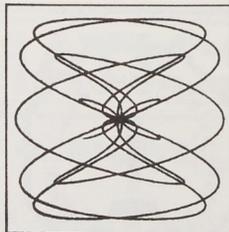


# THE LONDON MATHEMATICAL SOCIETY NEWSLETTER



**No. 132 Special Issue      September 1986**

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**Advertising:** Susan Oakes, LMS Office, Burlington House, Piccadilly, London W1V 0NL. Tel: 01-437 5377.

The *Newsletter* is published monthly, except in August and September. Items for inclusion (with the exception of advertising material) should be sent to the Editor, to arrive before the tenth day of the month prior to publication. Advertisements, and general enquiries about the Society, should be addressed to Susan Oakes at the LMS Office.

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## Forthcoming Meetings

Friday 17 October 1986, Burlington House  
(Meeting on Quasi-Crystals)

Friday 21 November 1986, Royal Society  
(The President, J. R. Hubbuck)

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## FIELDS MEDALS

The following were awarded Fields medals at the recent International Congress of Mathematicians:

**Simon K. Donaldson (Oxford University)** The Structure of 4-manifolds.

**Gerd Faltings (Princeton University)** The Modrell Conjecture.

**Michael H. Freedman (University of California, San Diego)** The 4 dimensional Poincare Conjecture.



# University of Petroleum & Minerals

DHAHRAN – SAUDI ARABIA

## MATHEMATICAL SCIENCES DEPARTMENT

### NEEDS

Faculty members for teaching graduate and undergraduate courses. Candidates should have a PhD in Mathematics, teaching experience, and research interests preferably in Applied Mathematics and/or Numerical Analysis.

The University offers attractive salary and benefits which are tax-free.

Send resumé with supporting documents to:

**Dean of Faculty & Personnel Affairs,  
University of Petroleum & Minerals,  
Dhahran – 31261,  
Saudi Arabia.**

THE CHINESE UNIVERSITY OF HONG KONG invites applications for the post of **Lecturer in Mathematics** (two vacancies) tenable from August 1, 1987. Applicants should possess a Ph.D degree in Mathematics. In addition to participation in the activities of the Board of Studies in Mathematics, the appointees are expected to undertake research in their field of specialization and be responsible for teaching at the undergraduate and postgraduate level. **Annual salary:** HK\$176,880 - 200,760 by 2 increments BAR 212, 700 - 295,680 by 7 increments. (Exchange rate approximately: US\$1=HK\$7.8, £1=HK\$11.8) Starting salary will depend on qualifications and experience. **Conditions of Service:** Benefits include long leave with pay, annual leave, sick leave, superannuation (University 15%, appointee 5%), education allowance for children, housing allowance for those whose annual salary is HK\$188,820 or above, and for appointees on overseas terms, passage benefits for themselves and their dependents as well. **Application Procedure:** Applications should be made out in duplicate, giving full particulars, experience and the names and addresses of 3 persons to whom reference may be made, and sent together with copies of certificates/diplomas/testimonials and recent publications to the Personnel Section, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong not later than **December 1, 1986**. Please quote reference number 41/509/2/86 and mark 'Recruitment' on cover.

### UNIVERSITY OF MANCHESTER

An SERC funded Research Assistantship in Combinatorics is available at the Department of Mathematics, University of Manchester for up to three years from October, 1986. Further

information may be obtained from Dr. N. Ray, Department of Mathematics, The University, Manchester, M13 9PL.

# WILEY MATHEMATICS

## Constants in Some Inequalities of Analysis

S.G. MIKHLIN

Leningrad Branch of the Institute of Mathematics of the USSR Academy of Sciences

In estimates for the norm of an operator, in error estimates for numerical methods, and in estimates for extended functions or for imbedding theorems, various constants occur which depend on certain parameters of the given problem. Here the author solves the problem of determining the "best" constants for some of these estimates or gives values for them which are as near as possible to the "best" ones.

