ILIAM 4 at NIHE, Limerick

The fourth in the series of ILIAM (Information Linkage Between Industry and Applied Mathematics) conferences was held at NIHE, Limerick on 8 May, 1987. The ILIAM meetings are the initiative of the Mathematics Department at NIHE, Dublin.The concept has now developed into a cooperative effort between that Department, the Mathematics Department of the University of Ulsterand the Mathematics Department of NIHE, Limerick.

The objective of ILIAM is to provide over a one day meeting an opportunity for industrialists and academic applied mathematicians to meet and discuss problems of direct interest to industry. With the passing of each conference the range of interaction between academic mathematicians and the industrial community is broadening and deepening. The audiences at the meetings are widely based including engineers and managers from the industrial sector and engineers and mathematicians from the total third level educational sector including the Universities, National Institutes for Higher Education and the Regional Technical Colleges. Some mathematics teachers from the second level system also attend.

The presentations at ILIAM meetings are typically by industrialists describing problems, involving mathematics, whch are of current interest in industry or by mathematicians/engineers from educational institutions describing the application of mathematics to industrially oriented problems.

The programme of ILIAM 4, at NIHE, Limerick on 8 May, 1987 included presentations by Mr. G. Hurley, Electronics Department, NIHE, Limerick with title "Mathematics of Resonanant Phenomena in Transformers"; Mr. M. Quinlan, Manager Director, Microelectronics Application Centre, Limerick with title "MAC – An Interface Between Industry and the Applied Mathematician"; Mr. T. O'Dwyer, Analog Devices Ltd., Limerick with title "Mathematical Modelling of Semiconductor Devices"; Mr. J.J. King, Central Fisheries Board, Dublin with title "Washout of Submerged Vegetation in Irish Lakes"; Professor D. Conniffe, Economic and Social Research Institute, Dublin with title "Experimental Design in the 'Real' and Social Sciences"; Mr. P.J. Shields and Mr. G. Silcock, University of Ulster, Jordanstown with title "Mathematical Models in Fire Safety Engineering"; Dr. J. Carroll, Mathematics Department, NIHE, Dublin with title "Numerical Analysis of Semiconductor Devices"; Mr. C. Humphreys, Howmedica Int., Limerick with title "Computer Integrated Manufacturing".

P.F. Hodnett

Conference Announcements

Members on occasion have expressed a wish for more information on the many Mathematical Conferences that take place throughout the year in many parts of the world. We publish here only a selected few, usually those specially requested by the organisers or of special interest to Irish Mathematicians. The Notices and Bulletins of other Mathematical Societies contain some of these and others. There are to our knowledge two other publications which are devoted entirely to announcements of Conferences and which are very comprehensive and all-embracing. One is the European Mathematical Newsletter looked after by the Mathematisches Forschunginstitut Oberwolfach and the other is the IMU Canberra Circular looked after by Bernhard Neumann. One great thing about these is that they are sent free of charge to those who ask for them! The full addresses are given below.

EUROPEAN MATHEMATICAL NEWSLETTER
Mathematisches Forschunginstitut Oberwolfach,
Geschäftsstelle: Albertstrasse 24,
D-7800 Freiburg im Breisgau.
West Germany.

IMU CANBERRA CIRCULAR
Professor B. H. Neumann,

Division of Mathematics & Statistics, CSIRO, Box 1965, GPO Canberra, ACT 2601, Australia.	OR	Department Of Mathematics, Institute of Advanced Studies, Australian National University, Box 4, GPO Canberra, ACT 2601, Australia.

Groups In Galway 88

The first Groups in Galway meeting was held in 1978. It has been decided to celebrate the tenth anniversary by adding an extra day to the usual (two-day) format. The 1988 meeting will commence after lunch on Thursday May 26 and conclude after lunch on Saturday May 28.

Further information will be circulated early in 1988. In the meantime, please note the dates and start planning to join in the celebrations!

Any enquiries should be addressed to:

Dr. J. McDermott
Groups in Galway 88
Department of Mathematics
University College Galway
Galway, Ireland.

BAIL V Conference — Shanghai, China.

