



NEWSLETTER

NUMBER 5

APRIL, 1976

PRESIDENT'S NOTES

I would like to take this opportunity to report two of the decisions taken at the Council meeting held in Auckland early in October. In the first place it was decided that the Society should, from time to time, sponsor local meetings. This will give the Society the opportunity to make itself better known and at the same time to enrich the mathematical life of the country. The first of the Auckland meetings has already been held (and was reported in Newsletter Number 4).

The second proposal that I wish to highlight is that there should be a slot set aside in future colloquia for a "New Zealand Mathematical Society Lecture". It is hoped that in this small way the Society can make a worthwhile contribution to the annual colloquium without in any way interfering with the very effective manner in which it is organised.

The council, of course, meets during the colloquium and also at one other time of the year. This second meeting has turned out to have been very valuable in the first two years of the Society's life, but I have serious doubts that it is appropriate to continue with both meetings for many more years. For one thing the expense is considerable, whether it is borne by the Society, the individual or by his institution, and for a second, it causes a major disruption to the work of those involved in this meeting. My own opinion is that the Council should attempt to carry out a large part of its work by post and I intend to do what I can to further this view.

J.C. Butcher
President.

1976 COUNCIL ELECTIONS

The following nominations for positions on Council and Auditor have been received:

Position	Nominee	Nominators
Incoming Vice-President	Prof. W.G. Malcolm	Butcher/Broughan
Council Member	Dr K.A. Broughan	Hosking/Turner
Council Member	Dr I.L. Reilly	Kalnins/Broughan
Council Member	Dr W.B. Wilson	Bryant/Long
Council Member	Prof. B.A. Woods	Petersen/Renaud
Auditor	Prof. D. Emanuel	Butcher/Lorimer

The three elected Council Members will serve for the three years 1976-79 and the Auditor for the year 1976-77. The current President, Prof. J.C. Butcher, will become Immediate Past President for the 1976-77 year and the current Incoming Vice-President, Prof. G.M. Petersen, will become President for the 1976-77 year. Council Members Dr R.B. Davies, Dr D.C. Joyce and Prof. D.B. Sawyer remain in office until 1978.

LEONID PLYUSHCH

Society members will probably be aware that the "dissident" Soviet mathematician, Leonid Plyushch, arrived in Austria on January 10th, having been released from a psychiatric hospital at Dnepropetrovsk after two and a half years' "treatment". He was the subject of an international campaign of protest (reported in letters to the Editor, Australian Mathematical Society Gazette, Vol.2, No's 1 and 3) and our Society approached the Soviet embassy several times last year to express our concern at the reports of his condition.

EMPLOYMENT OF MATHEMATICS GRADUATES

The Society's committee on employment is preparing a brochure on employment for mathematicians which will provide commentary on

- (1) the types of activity mathematicians are actually involved in during the course of their employment, with particular reference to the relationship between their training and their employment
- (2) the expectations mathematicians may have when they embark on their employment and the extent to which these may be met
- (3) the range and scope of the sorts of jobs available to mathematics graduates and other people who are qualified mathematically.

A number of mathematicians in teaching, government and industry have been asked to write personalised accounts of their own experiences. It is hoped that these accounts, together with statistics as to where mathematicians have found employment, will make the publication of value to students currently studying mathematics and/or related subjects at any level.

VACATION SCHOOL IN LOGIC

The School is planned by the logic group working within the departments of Philosophy and Mathematics at Victoria University and is jointly sponsored by the New Zealand Mathematics Society. It is intended to introduce logic to mathematicians, philosophers and computer scientists, and allow for an exchange of ideas on broad areas of current research.

The School will gather for an opening session on Sunday evening August 15th and will conclude after lunch on Saturday August 21st.