0 471 90553 9 150pp June'86 £13.75/\$25.75

*A Wiley-Teubner publication*

## Differential Equations: An Introduction with Applications

L. COLLATZ

University of Hamburg, Federal Republic of Germany

An introduction to the solution of differential equations, with particular emphasis on applications to science and engineering. Both analytical and numerical methods are fully covered, and key proofs are discussed using both classical methods and modern techniques of functional analysis.

0 471 90955 6 (cloth) 384pp Aug'86 approx. £21.95/\$37.00

0 471 99860 5 (paper) 384pp Aug'86 approx. £11.95/\$20.00

## Principles in the Theory of Extremal Problems

V.M. TIKHOMIROV

University of Moscow, USSR

This monograph deals with the general principles of the theory of extremal problems.

In particular, the author discusses Lagrange's principle, the duality principle, the complete elimination of restrictions, the Hamilton-Jacobi principle, the extension of extremal problems, and the invariance principle. These principles enable a variety of different extremal problems (for example, the calculus of variations, optimal control, and convex programming), to be considered from a unified point of view.

0 471 90563 1 150pp Aug'86 approx. £13.35/\$22.75

*A Wiley-Teubner publication*



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**THE ROYAL SOCIETY  
MATHEMATICAL INSTRUCTION SUBCOMMITTEE  
MIS NEWSLETTER No. 2**

**BY Professor D. G. Crighton, Chairman of the MIS**

The Mathematical Instruction Subcommittee (MIS) has met twice since the last MIS newsletter in March/April. We are now coming firmly to grips with our task of advising and informing the UK mathematical education community on matters relating to the International Commission on Mathematical Instruction (ICMI), especially the Congress on mathematical education (ICMEs), and other relevant international affairs. Our particular concern at present is to act as a clear focus of advice and information for UK participants at ICME-6 in 1988, and to act as a channel for passing potential UK contributions to the Congress organizers.

**ICME-6 Budapest 27 July to 3 August 1988**

ICME-6 is aiming for the active involvement of participants. The programme will be based on Action, Theme and Topic groups, together with plenary and sub-plenary lectures, exhibitions, poster sessions and short communications. An information sheet is available giving the names and addresses of the Chief Organizers of each Action and Theme group has been prepared. It includes a form for those considering making a presentation at ICME-6. Copies are available from the Royal Society, address below. Initial contact with the International Programme Committee (IPC) has revealed the following information: final decisions on topics, short presentations, national representations, projects etc. will be taken in December 1986, the results will be known after May 1987 and contributors will be invited in September 1987. 'High technology' goods with registration or serial numbers are not difficult to bring into and out of Hungary at present, but the regulations are being changed and details will be in the second announcement (May 1987). (This does not cover the export and reimportation of 'high technology' goods from the UK, regulations for which will be given in a later MIS newsletter)

**UK planning for ICME-6**

A series of regionally-based public planning meetings for ICME-6 will be held between now and the Congress. The first of these took place at the University of Nottingham on 6 June 1986 under the auspices of Professor Hugh Burkhardt. Between 50 and 60 people attended. The afternoon of a full-day meetings was devoted to ICME-6 affairs, organized by the MIS, and which included an introduction to our activities, information about travel, accommodation and funding for ICME-6 participants, and preliminary details of the Congress format. The meetings then split into groups according to the interests of those present (primary, up to age 18, and 18+). Each

group was asked to raise points on the organization and presentation of the Action, Theme and Topic groups that might be brought to the attention of the IPC; a lively discussion followed at the end of the session.

Three further public meetings have been planned for later this year as follows: Bristol Polytechnic on 18 October 1986, organized by Dr Daphne Kerslake (tel: (0272) 741251); Cambridge University on 25 October 1986, organized by Dr. Alan Bishop (tel: (0223) 336290); and Manchester Polytechnic on 1 November 1986, organized by Mr. D. Woodrow (tel: 061-445 7871, ext. 392). If you would like to attend any of these meetings then please contact the organizers. The meetings will all be similar. The morning sessions will address mathematics education in an international context, including, for example, multicultural issues involving presentation from, and discussions with, local teachers and with teachers visiting from other countries. The afternoon sessions will discuss ICME-6 arrangements, as at the Nottingham meeting described above. Two further meetings will be held in Scotland in November 1986, organized by Mr. C. J. Wood (tel: 031-449 5111, ext. 4093); please telephone him for details.