BAIL V, The Fifth International Conference on Boundary and Interior Layers — Computational and Asymptotic Methods, will be held on June 20–24, 1988 in Shanghai. This conference provides a forum for the discussion of numerical or asymptotic methods for the solution of problems involving boundary or interior layers. The registration fee for participants living outside China is US$260 *if received by January 31 1988* and US$320 thereafter. Hotel costs are US$20 per person per night for persons sharing a twin room and US$30 per person for sole occupancy of a twin room. The cost of meals, including the conference banquet, is US$20 per person per day.

Inquiries from individuals living outside China should be directed to the conference organizer in Dublin:

Pauline McKeever
Conference Management Services
P.O. Box 5, 51 Sandycove Road
Dún Laoghaire, Co. Dublin
Ireland.

Fourth Dublin Conference on Matrix Theory and its Applications

A two-day conference on Matrix Theory and its applications will be held in University College Dublin on March 10 and 11, 1988. Papers are invited on any aspect of linear algebra. The deadline for receipt of abstracts is January 15 1988.

The conference fee is IR£10 (or US$15). All correspondence should be addressed to the conference organizer:

Dr. F.J. Gaines
Department of Mathematics
University College Dublin
Dublin 4, Ireland.

ECMI 88

The first open meeting of the European Consortium for Mathematics in Industry (ECMI) will be held at the University of Strathclyde on August 28–31, 1988.

The scope is wide and includes, for example, the mathematics of semiconductor devices, control theory, nonlinear optimization and modelling, mathematical software etc.

For further details, write to:

Conference Secretariat
Department of Mathematics
University of Strathclyde
Glasgow, Scotland
JANET: CAAS29@UK.AC.STRATH.VAXA

Hyperbolic Problems — Aachen 1988

The Second International Conference on Hyperbolic Problems will be held in Aachen on March 14–18 1988. Significant advances have been made in the last few years in the exact and approximate solution of of systems of nonlinear hyperbolic equations and their applications. The aim of the conference is to bring together scientists in the field for a presentation of recent results and to discuss future research. Further information can be obtained from:

Rolf Jeltsch

Institut für Geometrie und Praktische Mathematik

RWTH Aachen

D–5100 Aachen, Federal Republic of Germany

EARN/BITNET: JELTSCH@DACTH51

International Conference on Radicals — Sapporo, Japan

An international conference on "Radicals — Theory and Applications" is to be held in Sapporo from July 24 to 30, 1988. Further information can be had from:

Prof. Shoji Kyuno

Department of Mathematics

Tohoku Gakuin University

Tagajo, Miyagi 985

Japan

Book Reviews

ATLAS OF FINITE GROUPS by J.H. Conway, R.T. Curtis, S.P. Norton, R.A. Parker and R.A. Wilson

Clarendon Press, Oxford, 1985, xxxiii+252pp. ISBN 0-9-8531990

The classification theorem for finite simple groups, which was completed around 1980, stated that a finite non-abelian simple group is an alternating group of degree at least 5, a group of Lie type, or one of the 26 sporadic groups.

The first priority of the authors of the Atlas is to print the ordinary character table of as many of these groups as possible since it is their view that this is the most compendious way of conveying information about a group to a skilled reader.

With the infinite families their guideline was "to think how far a reasonable person would go and to go one step further". Thus A_{13} is the largest group considered in the alternating series. A group of given Lie type is specified by two parameters, rank and field size. For low rank a variety of field sizes may be shown while for the highest rank only the smallest field size is shown. For example, the character tables of $PSL(2,q)$ are shown for $q \le 32$, while for rank 4 only that of $PSL(5,2)$ is shown. All of the sporadic groups are included.

In addition to the ordinary character table the authors present information about the maximal subgroups (nearly always complete), the Schur multiplier, the outer automorphism group, the character table for the corresponding coveing groups and extensions by automorphsims (in most cases), as well as various constructions of the simple group or a near relative.

The book has A3 format pages and is spiral bound. The introduction, pages i to xxxiii, consists of eight chapters in which the simple groups are descibed and explanations are given on how to read the tables and text in the two hundred and fifty two pages of the main body of the Atlas which follow.

The authors seek to reinforce trends in notation that they see as desirable. One of these is Artin's convention that single letters are used for groups that are 'generally' simple, for example, $L_n(q)$ for $PSL(n,q)$, and $S_{2n}(q)$ for $PSp(2n,q)$. This can lead to some confusion, for example, $U_n(q)$ for