The programme as now planned will consist of six survey courses specifically designed for non-specialists. Each course will run for one hour per day for five days and will be supplemented by tutorials. Lecture notes will be available at a nominal cost. The courses, with their organizers, are:

Professor G.E. Hughes	- Modal Logic
Dr R.L. Epstein	- Degrees of Unsolvability
Professors M.J. Cresswell & D. Lewis	- Formal Semantics for Natural Languages
Dr R.I. Goldblatt	- Category Theory & Logic
Dr R.L. Epstein	- Computers and Recursive Function Theory
Professor W.G. Malcolm	- Model Theory

These courses will run from 9-5 each day. Members of the School will be free to select their own courses according to interest. One hour will be reserved for reports on current research areas. To date we have had offers of talks on: Relevance Logic; Chess, Pattern Recognition; Formal Semantics of Algorithmic Languages.

We hope also to be able to offer talks of broad interest, accessible to all of the School, every evening from 7.30 to 9.30.

Accommodation will be available at Weir House, a Hall of Residence close by the University. The per diem charge (excluding lunch) is about \$10.

We very much welcome further offers of talks. These should be addressed to Dr Dick Epstein, Programme Organizer, Mathematics Department, Victoria University, Private Bag, Wellington, NEW ZEALAND.

We urge everyone to register as soon as possible to aid us in planning the school. The School Fee will be \$5/person, payable either at time of registration or at the time of the School in August. Registration forms may be obtained from Michael Brockway, Registration Secretary (address as above).

Wilf Malcolm, Max Cresswell

PROPOSAL FOR ANZAAS MEETING IN 1979

The cancellation of the XIIIth N.Z. Science Congress, planned for May 1976, has led the Royal Society to reconsider the proposal to hold the 1979 ANZAAS Congress in New Zealand. Member Bodies (including the NZMS) were asked "to consider urgently whether they would support an ANZAAS meeting in New Zealand early in February 1979 by agreeing to hold their major annual professional meetings as part of the ANZAAS Congress". After some discussion by letter, the NZMS Council responded by proposing that NZMS and kindred societies should combine to organize a meeting of a mathematical nature to take place as part of the ANZAAS meeting. It was thought that the 1979 Mathematics Colloquium could take place in May as usual.

ROYAL SOCIETY

Members will have received a copy of the Royal Society Newsletter along with this Newsletter. Since the NZMS became a Member Body (on October 9, 1975) members have been entitled to reduced subscriptions to the Royal Society's other publications (Journal, Proceedings, and Bulletin). Our Society may now nominate candidates for election as Fellows and have a say in the election of the Council of the Royal Society. Professor Vere-Jones attended the November meeting of the Member Bodies' Committee as our representative.

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Experience, however, shows that for the majority of the cultured, even of scientists, mathematics remains the science of the incomprehensible.

Alfred Pringsheim

AMERICAN MATHEMATICAL SOCIETY

At their meeting in Washington on 22 January 1975, the American Mathematical Society Council agreed in principle with a proposal to abolish reciprocity agreements and to offer membership to an appropriately defined group of foreign mathematicians at a reduced rate. The President was authorized to appoint a committee to co-ordinate a complete proposal after consultation with appropriate individuals and organizations, Bull. Amer. Math. Soc. 81 (1975) page 826. The committee was appointed (Notices 22 (1975) page 155) and made recommendations to the Council on 19 August 1975. However, according to their secretary Professor Everett Pitcher, these recommendations were neither approved nor rejected. In all, no decision has been reached about the working arrangement on how their earlier plan of membership by reciprocity is to be modified.

AUSTRALASIAN ASSOCIATION FOR LOGIC

At a conference of Logicians that was sponsored by the Research School of Social Sciences, Australian National University, and which was held in Canberra, from the 22nd to the 24th of August, 1975, it was decided to formally reconstitute the "Australasian Association for Logic", (A.A.L.), which has not met for several years. The meeting elected a new executive who will serve until the next general meeting of the A.A.L. in August, 1976. Mr F.R. Routley of the Department of Philosophy, Research School of Social Sciences, Australian National University, was elected President, and Mr M.A. McRobbie of the Department of Philosophy, Research School of Social Sciences, Australian National University, was elected Secretary.