**Finance and travel arrangements for ICME-6**

MIS will be seeking funds from industrial and commercial sources to assist participants at ICME-6. As far as possible, we will aim to coordinate a single central fund for ICME-6, to be raised and disbursed under the direction of the MIS. The MIS intends to encourage sponsors who wish to impose restrictions on their donations to favour practising mathematics teachers. A Hungarian visa (two photographs required) will be available at Budapest airport and at the border when travelling by car; no visa is available on the train and one must be obtained in advance. The present BA return air flight to Budapest is approximately £190, second class hotel rates are £35-40/night, and student accommodation £10-15/night; full participation requires seven nights' board. The registration fee will be about £60. Estimated total cost for each participant is in the order of £500.

**UK mailing list**

If you would like to be on the UK mailing list for ICME-6, you should write to the address below with the following information:

- (a) whether you are proposing to offer a presentation at ICME-6,
- (b) whether you expect to attend ICME-6.

- (c) whether you attended ICME-5,
- (d) brief information about your professional interests and activities.

#### Coming shortly

The next MIS newsletter will appear in about six months. It will include reports on the regional meetings and on the meetings of the IPC. There

will also be further details of the financial arrangements for ICME-6 and how and when to apply.

For further MIS information or to join the UK mailing list please contact: Jill A. Nelson, The Royal Society, 6 Carlton House Terrace, London, SW1Y 5AG. Tel: 01-839 5561, ext. 266.

## THE AUSTRALIAN MATHEMATICAL SOCIETY

The Australian Mathematical Society is the national society for the mathematics profession in Australia. It was founded in 1956 for the promotion and extension of mathematical knowledge and its applications. Members of the London Mathematical Society are invited to join the Australian Mathematical Society under the Reciprocity Agreement, which confers all privileges of membership except the right to vote. For the year 1987 the reduced subscription is A\$25.

The annual subscription includes receipt of the Gazette (published bi-monthly) and offers substantial reduction on the cost of the Society's journals. For 1987 these are:

- Journal Series A (A\$23)
- Journal Series B (A\$16)
- Bulletin (A\$20)
- Mathematical Scientist (A\$10).

There is also a 25% discount on the Society's Lecture Series, which is published through the Cambridge University Press.

Members of the London Mathematical Society may commence or continue their reciprocity membership of the Australian Mathematical Society during periods of temporary residence in Australia. They are then welcome to attend Society meetings (the annual meetings takes place in May).

Full particulars of the activities of the Australian Mathematical Society and application forms for reciprocity membership may be obtained from the Treasurer (Department of Mathematics, University of Queensland, St. Lucia, Qld 4067, Australia).

## EDINBURGH MATHEMATICAL SOCIETY

The following meetings have been arranged by the Edinburgh Mathematical Society:

- 17 October 1986 (Edinburgh) Annual General Meeting and Presidential Address: Professor J. R. Hubbuck
- 14 November 1986 (Strathclyde) Professor D. G. Crighton
- 5 December 1986 (Edinburgh) Dr. N. L. Biggs

- 16 January 1987 (Heriot-Watt) Professor B. D. Ripley
- 13 February 1987 (Dundee) Dr. J. W. Bruce
- 6 March 1987 (Stirling) Dr. R. Heath-Brown
- 8/9 May 1987 (Edinburgh) Joint meeting with London Mathematical Society
- 6 June 1987 (St Andrews) Dr D. Segal

## SELLING — LMS COMPUTER

The old LMS computer consisting of:

**Commodore PET 8096,  
Commodore 8050 twin disc drive,  
Ricoh RP 1600 daisy wheel printer  
with tractor feed and cut sheet feeder.**

is available for sale.

