zakharov’s course on algebraic geometry was also good, although it suffered slightly due to his ill-health towards the end; anyway I am now ready to tackle an advanced book on the subject and incorporate some of the techniques I have learnt into my future work. For me the most difficult and unfamiliar material that I absorbed was in the cosmology course of Starobinsky, although I found it absolutely fascinating and managed to pass the examination at the end. Three courses was the maximum that one could follow in the time available, as this meant about six hours of lectures every day; however, I also attended a couple of Pokrovsky’s lectures. The examinations were optional and were not offered for every course, as they were really only essential for the Russian students who wished to do further research at the Landau Institute.

Above all I am grateful that I had the chance to interact with the Russians, Germans, Italians, Japanese, Brazilians and Quebecois at the LSU. The atmosphere was very good and we had a lot of fun as well as sharing ideas and understanding. Russian science has clearly had to face enormous difficulties due to economic hardship, and the future remains uncertain; many of the people I spoke to were extremely pessimistic. Nevertheless, the standards of research and teaching at the Landau Institute are very high, and hopefully the money received from the LSU will help to ensure that these standards are maintained. Overall I would say that this LSU has been a great success, and if it benefits the Landau Institute then I hope it will become a regular feature.

Andrew Hone

**AN AWARD**

Professor Dusan Repovš has received the 1997 Award of the Republic of Slovenia for scientific work, the highest such honour in Slovenia. Professor Repovš holds a Chair in Geometry and Topology at the Faculty of Education in the University of Ljubljana and is the Head of the Topology Group at the Institute of Mathematics, Physics and Mechanics.

**JORDAN STRUCTURES IN ANALYSIS AND GEOMETRY**

This conference will be held at Goldsmiths College London from 25 - 26 March 1998. The conference is supported by the London Mathematical Society and a British-Spanish Accion Integrada programme. Speakers include L.J. Bunce, C.M. Edwards, J.M. Isidro, A. Moreno-Galindo, A. Rodriguez-Palacios and J.D.M. Wright. Research students are particularly welcome to attend and may be given some financial support. For further information, contact the organizer: C-H Chu, Goldsmiths College, University of London, London SE14 6NW (e-mail: maa01chc@gold.ac.uk, tel: 0171-919-7866, fax: 0171-919-7853).
ADVANCED MATHEMATICS FOR APPLIED AND PURE SCIENCES

C.F. Chan, Man Fong, D. De Kee and P.N. Kaloni, all of Canada

Covers applicable mathematics that should provide a text, at the third year level and beyond, appropriate for students of both engineering and the pure sciences. The emphasis is on helping the student develop an understanding of mathematics and its applications.


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K. Trimèche, Tunisia

Hypergroups provide a very general and flexible context in which many of the classical techniques of harmonic analysis can be fruitfully employed. It is, therefore, natural to seek to exploit the newer techniques of wavelet analysis in this area. This text addresses itself to this challenge in some depth, providing a thorough and authoritative account of wavelet methods applied to hypergroups.

1997 • 358 pp • Cloth • ISBN 90-5699-080-2
US$120 / £78 / ECU100

INTEGRAL TRANSFORMS OF GENERALIZED FUNCTIONS AND THEIR APPLICATIONS

Ram Shankar Pathak, India

"...an in-depth and up-to-date survey of much of the analysis concerning distributional and ultradistributional integral transforms...a valuable addition to the literature."

— Richard D. Carmichael, Department of Mathematics and Computer Science, Wake Forest University, USA

For those who have a background in advanced calculus, elementary topology and functional analysis, this work provides a comprehensive analysis of the many important integral transforms and renders particular attention to all the technical aspects of the subject. The author presents the last two decades of research and includes important results from other works.

Late 1997 • 344 pp • Cloth • ISBN 90-5699-554-5
US$85 / £55 / ECU71
SERIES OF FABER
POLYNOMIALS

P.K. Suetin, Russia

Presents some important classical and modern results of the series of Faber polynomials and their applications, a subject in which interest has increased rapidly over the last decade. Applications include theory of functions of complex variables, theory of analytic function approximation and some aspects of numerical analysis.

Early 1998 • 320pp • Cloth • ISBN 90-5699-058-6
US$125 / £81 / ECU104

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SOLVING ODEs BY LINEAR
MULTISTEP INITIAL AND
BOUNDARY VALUE
METHODS

L. Brugnano and D. Trigiante, both of Italy

This book aims to generalize classical multistep methods for both initial and boundary value problems; to present a self-contained theory which embraces and generalizes the classical Dahlquist theory; to treat nonclassical problems, such as Hamiltonian problems and the mesh selection; and to select appropriate methods for a general purpose software capable of solving a wide range of problems efficiently, even on parallel computers.

