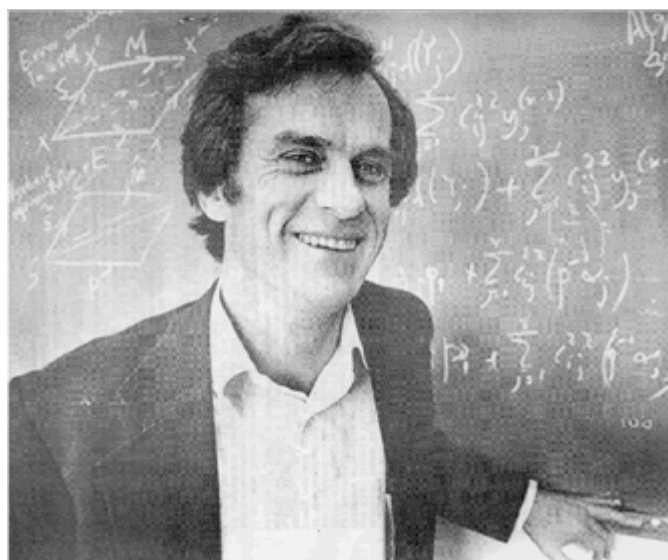


CENTREFOLD

Professor John Butcher

Elected Fellow of the Royal Society of New Zealand



On the 22nd May 1980 the Royal Society announced the election of one of our members, Professor John Butcher (Auckland) to a Fellowship of the Royal Society of New Zealand. This brings to six the number of mathematicians within the Fellowship (the others are, Professors Davidson (Otago), Forder (Auckland), Kerr (Canterbury), Lawden (Birmingham – previously Canterbury), and Petersen (Canterbury)).

The Royal Society released the following statement on Professor Butcher.

"Professor John Charles Butcher, Professor of Mathematics at the University of Auckland, is one of the leading mathematicians in the world working on the theory of the numerical integration of ordinary differential equations. His work in this field has resulted in the development of new mathematical techniques that have found widespread practical application in the efficient use of computers, in solving problems that arise in modern technology and in scientific research."

Within the Society we can add that Professor Butcher served as the second President of the New Zealand Mathematical Society (1975–76) and has continued to support the Society since its inception.

Professor Butcher's career is summarised below. He is 47 years old ("but looks 37" according to a recent Auckland newspaper article), married with three children, and is currently head of Auckland University's new Department of Computer Science. Professor Butcher was born in Auckland, and his early education was in Dargaville, Taumarunui, and Hamilton. He

graduated from Auckland University with an MSc (in Physics) in 1955. He then proceeded to complete his doctorate in Physics at Sydney University "working on computers". To quote from the Auckland papers he says—

"In those days I was a physicist, and that was in the early days of computers. More or less as a hobby, I started working on these differential equation questions."

He returned to New Zealand in 1961 as a Senior Lecturer in Mathematics at Canterbury University after a two year spell as a Lecturer in Applied Mathematics at Sydney University. After a brief period as a Computer Mathematician at Stanford (USA) he became a Professor of Mathematics at Auckland University in 1966. In 1970 he was awarded a DSc by the University of Sydney and he became the first Head of the new Department of Computer Science at Auckland early this year. Since 1955, Professor Butcher has written some 40 papers, predominantly in the area of numerical solution of differential equations. Papers of particular interest include:

Coefficients for the Study of Runge-Kutta Integration Processes, J. Austral. Math. Soc. 3 (1963), 185–201.

Implicit Runge-Kutta Processes, Math. Comp. 18 (1964), 50–64.

A Modified Multistep Method for the Numerical Integration of Ordinary Differential Equations, J. Assoc. Comput. Mach. 12 (1965), 124–135.

On the Convergence of Numerical Solutions to Ordinary Differential Equations, Math. Comp. 20 (1966), 1–10.

An Algebraic Theory of Integration Methods, Math. Comp. 26 (1972), 79–106.

The Order of Numerical Methods for Ordinary Differential Equations, Math. Comp. 27 (1973), 793–806.

The Mathematical Society congratulates Professor Butcher on his achievements. (Well done John!)

G.C. Wake