PUBLISHING PROPOSALS

Council members have been discussing (by letter) a range of proposals for the Society's long-term publication policy. These have included

- (1) undergraduate and graduate course lecture notes,
- (2) proceedings of mathematical conferences and other meetings,
- (3) research notes and mathematical monographs,
- (4) theses and review papers,
- (5) a journal in mathematical education or applied mathematics.

Opinions about these proposals vary widely among Council members and it is hoped that members will consider them carefully before the Society's AGM.

STATISTICAL PACKAGES

The December issue of the N.Z. Statistician contains most of the papers given at the May, 1975, conference on Statistical Computer Packages organized by the Statistical Association in conjunction with the Victoria University Department of Extension. It also contains a variety of other papers on Statistical Packages, an index of Algorithms published in the Journal of the Royal Statistical Society, Ser C and a writeup of the Association's 1975 Calculator Display. Orders should be sent to the Editor, R.B. Davies, c/- Applied Maths Division, D.S.I.R., Box 1335, Wellington. The cost is \$2.00 a copy (105 pages).

CO-OPERATION WITH THE CHRONICLE

The NZMS Council and the Mathematical Chronicle Committee have agreed on a scheme of co-operation covering the publication of Personal Notes and a reduced subscription for Society members. The Society will make available to the Chronicle Committee the Personal Notes published in the Newsletter so that the Chronicle may reprint a selection from them, accompanied by a suitable acknowledgement. Members and Reciprocity Members of the Society will be granted a \$1.00 reduction on the rate for individual subscribers to the Chronicle. The individual subscription for Volume 5 has been set at \$3.50, so members will be able to subscribe for \$2.50. The Society will pay the Chronicle 70 cents per subscription or \$20.00, whichever is the greater. The terms may be renegotiated at any time on the request of either the Society Council or the Chronicle Committee.

MATHEMATICS EDUCATION RESEARCH AT MASSEY

Early in 1975 the Massey Mathematics Department decided that it would be appropriate to organise some modest form of group effort aimed at Mathematics Education Research. Individual members had previously been working in this area but no attempt had been made to co-ordinate or promote such work.

We chose a few problems and divided the interested people into small groups to work on these, reporting progress back to the combined groups from time to time.

The topics chosen were:

1. The advantages and disadvantages of open/closed book testing of mathematics.
2. The difficulties encountered in learning mathematics by reading and strategies for overcoming these difficulties.
3. The organisation of mathematics tutorials.
4. Problems associated with extramural teaching at third year level.
5. Consumer research. What do past students and employers think of university mathematics courses?

While we cannot claim that the year has produced really significant results, progress has been made in some groups and we are sufficiently encouraged to believe that the exercise should continue.

Gordon Knight

MATHEMATICS EDUCATION

So far several members have commented on the proposals on Mathematics Education published in Newsletter Number 4. It is hoped to include their comments in a section on Mathematics Education to appear in Newsletter Number 6 after the Colloquium.

MATHEMATICS OLYMPIADS

During this summer I took a holiday of two months duration and amongst other things during a visit to London obtained some information about the Mathematics Olympiad in Great Britain and the International Mathematics Olympiad which will be held this year in Vienna. These Olympiads are for competitors who are under the age of 20 and still at school. In the first round of the Olympiad there are about 10,000 competitors who each pay £1 for taking the examination. This fee is the principal source for paying the expenses of those who are finally sent to the International Olympiad. The examination is a multiple choice paper and is followed by a second round for a smaller group and the team of eight finalists to represent the country in the International Olympiad is selected.

Readers will know that Olympiads have been held in Hungary since the latter part of the nineteenth century and there are some people who feel that this event contributed to a considerable extent to the Mathematical development of that country. Other eastern European countries successfully adopted the same plan and the contest has been an annual event in Great Britain now for eight years. The Americans and Canadians have been sending teams to the International Olympiad for the last two years. In the last contest held in Sofia there were 17 competitors including the following countries:

Austria,	Bulgaria,	Czechoslovakia,
East Germany,	France,	Great Britain,
Greece,	Hungary,	Mongolia,
Netherlands,	Poland,	Romania,
Sweden,	Yugoslavia,	U.S.A.,
U.S.S.R.,	Viet Nam.	