Early 1998 • 448pp • Cloth • ISBN 90-5699-107-8
US$120 / £78 / ECU100

Stability and Control: Theory Methods and Applications, Volume 6

TENSOR AND VECTOR
ANALYSIS

Geometry, Mechanics and Physics

A.T. Fomenko, V.V. Trofimov and O.V. Manturov, all of Russia

Foreword by Professor Nigel Hitchin, Savilian Professor of Geometry, Oxford University, UK

Reflecting the significant contributions of Russian mathematicians to the field, this book contains a selection of papers on tensor and vector analysis. It is divided into three parts, covering Hamiltonian systems, Riemannian geometry and calculus of variations, and topology.

Early 1998 • 312pp • Cloth • ISBN 90-5699-007-1
US$90 / £59 / ECU75

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Sixth Edition

Boris V. Gnedenko, Russia

This sixth edition of a classic text first published in 1950, is a major revision over the fifth. It contains new material and for the first time includes a brief history of probability and its development. Exercise problems and examples have been revised and new ones added.

Late 1997 • 512pp • Cloth • ISBN 90-5699-585-5
US$64.95 / £42 / ECU54

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The Adams Lectures are held annually at the University of Manchester in memory of Frank Adams. The 1998 Adams Lecturer is Professor Franklin P. Peterson of M.I.T., who will be visiting Manchester from 1 March to 30 April. The lectures will be held in the Mathematics Department, University of Manchester in March 1998. Further details of dates, times and topics of the lectures will be announced later. The local organisers are Reg Wood (reg@ma.man.ac.uk) and Grant Walker (grant@ma.man.ac.uk), and the lectures are sponsored by KPMG.

The European Mathematical Society has launched its series of Summer Schools. The series is intended to include two schools a year, one in Pure Mathematics and one devoted to applications of Mathematics. With this activity the EMS wants to encourage young European mathematicians to meet and study together current developments in Mathematics and its applications. The EMS, through its Summer School Committee, will examine proposals for summer schools fully organized by other institutions. To meet the EMS requirements, each school should be at a pre-doctoral level, last from 2 to 3 weeks, and have about 100 participants, mainly graduate students or young mathematicians coming from several European countries. Costs of participation should be kept low and, if possible, grants should be available to people from countries which cannot afford any financial support. The EMS will guarantee its moral support to the selected schools, advertising within the European mathematical community, and will apply for funds to the summer school Programmes of the European Commission. Topics, which may be single or composite, sites, and organisers of the schools will vary each year.

The Society is now asking for proposals for the two 1999 summer schools. A proposal should in particular contain the topic (title and short description), names of lecturers, site, timing, costs, conditions for participants, name and address of the organizer. Proposals should be sent to: Professor G. Monegato, Dipartimento di Matematica, Politecnico di Torino, Corso Duca degli Abruzzi, 24, 10129 Torino, Italia; fax: 39-11-564.7599; e-mail: monegato@polito.it by 31 May 1998. Decision can be expected by the end of July.

The Newton Institute is currently seeking 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. By having some shorter programmes the Institute will be able to accommodate important, but less well-developed areas and also to improve the coverage of all areas of the mathematical sciences. (A proposal to introduce further flexibility in programme structure for 2000 is currently under consideration.)

For full details and submission guidelines, see: http://www.newton.cam.ac.uk/callprop.html. Proposals should be addressed to The Director, Professor Keith Moffatt, Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge CB3 0EH, UK; proposers should state whether they would prefer a four-month or six-month 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 January 1998; proposals for consideration at the second meeting in 1998 should be received by 31st July 1998.
**VISIT OF DR H. CRAUEL**

Dr Hans Crauel (Technische Universität Berlin) will be visiting the UK in late January 1998, supported by an LMS scheme 2 grant. His research is in the area of random dynamical systems and uses probability theory, ergodic theory and analysis to understand attractors and other properties, with applications to stochastic differential equations and other such systems. He is intending to give lectures at the Universities of Warwick (21st January), Surrey (23rd January) and UMIST (27th January) or dates thereafter. All members of the Society are welcome to attend these lectures. For more information, please contact Dr P. Ashwin (p.ashwin@surrey.ac.uk).

**GALOIS REPRESENTATIONS IN ARITHMETIC GEOMETRY**

A meeting on Galois Representations in Arithmetic Geometry will be held from 19-25 July 1998 at Anwgeia, Crete. The aim of the meeting is to provide an opportunity for discussing recent developments in the area of Galois representations and their connections with values of L-functions and modular forms. We are pleased to announce that D. Burns, T. Chinburg, K. Kato and T. Saito have already agreed to speak at the meeting. The EU and University of Crete have made some limited funds available for participants. Mathematicians who are interested in attending the meeting should contact one of the organisers: George Pappas (Princeton) e-mail: pappas@math.princeton.edu; or Martin Taylor (UMIST) e-mail: martin.taylor@umist.ac.uk