Please submit offers to Susan Oakes  
at the LMS office.

# EUROPEAN MATHEMATICAL COUNCIL

## SURVEY OF EUROPEAN MATHEMATICAL PERIODICALS

The European Mathematical Council recently carried out a survey of European mathematical periodicals. The work was carried out (mainly by John Howie) in conjunction with the A.M.S.

### Method

The list of journals surveyed contains only those which are:

- (1) published in Europe, and
- (2) reviewed in their entirety by *Mathematical Reviews*.

The boundaries of Europe were defined more or less arbitrarily, taking into account the purposes of this survey. In particular, journals published in the USSR have not been surveyed, partly because a large part of the USSR lies outside Europe, partly because the USSR does not participate in European Mathematics Council affairs, and partly because economic comparisons with the West are of little value. In addition, in order to restrict the scope of the survey to a manageable size, some attempt was made to exclude journals sponsored by a university or similar institution and limited, e.g., to reports of seminars held at the institution. (For example, *Atti Sem. Mat. Fis. Univ. Modena*, *Sem. Anal. Convexe*, *Publ. Centre Rech. Math. Pures*).

### Counting Methods

Twenty pages were arbitrarily selected from each journal, as follows:

The number of pages published in 1984 was determined by taking the number on the last numbered page in each volume (or issue, if numbered separately), and summing these numbers for all volumes or issues published in 1984. Author indexes, tables of contents and other such front and end matter were excluded from the page counts. The blanks that occasionally occur between consecutive articles were not excluded.

Once it had been determined, the number of pages was divided by 20, and the result was rounded to the nearest multiple of 10. (This rounding was done in order to make the task of photocopying the samples easier and quicker). This rounded number was used as the index for selecting pages from the journal for counting purposes.

I.e., letting  $p$  denote the number of pages in 1984, we found  $q = p/20$ . Then we rounded  $q$  to the nearest 10, and called this rounded number  $q'$ . Pages numbered  $q'$ ,  $2q'$ ,  $3q'$ , ...,  $20q'$  were selected for counting procedures. (If pages were not numbered consecutively and continuously throughout 1984, pages were selected as if they HAD been so numbered).

If any of the pages selected was deemed unsuitable, the nearest suitable page was used instead. Pages were deemed unsuitable if they were shorter than a full page or if they contained figures, diagrams or tables, or if they were set in type different in size from the type used for the main body of text of the journal — for example, references, footnotes, or, in some cases, book reviews. Pages with a one-line footnote were not deemed unsuitable.

Once twenty suitable pages had been found, the number of lines per page was counted and the average was computed. Display lines were each counted as one line, except for fractions where the combined length of the numerator and denominator exceeded the width of the text format; such fractions were counted as two lines.

The average number of characters per line was determined by counting the number of characters in the first and last full lines of text on the first six pages of the sample taken from each journal. Spaces between words counted as one character each; spaces within mathematical expressions were not counted. Embellishments above symbols were not counted; but each character in a superscript or subscript was counted.

Note that display lines were not used in finding the average number of characters per line. Usually they do not contain as many characters as a line of text; in a cost study, however, this factor is offset by the greater cost of typesetting for displayed mathematics as opposed to text, and by the superiority of symbols over words for expressing information compactly.

Note further that because display lines were not counted, and because some text lines are less than full length by reason of ending or beginning a paragraph, or introducing a display, the average number of characters per line (and hence, the average characters per page) is somewhat overstated by our methods. We use the figures for comparison only, however, not as absolutes.

It goes without saying that, owing to variations in the exchange rate, the prices should be regarded as approximate only; it should also be remembered that in some cases there are considerable variations in volume from year to year. Some journals have not published any issues during 1984 and for this reason were omitted. In other cases it was impossible to ascertain the price. For all these reasons great caution must be exercised in drawing conclusions from these figures.

We are grateful to the American Mathematical Society for much valuable help in gathering data.

