

6

NEWS AND NOTES

IRISH NATIONAL MATHEMATICS CONTEST

The first National Mathematics Contest was held on March 6, 1979, and the results are now being compiled. The chief organiser of the contest is Dr. Finbarr Holland, who as first president of the I.M.S. made the institution of this contest one of the aims of the I.M.S. Through his trojan efforts, the contest was held despite the handicap of the postal dispute and over 700 students participated. The Society is very grateful to the M.A.A. Committee on High School Contests and the Executive Director of the American High School Mathematics Examination who gave permission to use their test. (This test is used in the United Kingdom and Canada as well as the U.S. and it is held simultaneously in participating countries). The contest could not have been held here without the co-operation of the teachers and we wish to thank them individually and as members of the I.M.T.A., for carrying out the test and for encouraging their students to participate. The Society also wishes to express its gratitude to the Educational Company of Ireland Ltd. who have kindly agreed to sponsor the contest.

A full account of this year's contest and the results will appear in the next issue of the Newsletter.

SHORT CONFERENCES

One of the main activities of the Society has been the organisation of short, mainly instructional, conferences. The next conference of

7

this type will be held in University College, Galway, on May 11-12, and will be on Group Theory. The organiser is Professor M.L. Newell. A similar conference on Function Theory will be held in University College, Cork, in the Autumn.

These conferences are a good way of encouraging research and of building up a mutual awareness of the work of one's colleagues. They nicely supplement the D.I.A.S. symposia in that they are each devoted to one particular topic, while the symposia cater for the mathematical community in a more general context. For this reason, the Society strongly encourages its members to undertake the task of organising more conferences of this type.

CONTRIBUTIONS TO THE NEWSLETTER

As was stated in the first issue of the Newsletter, it is hoped to include in each issue some short surveys of research topics or topics in the history of Mathematics. Contributions of this type are sought from readers for consideration for inclusion in the Newsletter. From the discussion on Mr. Con O'Caoimh's talk at the I.M.S. conference on Matrix Theory and its Applications, it is clear that many members have very strong (and divergent) views on what type of Mathematics should be taught in second-level schools. We would also welcome contributions on this topic for the Newsletter.

8

FOR YOUR DIARY

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CALCULATING PRODIGES

James Callagy (U.C.G.)

During the eighteenth and nineteenth centuries some remarkable individuals appeared from time to time whose phenomenal powers of rapid mental calculation excited the interest of mathematicians and psychologists. Those who possessed such powers from an early age and were mostly self-taught are the most interesting:

Buxton (1707 - 1772), an English farmhand; Fuller (1710 - 1790), a negro slave; Whateley (1757 - 1863), later Protestant Archbishop of Dublin; Colburn (1804 - 1840), a farmer's son of Vermont, U.S.A.; Bidder (1806 - 1878), son of an English stonemason; Dase (1824 - 1861), of Hamburg; Safford (1836 - 1901), of Harvard; and three shepherds, Mondeux, Mangiarele and Inaudi, about 1867 - 1900.

It is significant that all but two have been completely ignored by historians of mathematics who always tell us of the extraordinary calculating powers possessed by great mathematicians like Euler and Gauss at an early age. Apparently, there exists a consensus of expert opinion that ability to do mental arithmetic rapidly has very little, if any, correlation with mathematical insight and creativity. Whatever about the converse, this view probably derives from a tradition originating with classical Greek mathematicians who clearly defined 'arithmetica' or number theory, as a liberal pursuit, and 'logistica', or practical computation, as unworthy of inclusion in the 'mathemata'.

We find this view reflected in Renaissance writers like Leonardo Bruni (1536) who expressed nothing but contempt for the medieval 'calculatores' and in our own times the historian of science, George Sarton, protesting that press reporters and other ignorant people attribute mathematical genius to those lightning calculators who can perform fantastic computations.

When one studies the methodology of some of those mentioned in achieving amazing feats of numerical skill, however, the classical argument appears insufficient nor does it justify the attitude adopted by historians towards them. Sarton's statement that it represents mathematical ability of a very low order loses much of its credibility too, when one considers the unique analytical processes (often devised ad hoc) of calculators like Bidder, Colburn and Inaudi, apart altogether from the time factor. We are fortunate in this respect to have complete explanations, notably from Bidder and Colburn on their own methods and from Binet and

I.M.S. Group Theory Conference. U.C.G., May 11-12, 1979. (Details from Professor M. Newell, U.C.G.).

Conference on the Numerical Analysis of Semiconductor Devices. Trinity College Dublin. June 27-29, 1979. (Details from Secretary, NASECODE 1, 39 T.C.D., Dublin 2).

Conference on Current Problems in General Relativity. Dublin Institute for Advanced Studies, July 2-6, 1979. (Details from The Director, School of Theoretical Physics (Working Seminar 1979), D.I.A.S., 10 Burlington Road, Dublin 4).

Dundee Biennial Conference on Numerical Analysis, Dundee, June 26-29, 1979.

L.M.S. Conference on Aspects of Contemporary Complex Analysis. Collingwood College, Durham University, July 1-20, 1979.

L.M.S. Conference on Progress in Analytic Number Theory, University of Durham, July 22-August 1, 1979.

L.M.S. Conference on Noetherian Rings and Rings with Polynomial Identity. University of Durham, July 22-August 1, 1979. (Details from Dept. Math., University of Durham, Durham DH1 3LE).

A.M.S. Summer Research Institute Finite Group Theory. University of California, Santa Cruz. June 25-July 20, 1979. (Details from Dr. W.J. Le Veque, A.M.S., P.O. Box 6248, Providence, R.I. 02940).