G.M. Petersen

LOCAL NEWS

Auckland

Professor Warren Wong, currently Chairman of the Department of Mathematics at Notre Dame, will be in the University of Auckland Mathematics Department in 1977.

Visitors who will spend all or part of 1976 in the Department include:

Prof. David Brillinger, Berkeley, (Time Series).
 Prof. F.H. Chipman, Acadia University, Nova Scotia, (Numerical Analysis).
 Dr L.W. Flinn, Lancaster University, (Dynamical Systems).
 Dr R. Jewett, Western Washington State College, (Analysis).
 Dr Ian Stewart, Warwick University, (Catastrophe Theory).
 Dr T.O. To, Canterbury University (Functional Analysis and Measure Theory)
 Dr Jim Verner, Queen's University, Ontario (Numerical Analysis).

The Junior Lecturers appointed for 1976 are:

Mr C.D. Lai, Mr J.G. Peterson, Miss D. Sim and Mr C. Wild.

Mr E. Gray has been appointed as a part-time lecturer.

Professor Albert Tucker, of Princeton University, visited the Department in November 1975, when he gave lectures on:

"Linear Programming & Least Squares", and "Matrix factoring for Bases by Gaussian & Gauss-Jordan Elimination".

G.J.T.

Victoria

Mr Jock Hoe is spending the first term in Paris, preparing for publication his translation and critical study of medieval Chinese mathematical manuscripts.

Mrs Shirley Pledger has returned to the Mathematics Department as a part-time lecturer.

Dr Graeme Wake has been awarded a British Science Research Council Senior Visiting Research Fellowship for the period from September 1976 to March 1977 while he will be on sabbatical leave at Leeds.

Messrs Doug Jones and Mick Roberts are this year's new junior lecturers.

Dr Lindsay Johnston and Ms Thora Blithe are leading our first experiment with the Keller plan this year. They are teaching second-year linear algebra by individual work through a set sequence of modules instead of the customary lectures.

One junior lecturer listened with great interest to the discussion at the last departmental meeting on what steps Ph.D. supervisors ought to take to ensure that their supervisees were still working, and within a week produced a 33-page progress report for his supervisor.

In the second week of February several Victoria University mathematicians contributed to a mini-conference organized by Applied Mathematics Division, D.S.I.R., and the Auckland University Department of Theoretical and Applied Mechanics. Topics ranged from spectra of nonlinear eigenvalue problems to the (possibly) supersonic flow of wet steam up geothermal bores.

J.F.H.

Applied Mathematics Division, D.S.I.R., Wellington

The Director of A.M.D., Dr H.R. Thompson, visited Australia during February as part of the Division's continuing contact with the Division of Mathematics and Statistics of C.S.I.R.O. and also represented the Statistical Association at the council meeting of the Australian Statistical Society.

Ms Kay Fancy has now left A.M.D. and is now resident in London.

Ms Vicky Mabin has joined the Operations Research section of A.M.D. Ms Mabin has a B.Sc honours degree from the Economics Department of the University of Canterbury.

R.B.D.

Physics and Engineering Laboratory, D.S.I.R., Gracefield

Dr D.G. Campbell left the Applied Mechanics Section to join the Industrial Development Division, D.S.I.R., Auckland at the end of February.

Stuart Hodder, a graduate of the Department of Theoretical and Applied Mechanics, Auckland University, joined the Engineering Seismology Section at the beginning of the year.

I.D.

Department of Statistics, Wellington

Len Cook represented the N.Z. Statistical Association at the 40th Session of the International Statistical Institute held in Warsaw in September 1975.

R.B.D.

Canterbury

Brent Wilson returned recently from study leave at the Institute of Astronomy, Cambridge, where he worked in relativity. He has brought back a compiler for doing algebraic manipulations on the computer.

Ting On To passed through on his way from Swansea to Auckland, where he is spending the remainder of his leave.

Gordon Petersen travelled overseas during the summer, renewing acquaintances in sundry countries.

