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Dr. Rick Wilson named Honorary Fellow of the ICA

Honorary Fellowship in the Institute of Combinatorics and its Applications is awarded to an individual who has made **pre-eminent contributions to combinatorics or its applications**.

Rick Wilson received his PhD in 1969 from the Ohio State University. He has had a long and distinguished academic career at Ohio State and CalTech and he has made many seminal contributions to a wide variety of areas in combinatorics, in particular, to design theory and coding theory.

While he was a graduate student, in 1968, Rick solved the famous Kirkman Schoolgirl problem with D. K. Ray-Chaudhuri. Rick's PhD thesis initiated a deep study of pairwise balanced designs (PBDs), which culminated in 1974 with an asymptotic existence theorem (known as Wilson's Theorem) for PBDs with fixed block size. Rick was awarded the prestigious 1975 Pólya Prize for this work. Rick also did fundamental work in the early to mid-1970's on a wide variety of problems: the construction of mutually orthogonal latin squares, cyclotomy and difference families, group-divisible designs and their connections to PBDs, embeddings of Steiner triple systems (the Doyen-Wilson Theorem), large sets of Steiner triple systems, nonisomorphic Steiner triple systems, t -designs, nearly Kirkman triple systems, existence of resolvable BIBDs with block size four, and geometric lattices. Much of Rick's work during this time period concerned the development of direct and recursive techniques for constructing designs that has formed the foundation of modern design theory. We should also point out that many of these papers have hundreds of citations on Google Scholar.

Later, Rick did important work with a variety of co-authors on the Erdős-Ko-Rado theorem, optimal normal bases in finite fields, cyclic codes, Preparata and Goethals codes, decompositions of edge-coloured complete graphs, and incidence matrices of t -designs, as well as many other topics in combinatorics. Rick's research is notable for its diversity, originality and elegance, and particularly for its deep connections with linear algebra. Rick is also well known for his entertaining and lucid talks in which he demystifies complex ideas, making them appear straightforward. (Of course it requires a special skill to do this!)

Rick is also the co-author (with J. van Lint) of the classic graduate level textbook *A Course in Combinatorics*. This is one of the two or three most influential textbooks on combinatorics. It covers a wide variety of topics in combinatorial mathematics and successfully elucidates the beauty of the subject and the ingenious mathematical techniques employed in its study. Rick also supervised a large number of PhD students; the Math Genealogy project lists 29, including well-known mathematicians such as Ron Baker, Jeff Dinitz, Doug Leonard, and Peter Dukes. Finally, Rick is well known as a performer and collector of historical flutes.

The Institute of Combinatorics and its Applications is an international scholarly society that was founded in 1990 by Ralph Stanton; the ICA was established for the purpose of promoting the development of combinatorics and of encouraging publications and conferences in combinatorics and its applications.