**POSITIVITY IN APPLICATIONS**

A meeting in memory of the late Professor Huijsmans will be held from 22 - 26 June 1998 at the Department of Mathematics, Middle East Technical University, Ankara Turkey. The following are definite speakers: L. Tzafriri, A.R. Schep, W. Luxemburg, R. Nagel, B. de Pagter, A. Wickstead, M. Orhon, Yu. Abramovich, C.D. Aliprantis, W. Arendt, A. Bukhvalov, G. Buskes, P. Dodds, K. Grobler, A.E. Gutman, F. Hernandez, A.E. Kusraev, I. Polyakakis and S. Kutateladze. There will be no registration fee. For more information: http://www.math.metu.edu.tr/~safak/conferences/ or write to Professor Safak Alpay at: safak@narwhal.cc.metu.edu.tr. Deadline for applications is 1 May 1998.

**WHITEHEAD-CHAPMAN MEETING**

A meeting devoted to the memory of Alfred North Whitehead (1861-1947; Imperial College 1914-1924) and Sidney Chapman (1888-1970; Imperial College 1924-1946) will be held at Imperial College, London, on Thursday 29 January 1998, with the following programme.

4.00 - 4.50 Anne Barrett
"From the Arithmometer to Electronic Arithmetic - the History till 1955" (Clore Theatre, Huxley Building)

5.00 - 5.50 Walter Hayman
"Mathematics at Imperial College since 1956" (Clore Theatre, Huxley Building)

6.00 - 6.30 Coffee and Tea
(FOyer, Mechanical Engineering)

6.30 - 7.20 Philip Davis
"Mathematical Evidence" (A.N. Whitehead Lecture)
(Theatre 220, Mechanical Engineering)

7.30 - 8.20 Paul Malliavin
"Differential Geometry and Stochastic Analysis on Riemannian Path Spaces" (S. Chapman Lecture) (Theatre 220, Mechanical Engineering)

The organizer is B. Zegarlinski. All are welcome to attend. Additional information can be obtained from e.rowley@ic.ac.uk (tel: 0171 594 8547; fax: 0171 594 8517) or from the internet (http://icmp2000.ma.ic.ac.uk/MathHistory/).
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## JANUARY 1998
- **16** Edinburgh Mathematical Society Meeting, Edinburgh University (252)

## FEBRUARY 1998
- **9-13** Hyperbolic Problems Theory, Numerics, Application Conference, ETH Zurich, Switzerland (246)
- **13** Edinburgh Mathematical Society Meeting, Edinburgh University (252)
- **20-21** Two-day London Mathematical Society Meeting, University of Southampton - Hyperbolic Geometry (254)

## MARCH 1998
- **13** Edinburgh Mathematical Society Meeting, Dundee University (252)
- **23-3 Apr** Symplectic Topology Workshop, Warwick University (255)
- **31-3 Apr** Computational Fluid Dynamics Conference, Oxford University (252)

## APRIL 1998
- **6-9** British Mathematical Colloquium, Manchester University
- **6-9** British Applied Mathematics Colloquium, Brunel University (254)
- **14-16** British Topology Meeting, Aberdeen University (255)
- **20-24** LMS Invited Lectures, Exeter University, Professor D. Zagier
- **20-24** Probability: Theory and Applications Workshop, Nottingham Trent University (252)

## MAY 1998
- **8** Edinburgh Mathematical Society Meeting, Aberdeen University (252)
- **22-23** London Mathematical Society and Irish Mathematical Society Joint Meeting on Complex Analysis and Dynamical Systems, London

## JUNE 1998
- **5** Edinburgh Mathematical Society Meeting, St Andrews University (252)
- **7-19** Arithmetic and Geometry of Algebraic Cycles NATO ASI, Alberta, Canada (255)
- **22-26** Groups of Finite Morley Rank Conference, Greece (255)
- **22-27** European Consortium for Mathematics in Industry (ECMI 98), Göteborg, Sweden (252)

## JULY 1998
- **5-9** Mathematics Colloquium, Victoria University of Wellington, New Zealand (254)
- **13-24** Symplectic Topology Workshop, Warwick University (255)
- **20-24** Dimensions and Dynamics Conference, Miskolc, Hungary (254)
- **20-24** Domain Decomposition Methods Conference, Greenwich University (254)
- **27-7 Aug** Nonlinear Analysis, Differential Equations and Control Seminar, Montreal, Canada (254)

## AUGUST 1998
- **18-28** International Congress of Mathematicians, Berlin, Germany (238) (242) (253)
- **30-5 Sep** Algebraic Number Theory and Diophantine Analysis Conference, Graz, Austria (249)

## JULY 1999
- **5-9** International Congress of Industrial and Applied Mathematics (ICIAM 99), Edinburgh (252)
- **12-16** British Combinatorial Conference, Kent University (254)

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