Roy Kerr and Graeme Weir attended the Third Australian Relativity Conference in Adelaide, where Graeme gave a paper on some of the more important results in his Ph.D. thesis. Roy Kerr will be representing New Zealand in the World Bridge Championships at Monte Carlo in May.

Bob Broughton is working on a system for using marksense cards with our large computer programming classes.

John De la Bere is continuing the work begun on study leave on the life and work of Thomas Harriot, and is to be found peering into a microfilm reader.

P.J.B.

Otago

The Department has 3 new Assistant Lecturers. They and their special areas of interest are:

Dr M.J. Curran (Group Theory)

Dr A.B. Evans (Relativity and Cosmology)

Dr G.F. Liddell (Logic and Functional Analysis).

Mr B.E. Niven, who was an Assistant Lecturer, has been appointed Scientific Officer.

Dr R.L. Enlow has been promoted to Senior Lecturer.

Professor Sawyer attended the Number Theory section of the 1976 Australian Mathematical Society's Summer Research Institute in Adelaide, and contributed a paper on "Uncovering".

Professor A. Levine of Tulane University will be visiting the Mathematics Department from mid-July until the end of August, 1976. Information concerning the details of his visit may be obtained from Professor S.P.H. Mandel.

Dr G. Maxwell of the University of British Columbia visited the Department during last summer. His current work is in mathematical crystallography and group theory.

Professor W. Davidson presented a paper entitled "In Search of a Cosmological Model" at a meeting of the Royal Astronomical Society of New Zealand on 23 November.

G.O.

Waikato

Dr Durling leaves in May for a senior lectureship as head of statistics at the Western Australian Institute of Technology (Department of Mathematics and Computing Studies, W.A.I.T., South Bentley 6102, W.A.). The resulting vacancy was widely advertised and attracted a number of replies.

Prof. Hosking came back from leave at Cambridge (England) in March and we (Dr Schroder) returned in February. (Nobody noticed this, as our leave was spent entirely in Hamilton, except for three weeks last August in a hot Mannheim summer among categorial topologists. We were also appointed to the National Committee on Mathematics until its next meeting.)

Prof. B.R. Judd (Physics, Cornell) paid a short visit before Christmas on his way home from A.N.U. and Canterbury, and spoke on 'Group Theory and Atomic Physics'.

Prof. G.S.S. Ludford (Theoretical and Applied Mechanics, Cornell) spent January here before going to Brisbane on leave. He gave a seminar on the difficulties of plumbing in fusion reactors, and worked with Dr Sneyd on the boundary layer of a fluid in a rotating magnetic field.

Prof. D.A. Nield came down from Auckland to give a seminar on the growth of cells as convection starts.

John Turner took part in the Wellington Guitar Society's Summer School (directed by Karl Herreshoff), assisting at the birth of the N.Z. Federation of Classical Guitar Societies and becoming its first president.

In the same vein, a daughter was born to Ernie Kalnins. He is well.

Mr Gerald Gehrke has joined the staff of Hamilton Teachers' College as a lecturer in the Mathematics Department. He is an American and received his B.A., (cum laude), from Carleton College, Minnesota, and his Master of Arts - Teaching, from Harvard University as a Prize Fellow. His teaching experience has been at the secondary-intermediate school level over a summer in the U.S.A., four years at an international school in Nigeria, four years in England and one year at Papakura High School in New Zealand.

M.S.

Massey

Peter Kelly has been elected Chairman of the local AUT branch.

John Reynolds, a Massey honours graduate, has come back to the Mathematics Department as a junior lecturer in Statistics.

Adrian Swift is on leave in England and is taking full advantage of the opportunity to attend seminars and conferences and to further his research in numerical analysis.

The two new second year courses, Applied Differential Equations and Statistical Methods, have proved popular, as has the new third year course in Optimization.

The Department is putting on a University Extension course in "Recreational Mathematics" during the winter term. Topics will include the laws of chance, geometrical models, patterns in nature and mathematical puzzles. Other extension courses planned include "Experimental Design" and "Mathematical and Numerical Techniques".