PERIODICAL	PUBLISHER	List	1984	Char/	Cents/
		price (US\$)	pages	page	1,000 char
Acta Appl. Math.	Reidel, Dordrecht	76	400	3025	6.3
Acta Arith.	Polish Academy of Sciences	126	413	2268	13.5
Acta Math.	Inst. Mittag-Leffler, Djursholm	90	605	2274	6.5
Acta Math. Hungar.	Akad. Kiadó, Budapest	40	778	2617	2.0
Acta Sci. Math.	Jozsef Attila Univ., Szeged	52	470	2422	4.6
Adv. Appl. Prob.	Appl. Probability Trust, Sheffield	102	931	2364	4.6
Anal. Math.	Akad. Kiadó, Budapest	90	335	2344	11.4
Analysis	R. Oldenbourg Verlag, Munchen	85	361	1389	17.0
Ann. Acad. Sci. Fenn. Ser. A I Math.	Acad. Sci. Fennica, Helsinki	60	192	2632	11.9
Ann. Global Anal. Geom.	Elsevier B.V. (North Holland)	62	384	1453	11.1
Ann. Inst. Fourier	Univ. Grenoble	117	1042	1702	6.6
Ann. Mat. Pura Appl.	Zanichelli, Bologna	80	1182	2411	2.8
Ann. Polon. Math.	Panstwowe Wydawnictwo Naukowe, Warsaw	45	359	2269	5.5
Ann. Pure Appl. Logic	Elsevier B.V. (North-Holland)	184	669	2631	10.5
Ann. Sci. Ecole Norm Sup.	Bordas, Paris	116	662	2632	7.1
Arch. Math. (Basel)	Birkhäuser Verlag	125	1152	3031	3.6
Arch. Math. Logik Grundlag.	Kohlhammer, Stuttgart	82	191	2601	16.5
Arch. Rat. Mech. Anal.	Springer Verlag	442	785	2759	20.4
Ark Mat.	Inst. Mittag-Leffler, Djursholm	40	210	2597	7.3
Beiträge Al. Geom.	Wiss. Beiträge Martin Luther Universität, Halle	11.4	411	1607	1.7
Bull. London Math. Soc.	London Math. Soc.	80	656	3002	4.1
Bull. Math. Soc. Sci. Math. R.S. (Roumanie) (NS)	Soc. Ști. Mat. RS Romania, Bucharest		276	2572	3.1
Bull. Polish Acad. Sci. Math.	PWN, Warsaw	87	743	2461	4.8
Bull. Sci. Math. (2)	Gauthier-Villars	96	446	1883	11.4
Bull. Soc. Math. France	Bordas, Paris	98*	480	2198	3.3
C.R. Acad. Sci. Paris Ser. I. Math.	Bordas, Paris	244	1575	2877	5.4
Casopis pro Pest. Mat.	Matematický ústav Československé akademie ved	87	448	2592	7.5
Collect. Math.	University of Barcelona	18	111	1857	8.7
Colloq. Math.	Panstwowe Wydawnictwo Naukowe, Warsaw	81	425	2377	8.0
Combinatorica	Kultura, Budapest	86	395	3026	7.2
Comm. Math. Helvet.	Birkhäuser Verlag	90	676	2207	6.0
Comm. Math. Univ. Carol.	Univ. Karlova, Prague	42	764	1576	3.5
Compositio Math.	Kluwer, Dordrecht	318	1168	1959	13.9
Czechoslovak Math. J.	Academia, Prague	245	668	2589	14.2
Demonstratio Math.	Politech. Warszaw. Warsaw	2.5	1109	1470	0.15
Diagrammes	Univ. Paris VII	11	179	2154	2.9
Discrete Math.	Elsevier B.V. (North-Holland)	384	1625	2518	9.4
Ergodic Theory and Dynamical Systems	Cambridge U.P.	180	643	2878	9.7
European J. Combinatorics	Academic Press	89	395	3329	6.8
Expositiones Math.	Bibl. Institut AG, Mannheim	85	378	2983.5	7.5
Fund. Inform.	Panstwowe Wydawnictwo Naukowe, Warsaw	58	501	1829	6.3
Fund. Math.	PWN Warsaw	216	1291	2762	10.9
Geom. Dedicata	Reidel, Dordrecht	168	814	2439	8.5
Glas. Mat. Ser. III	Soc. Math. Phys. SR Croatia, Zagreb	14.40	407	1881	1.9
Glasgow Math. J.	Scottish Acad. Press Edinburgh	45	262	2497	6.9
IMA J. Numer. Anal.	Academic Press	173	506	2780	12.3
Indag. Math.	North-Holland	90	478	2598	7.2
IHES Publ. Math.	Presses Univ. France, Paris	66	369	2848	6.3
Integral Equation Operator Th.	Birkhäuser Verlag	110	905	1714	7.1
Internat. J. Computing Math.	Gordon and Breach, London	252	701	2013	17.9
Internat. J. Game Th.	Physica Verlag, Vienna	76	256	2085	14.2
Invent. Math.	Springer Verlag	775	2218	2675	13.1
J. Appl. Prob.	Appl. Probability Trust, Sheffield	82	934	2251	3.6
J. Geom.	Birkhäuser Verlag	102	401	1760	14.5
J. London Math. Soc.	London Math. Soc.	252	1152	2590	8.4
J. Math. Economics	Elsevier B.V. (North-Holland)	93	305	2403	12.7
J. Math. Pures Appl.	Bordas, Paris	75.50	483	2378	6.6
J. Operator Th.	Nat. Inst. Sci. Tech. Creation Bucharest	60	402	2334	6.4
J. Pure Appl. Algebra	Elsevier B.V. (North-Holland)	338	1313	2820	9.1
J. Reine Agnew. Math.	de Gruyter, Berlin	78	1962	2814	1.4
J. Statist. Plann. Inference	North-Holland, Amsterdam	193	792	2465	9.9

