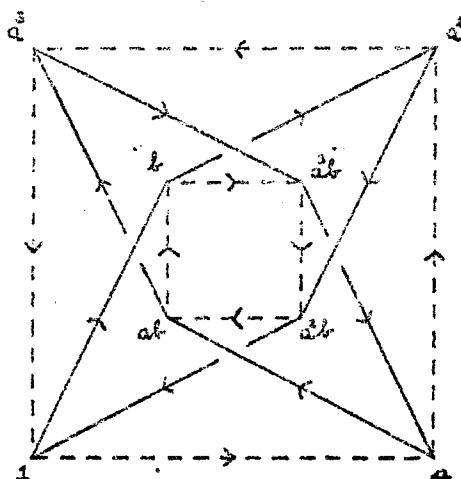# Irish Mathematical Society

Logo

DES MacHALE (U.C.C.)

I approached the challenge of designing a logo for the Irish Mathematical Society in the following manner. Mathematics is created by people and the personalities of mathematicians are a unique source of impetus to the subject. Hamilton, who was proud to be an Irishman, was the greatest mathematician this country has produced and Quaternions were his greatest contribution to Mathematics. The Quaternion group generated by the elements i, j and k, gives eight elements in all and can conveniently be represented by a di-graph which is called a Cayley diagram. This fact also commemorates the Cayley-Hamilton Theorem (or is it the Hamilton-Cayley Theorem?) Another aspect of the logo I finally chose is that of Hamiltonian circuits which are an important branch of Graph Theory and are currently an active area of research.

The logo is thus an abstraction of the Cayley di-graph of the quaternion group given by

$$< a,b | a^4 = 1,\ a^2 = b^2,\ b^{-1}ab = a^3 >$$

and it looks as follows when fully directed and labelled:-

NEWS AND ANNOUNCEMENTS

International Mathematical Union

At the General Assembly of the I.M.U. held in Warsaw on 8th and 9th August, 1982, the following awards were announced.

FIELDS MEDALS

- A. CONNES   (I.H.E.S., Paris)

- W. THURSTON   (PRINCETON UNIVERSITY)

- S.T. YAU   (I.A.S., PRINCETON)

NEVANLINNA PRIZE

- R. TARJAN   (Stanford)

The Nevanlinna Prize is a new prize in Information Science to be awarded every four years on the occasion of International Congresses of Mathematicians. The University of Helsinki is funding the prize.

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It was also announced that the 1986 ICM will be held at Berkeley, California.

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PERSONAL ITEMS

New Appointments.

Dr. R. Gimson of the Computer Science Dept., U.C.D. has been appointed to a Research Position at Oxford University.

Dr. J. Hannah, a Post Doctoral Fellow at the Mathematics Department, U.C.D. has been appointed to the staff of the Mathematics Department, U.C.G. Dr. Hannah works in Ring Theory.

Dr. J. Morris (Ph.D., T.C.D.) has been appointed to the staff of the Computer Science Department, U.C.D. Dr. Morris' speciality is Program Construction.

Dr. D. Ó'Mathúna of the U.S. Department of Transport has been appointed a Research Associate at T.C.D. Dr. Ó'Mathúna's field of interest is Mechanics.

Dr. D. Reynolds of the Mathematical Physics Department, U.C.D. has been appointed to the staff of N.I.H.E., Dublin.

Dr. P. Rippon of the Mathematics Department, U.C.C. has been appointed to a position in the Open University. Dr. Rippon works in Complex Analysis.

Promotions.

Dr. J. Kelly of the Computer Science Department, U.C.D. has been promoted to College Lecturer.

Dr. T. Terakian of the Mathematical Physics Department, Maynooth College, has been promoted to Senior Lecturer.

Dr. J.B. Twomey of the Mathematics Department, U.C.C. has been promoted to Associate Professor.

Study/Sabbatical Leave

Dr. J. Adam of the New University of Ulster will be on study leave from January to September 1983 at the University of Rochester, New York.

Dr. H. Seifert of the Mathematics Department, U.C.D. will be on sabbatical leave at the University of Paris for the Academic Year 1982-1983.

Dr. D.A. Walsh of the Mathematics Department, Maynooth College will be on Sabbatical leave from January to September 1983 at Edinburgh University with brief visits in England and France.

Visitors.

Dr. P.B. Chapman of the Mathematics Department, University of Western Australia will visit T.C.D. from May to August 1983. His field of study is Numerical Analysis.

Irish National Mathematics Contest

The Fourth Irish National Mathematics Contest was held on March 9, 1982 and attracted about 1,400 entries from 75 schools. The total represents a decrease of about 300 entrants from 1981. This decrease is possibly accounted for by the increase in fee and the difficulty of the 1980 and 1981 Contests which may have deterred some schools from participating.

The results to hand indicate that the 1982 Contest was more difficult than the 1981 edition. The number of those who scored 80 or more was 26 - and includes 5 girls - as against 45 in 1981; the average mark for the top scorers was 84.9 versus 85.4 in 1981. Nevertheless, the highest score achieved so far by an Irish student was recorded this year by our winner:

David A. Donnelly, St. Michael's College, Omeath, Co. Louth,

who scored 115. This is a highly commendable achievement.

The top three scorers will be presented with suitable prizes later on in the year.

A fuller analysis of the results will appear in the Newsletter published by the Irish Mathematics Teachers Association, co-sponsors with the Irish Mathematical Society of the 1982 Contest.

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Newsflash

Rumour has it that a postgraduate student in Oxford has proved the generalized Poincaré conjecture in dimension 4. (The n-dimensional Poincaré conjecture is that any closed n-manifold with the homotopy of an n-sphere is homeomorphic to an n-sphere.) If the rumour is true, this means that the only outstanding case is the original one of Poincaré when $n = 3$. (The cases $n \geq 5$ were done by Smale in 1956.)