Seminars given so far this year include the following:

- V.J. Thomas, Applied Mathematics Division: "Optimal Design of Experiments",
- G.C. Arnold, Massey University: "Is Significance Testing Obsolete",
- W.D. Halford, Massey University: "Conformal Symmetry in Relativity".

With an internal roll of 4675 (up 10%) and an extramural roll of 5300 (up 25%), Massey has narrowly missed becoming the second N.Z. university to break the 10000 "barrier". Enrolments in Mathematics and Statistics courses have reflected the overall increases. Perhaps the most dramatic growth has been in Introductory Statistics, which increased 50% in 1975 and 40% this year (i.e. the roll has more than doubled since the "Personalized System of Instruction" was introduced).

CONFERENCES 1976

- May 10 - 14 Annual Meeting of Australian Mathematical Society
(Perth) Details from Dr R.P. Sullivan, Mathematics Department,
University of Western Australia, Nedlands,
W.A. 6009, AUSTRALIA.
- May 10 - 14 Congress of Australian and New Zealand Association for
the Advancement of Science
(Hobart) Details from ANZAAS Congress Office, University of Tasmania,
G.P.O. Box 252C, Hobart, Tas.7001, AUSTRALIA.
- May 21 - 24 New Zealand Mathematics Colloquium (see article below)
(Palmerston
North) Details from Dr M.D. Hendy, Mathematics Department,
Massey University, Palmerston North,
NEW ZEALAND.
- May 25 - 27 Industrial Technology Conference (see notice below)
(Palmerston
North) Details from Denise King, Department of Industrial
Management and Engineering, Massey University,
Palmerston North, NEW ZEALAND.
- May 25 - 28 International Symposium on Multiple Valued Logic
(Utah) Details from Prof. Y.H. Su, Department of Electrical
Engineering, Utah State University,
Logan, UT84321, U.S.A.
- Jun 29 - 30 Annual Conference of N.Z. Statistical Association
(Wellington) Details from The Secretary, N.Z. Statistical Association,
P.O. Box 31, Wellington, NEW ZEALAND.
- Jul 2 - 12 Symposium on Potential Theory and Conformal Mapping
(Durham) Details from D.A. Brannan, Mathematics Department,
Queen Elizabeth College, London W8 7AH,
ENGLAND.
- Jul 12 - 23 Symposium on Partial Differential Equations
(Durham) Details from D.E. Edmunds, School of Mathematical and
Physical Science, University of Sussex,
Falmer, Brighton BN1 9QH, ENGLAND.
- Aug 10 - 12 Symposium on Symbolic and Algebraic Computation
(New York) Details from Dr J.H. Griesmer, IBM Thomas J Watson
Research Center, P.O. Box 218, Yorktown
Heights, NY 10598, U.S.A.
- Aug 12 - 14 Conference of Australasian Association for Logic
(Canberra) Details from Mr M.A. McRobbie, Department of Philosophy,
Research School of Social Sciences,
Australian National University, Canberra,
A.C.T., AUSTRALIA.
- Aug 15 - 21 Vacation School in Logic
(Wellington) Details from Dr R.L. Epstein, Department of Mathematics,
Victoria University, Private Bag,
Wellington, NEW ZEALAND.

- Aug 16 - 21 International Congress on Mathematical Education
(Karlsruhe) Details from Prof. Dr. H. Kunl, Institut fur Geometrie der
Universitat, Englerstrasse, D75 Karlsruhe,
GERMANY.
- Aug 17 - 20 Australian Statistical Conference
(Melbourne) Details from Prof. P. Brookwell, Department of Statistics,
La Trobe University, Bundoora, Vic. 3083,
AUSTRALIA.
- Aug 24 - 27 Australian Conference on Combinatorial Mathematics
(Melbourne) Details from Charles Little, Department of Mathematics
and Computer Science, Royal Melbourne Institute
of Technology, Melbourne, Vic. 3000, AUSTRALIA.
- Aug 26 - 27 Operational Research Conference
(Auckland) Details from Conference Organizer, Operational Research Society
of N.Z., Box 12360, Penrose, Auckland,
NEW ZEALAND.
- Aug 30 - Sept 4 International Congress of Theoretical and Applied Mechanics
(Delft) Details from IUTAM 1976, c/q KIVI, 23 Prinsessegracht,
The Hague, NETHERLANDS.
- Sept 20 - 24 Symposium on Computational Statistics
(Berlin) Details from COMPSTAT, c/- Universitaetsausssenamt der Freien
Universitaet Berlin, Harnackstrasse 4,
D-1 Berlin 33, GERMANY.