PERIODICAL	PUBLISHER	List price (US\$)	1984 pages	Char/ page	Cents/ 1,000 char
Lett. Math. Phys.	Reidel, Dordrecht	90	540	3203	5.2
Manuscripta Math.	Springer Verlag	233	1020	1515	15.1
Mat. Vesnik	Mat. Inst., Belgrade	6	400	2124	0.7
Math. Ann.	Springer-Verlag	727	1699	2697	15.9
Math. Comput. Simulation	Elsevier B.V., (North-Holland)	115	566	3718	5.5
Math. Methods Appl. Sci.	Teubner, Stuttgart	140	549	2501	10.2
Math. Nachr.	Akademie-Verlag, Berlin	43	1706	2803	0.9
Math. Proc. Cambridge Phil. Soc.	Cambridge U.P.	220	1068	3285	6.3
Math. Programming	North-Holland, Amsterdam	206	1086	2778	6.8
Math. Scand.	Aarhus Univ., Aarhus	64	635	2233	4.5
Math. Slovaca	Slovak Academy of Sciences	10	430	2452	0.52
Math. Soc. Sci.	Elsevier B.V., Dordrecht	161	609	3058	8.7
Math. Zeitschr.	Springer Verlag	549	1856	2755	10.7
Mathematica (Cluj)	Acad. Rep. RSR, Cluj-Napoca	42	180	2226	10.5
Mathematika	University College, London	18.80	339	2511	2.2
Mem. Soc. Math. France	Gauthier-Villars	98*	904	2130	3.3
Monatsh. Math.	Springer, Vienna	182	696	2062	12.7
Nieuw Arch. Wisk. (4)	Math. Centrum, Amsterdam	29	451	2322	2.8
Nonlinear Analysis	Pergamon Press	225	1506	2581	5.8
Numer. Math.	Springer Verlag	210	1417	2478	6.0
Optimization	Akademie-Verlag, Berlin	52	636	2847	2.9
Order	Reidel	84	218	3197	12.1
Proc. Edinburgh Math. Soc.	Scottish Academic Press, Edinburgh	75	350	2407	8.9
Proc. London Math. Soc.	London Math. Soc.	272	1152	3046	7.8
Proc. Royal Irish Acad.	Royal Irish Acad., Dublin	22	173	2698	4.7
Proc. Royal Soc. Edinburgh A	Royal Society of Edinburgh	60	1220	2630	1.9
Publ. Math. Debrecen	Kossuth Lajos Tudoman, Debrecen	25	297	2804	3.0
Quart. J. Math. Oxford (2)	Oxford U.P.	80	512	2533	6.2
Rend. Circ. Mat. Palermo	Circ. Mat. Palermo	47	469	1964	5.1
Rend. Math.	Univ. Studi Roma	50	624	1968	4.1
Resultate Math.	Birkhäuser-Verlag	55	250	2365	9.3
Rev. Roumaine Math. Pures Appl.	Acad. RS Romania, Bucharest	88	919	2521	3.8
Serdica	Bulgarian Acad. Sci., Sofia	11.36	448	3027	0.84
Simon Stevin	Rijksuniversiteit, Gent	15.50	333	1634	2.85
Statistics	Akademie-Verlag, Berlin	60	566	2360	4.5
Stochastic Proc. Appl.	Elsevier B.V. (North-Holland)	254	1070	2267	10.5
Studia Logica	Ossolineum, Wroclaw	58	484	2612	4.6
Studia Math. PWN, Warsaw	PWN, Warsaw	162	1250	2339	5.5
Theoret. Comp. Sci.	Elsevier B.V. (North-Holland)	485	2452	2910	6.8
Topology	Pergamon Press	140	480	3270	8.9
Topology Appl.	Elsevier B.V. (North-Holland)	161	628	2735	9.4
Z. Anal. Anwendungen	Deutscher Verlag Wissensch., Berlin	109.7	576	2660	7.16
Z. Math. Logik Grundlag. Math.	Deutscher Verlag Wissensch., Berlin	61.7	573	3240	3.3
Z. Warsch. Verw. Gebiet	Springer Verlag	595	1920	1685	18.4

