

## Ralph Gordon Stanton

21 October 1923 – 21 April 2010



Ralph Stanton was born in Ontario, Canada, on the anniversary of the Battle of Trafalgar, and he died in St Boniface hospital in Winnipeg, at the age of 86. He preferred a simple life, content with a shelf of good books, his stamp collection, a little good food, congenial company, and an interesting problem on which to work.

Stanton graduated with a PhD in Mathematics in 1949, and began his teaching career at the University of Toronto. He was one of the earliest staff members appointed in Mathematics at Waterloo, and he also served at York University (Canada) and at the University of Manitoba. During his illustrious, lengthy career he was a Professor, and several times Dean and Department Chairman or Head.

Stanton's extremely distinguished academic career spanned 61 years. His distinctions include Killam Laureate, 1985, and honorary doctorates from four universities: D.Sc. from the University of Newcastle (Australia), 1979; D.Sc. from the University of Queensland, 1989; D.Sc. from the University of Natal, 1997; and D.Math. from the University of Waterloo, 1997.

Stanton commenced his research in group theory, in particular, with the Mathieu groups, in the late forties and early fifties. He then worked on families of difference sets and balanced incomplete block designs (BIBDs), from both combinatorial and statistical points of view. As well as BIBDs, he worked on covering and packing designs, constructions of Room squares, properties of various graphs, and of error-correcting codes. At the time of his death, he was still working on four classes of designs: Doehlert-Klee designs, small projective geometries described in combinatorial terms, Sarvate-Beam triple systems and butterfly factorizations.

In addition to his outstanding research record, Stanton will long be remembered for his teaching, mentorship and supervisory skills. Combinatorialists in Australasia are particularly grateful for the strong support and encouragement which he always generously and cheerfully provided, over many years. He was Honorary Editor of the *Australasian Journal of Combinatorics* from its inception in 1990, when the journal essentially “took over” from the red series of *Ars Combinatoria*; so we owe our journal’s existence to him. He also attended many of the annual *Combinatorial Mathematics Society of Australasia* conferences, regularly visited Australasian institutions over the years, and made many friends at those institutions.

Stanton’s philanthropic generosity is especially noteworthy: in particular, he founded three non-profit corporations, which he also continued to administer until his death. Utilitas Mathematica Publishing Incorporated was started in the early 1970s, to publish conference proceedings in mathematics and scientific computing. The Charles Babbage Research Centre was the next of Ralph’s charitable organizations, set up to promote conferences and facilitate publication of research. The third of his enterprises in this area was the Institute of Combinatorics and Its Applications, modelled after the IMA, but concentrating in the areas of Designs and Combinatorial Mathematics. The ICA has worldwide membership and is internationally recognised, annually presenting awards for leadership and research in combinatorics and related areas. All three of the ICA, CBRC, and UMPI have been remarkably successful, highlighting Stanton’s dedication and talent in these areas.

Ralph Gordon Stanton will long be remembered as an inspiration to the scientific community, and as a dear friend.

*Anne Penfold Street*  
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