MATHEMATICS COLLOQUIUM

The Eleventh New Zealand Mathematics Colloquium, to be held at Massey University from Friday May 21 to Monday May 24, has attracted a lot of interest. There have been more than 120 registrations (covering schools, teachers' colleges, polytechnics, universities, government departments and research centres) and 65 papers have been scheduled (including speakers from England, Israel, Papua New Guinea and Australia). Amongst the intriguing paper titles appearing in the programme are "Fun with Tessellations", "A Self-Improving Compiler", "Stability Questions in the Theory of General Deterrence" and "Microsingular Support of an Integral". There will be displays of books and calculators, and seats are still available on the bus tours.

The programme begins at 8.30 pm on Friday with a welcoming address followed by the NZMS lecture, "Catastrophe Theory" by Dr I.N. Stewart of Warwick University. Saturday will be busy, with 28 contributed papers, an invited address by Professor Terence Nonweiler of Victoria University (on "The Estimation of Areas and Integrals from Discrete Irregular Data"), the NZMS Annual General Meeting, and the Colloquium Dinner. It has proved impossible to keep Sunday as a day of rest, instead there will be screenings of Open University films, 15 contributed papers (including 6 on Mathematics Education), an invited address by Garry Tee of Auckland University (on "Sof'ya Vasil'yevna Kovalevskaya"), the Colloquium Business Meeting, and a Panel Discussion on "What should we teach in university mathematics courses, and why?". The remaining 19 contributed papers will be presented on Monday morning.

Registration takes place on Friday from 4 to 8.30 pm (with a social from 7), and on Saturday from 9 to 9.30 am. Any enquiries about the Colloquium should be addressed to

The Colloquium Secretary
Department of Mathematics
Massey University
Palmerston North.

NEWS FROM THE MATHEMATICAL ASSOCIATIONS

The next meeting of representatives of the Society and the Mathematical Associations will take place on Saturday May 1 at Christchurch Teachers' College. Items on the agenda include:

1. Organisation of a N.Z. Mathematics Olympiad.
2. Senior secondary school pupils mathematics camp.
3. Future prospects of N.Z. Mathematics magazine.
4. Mathematics Resource Centres.
5. International Congress on mathematics education.
6. Review of news-sheet.
7. Possibility of including more sessions on mathematics education in future colloquiums.
8. Report on organisation of the Australian Association of Mathematics teachers.

The Auckland Association held a Mathematics Resources Workshop on "Games and their place in the teaching programme" on March 18 and their AGM on April 9th. The topic for their meeting on June 2 (at 7.30 pm in the Maths/Physics Building, Auckland University) will be "Mathematics in Operations Research".

The Southland Association discussed the 1975 Mathematics Examinations after their AGM on March 17.

The Wellington Association has invited nominations for the Second Annual Residential Mathematics Camp for Senior Secondary School pupils, to be held at Firth House from May 9-12. The course is designed for able students at Form 6-7 level and aims to enhance interest, and encourage activity, in mathematics. The areas of mathematics studied are not usually included in the secondary school curriculum and the teachers are chosen for their enthusiasm and mastery in their subject. Each region is allocated places at the camp.

[These news items were obtained from the N.Z. Mathematical News-sheet, published by the Southland Mathematical Association and edited by F.R. Gwatkin]

INDUSTRIAL TECHNOLOGY CONFERENCE

Massey University's Department of Industrial Management and Engineering has arranged a three day Industrial Technology Conference in association with the Institution of Industrial Engineers. The programme begins on May 25 and includes seminars on Computer Control and Applications, Human Implications of Technological Change, Applications of Operations Research and Statistics to Industry, and Fluidised Processing and Materials Handling, a discussion on Quality Control, and papers on Industrial Engineering. Further details may be obtained from:

Denise King
Department of Industrial Management and Engineering
Massey University
Palmerston North
NEW ZEALAND

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A mathematician who is not also something of a poet will never be a complete mathematician.