\* price includes Mem. Soc. Math. France

## BUYING

Does anyone have a copy of *Mathematical Analysis* by Lyusternik and Yanpol'skii, Vol 69, International Series of Monographs in Pure

and Applied Mathematics, Pergamon Press, that they are willing to sell? Contact J. McCabe, Mathematical Institute, St. Andrews.

## AUSTRALIAN MATHEMATICAL SOCIETY

The Thirty-first Annual Meeting of the Australian Mathematical Society will be held from 11-15 May, 1987 at Deakin University, Geelong, Victoria, Australia. Original and survey papers in any area of mathematics, application of mathematics, mathematics education, and history of mathematics are solicited. The

deadline for abstracts is 31 March 1987. For further information contact K. L. McAvaney, Division of Computing and Mathematics, Deakin University, Victoria, 3217, Australia. Phone: (052) 471376 Telex: DUNIV AA35625. Telefacsimile (052) 442777.

## AN OPEN INVITATION TO LONDON MATHEMATICAL SOCIETY MEMBERS

The American Mathematical Society is pleased to extend an open invitation to all members of the London Mathematical Society to become members of the AMS at a special reciprocity rate of \$42 — half the ordinary member rate for 1987.

LMS members are welcome to join the AMS under the reciprocity agreement which has existed between the Societies for many years. This special reduced rate applies to LMS members residing outside of North America.

Membership in the American Mathematical Society entitles members to:

- Free subscriptions to *Notices of the AMS* and *Bulletin of the AMS*
- Discounts of up to 40% on most AMS publications
- Discounts on the publications of some other publishers
- Reduced registration fees at national and sectional meetings of the AMS

The American Mathematical Society is a nonprofit organization devoted to promoting the interests of mathematical scholarship and research. To receive more information about the AMS and a membership application, write to Membership Department, American Mathematical Society, P. O. Box 6248, Providence, Rhode Island 02940 U.S.A.

## THIRD GREGYNOG SYMPOSIUM ON DIFFERENTIAL EQUATIONS

It is proposed to hold the third in the series of Gregynog Symposia on Differential Equations during the week 6-10 July 1987. The venue, as previously, will be Gregynog, a conference centre owned by the University of Wales, and situated in the mid Wales countryside near Newtown. The meetings will be financed by S.E.R.C.

The theme of the symposium will be *Dynamical Systems*. We plan to bring together a small group of interested mathematicians to discuss their current research and to work on problems of mutual interest in a pleasant and informal atmosphere. There will be some expository talks

and also an opportunity for participants to present recent findings. We hope that the meetings will stimulate research activity and encourage collaboration.

Since the available accommodation is limited, participation is by invitation. Research workers in the field of Dynamical Systems who wish to take part in the symposium are asked to contact Dr. M. G. Lloyd, Department of Mathematics, The University College of Wales, Aberystwyth, Dyfed, SY23 3BZ. A brief summary of current research interest should be included. The cost of accommodation at Gregynog will be covered.

## EVOLUTION EQUATIONS

A special research program on different aspects of the mathematical theory of *Evolution Equations* will take place during the first semester of 1987 in Pisa at the Departments of Mathematics of the University and the Scuola Normale Superiore. The program will be supported by the Italian C.N.R. and Ministry of Education.

During the Semester there will be workshops, extended and short visits of leading mathematicians, intensive courses of lectures, as well as informal activities.

Five microprograms are planned, each one including a workshop:

1. Control Theory (Scientific Committee: R. Conti, E. De Giorgi, S. K. Mitter) - Jan 12 to Feb 8.
2. Parabolic Equations and Semigroups (SC: S. Campanato, G. Da Prato, A. Marino) - Feb 9 to

March 7.

3. Hyperbolic Equations (SC: L. Cattabriga, F. Colombini, M. K. V. Murthy, S. Spagnolo) - March 9 to April 4.

4. Fluid Dynamics (SC: H. Beirão Da Veiga, G. Prodi, G. Prouse) - April 27 to May 23.

5. Mathematical Models in Chemistry and Biology (SC: M. Iannelli, W. Jaeger, L. Modica) - May 25 to June 20.

All the mathematicians who are interested are warmly invited to attend. Limited funds will be available to partially support the participating persons. Young researchers, both from Italy and abroad, are encouraged to apply. The organising committee is G. Da Prato, L. Modica and S. Spagnolo. Please address correspondence to: Mrs. Kirsti Nicotra, Evolution Equations Program, Scuola Normale Superiore, I-56100 PISA, Italy.

## THE DUTCH MATHEMATICAL SOCIETY 'HET WISKUNDIG GENOOTSCHAP'

'Het Wiskundig Genootschap' (WG) was established in 1778. It is the second youngest mathematical society in the world. The purpose is to promote mathematics as well as to encourage its study and its application. In fact the WG is the union of mathematicians in the Netherlands.

Members of the London Mathematical Society are welcome to join the WG as reciprocity members at the reduced subscription of Dfl.35. Reciprocity members receive the periodicals 'Nieuw Archief voor Wiskunde' (3 issues per

volume, English) and 'Mededelingen van het Genootschap' (9 issues per volume, Dutch).

Further information about the WG can be obtained from the Secretary, Department of Mathematics and Informatics, University of Technology, P.O. Box 356, 2600 AJ Delft. Applications of membership should be sent to the Treasurer, Mathematical Institute of the University, Budapestlaan 6, 3584 CD Utrecht, The Netherlands.

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## COLLINGWOOD MEMORIAL PRIZE

This prize was established by the London Mathematical Society in memory of Sir Edward Collingwood and is awarded annually to a student of the University of Durham obtaining First Class Honours in mathematics and entering a course of postgraduate study. No prize was awar-

ded in 1985. Two prizes are awarded this year, to Mr. Jimmy Fung of St. Cuthbert's Society and Mr. Mark Ainsworth of Grey College. They will be research students at Cambridge and Durham, respectively.