Karl Weierstrass

VACANCY

UNIVERSITY OF MELBOURNE
DEPARTMENT OF STATISTICS

Lecturer or Senior Lecturer in Statistics

The appointee will be expected to have strong research interests in some area of probability, theoretical or applied statistics. Duties will include teaching of undergraduate level courses and possibly the supervision of postgraduate students.

Salary ranges: Lecturer \$A12835 - 17229, Senior Lecturer \$A17569-20421.

Further details may be obtained from the Registrar, University of Melbourne, Parkville, Victoria 3052, Australia, with whom applications close on April 30, 1976.

VACANCY

ATENISI UNIVERSITY, TONGA

Lecturer in Mathematics and Physics

Atenisi Institute in Nukualofa is staffed by an international faculty of dedicated idealists prepared to work for small salaries in an effort to provide an alternative education system to the schools of the State and the churches. It consists of a high school, a technical school and a university division offering a two year degree (A.A. or A.S.). A lecturer in Mathematics and Physics is needed to start between May and August. Further details may be obtained from Dr Kit Withers, c/- P.O. Box 1335, Wellington, NEW ZEALAND.

RECIPROCITY AGREEMENTSAustralian Mathematical Society

The terms of the agreement provide for individuals who are members of one Society to join the other for half the usual fee and thereby enjoy all the privileges of that Society, other than the right to vote. This applies, of course, provided you are not resident in the country of the second Society. Current subscriptions and prices are as follows (proposals for 1976 in parentheses):

- (1) Membership subscription (including the Gazette) : \$12
(\$15, with a remission of \$2 for early payment)
- (2) Journal - Series A : \$8 (\$10)
- (3) Journal - Series B : \$2 (\$2.50)
- (4) Bulletin : \$8 (\$10)

Thus members of the NZMS may join the AMS for \$6 a year. They should obtain a note of authentication and an application form from our Treasurer and send both to the AMS Secretary (Mr W. Pye, Melbourne State College, 757 Swanston St, Carlton, Vic 3053, AUSTRALIA).

London Mathematical Society

The same terms apply as for the AMS (see above). Current subscriptions and prices are as follows (for the year beginning November 1, 1975):

- (1) Membership subscription : £3.00
- (2) Journal : £6.00
- (3) Proceedings : £6.00
- (4) Bulletin : £3.00

Thus members of the NZMS may join the LMS for £1.50 a year. Application forms may be obtained from our Secretary.

Southeast Asian Mathematical Society

The same terms apply as for the AMS (see above). The current subscription is US\$5.00, and privileges of membership include a quarterly newsletter and members rates for conferences, meetings and occasional publications. Thus NZMS members may join the SEAMS for US\$2.50. Application forms may be obtained from our Secretary.

OTHER N.Z. MATHEMATICAL PUBLICATIONSMathematical Chronicle

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is published by the Operational Research Society of N.Z., P.O. Box 904, Wellington. The editor is Dr H.G. Daellenbach. The annual subscription for individuals is \$4.50 (\$6.00 including Newsletter) and two issues are published each year.

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Members and prospective members are reminded that their subscriptions for the year 1976-1977 were due on 1st April 1976. The annual subscription of \$5 (reduced to \$1 for students) should be sent direct to:

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THE NEWSLETTER

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Contributions are invited from anyone who has anything to say of interest to the N.Z. mathematics community. Local News items may be sent to one of the Honorary Correspondents or direct to the Editor (c/- Mathematics Department, Massey University, Palmerston North, NEW ZEALAND).

Mark all Mathematicall Heades which be onely and wholly bent to those sciences, how solitarie they be themselves, how unfit to live with others and how unapte to serve in the world.

Roger Ascham