

Charles Dunkl

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Essay by Farrah Rahman

Charles Dunkl was born on February 16, 1941 in Vienna, Austria. He got both his bachelor's in Mathematics and Physics in 1962 and his master's in Mathematics in 1963 from the University of Toronto. For his PhD in Mathematics, he studied at the University of Wisconsin-Madison, and published thesis "Harmonic Analysis on Spheres" in 1965. Throughout his career, harmonics and harmonic analysis would prove to be a major focus of his research, playing at least some role in 40 of his other papers to date. He has also done extensive work in several different fields, notably including algebra, number theory, and representation theory. However, he is best known for creating Dunkl Operators, an operator in group theory that has been described as a "meaningful generalization of partial derivatives."

He began his career in academia as an Instructor at Princeton University, from which he moved to the University of Virginia in 1967. He has continued to work there since, going from an Assistant Professor to a Professor Emeritus. Alongside his teaching and research, Dunkl has also served on the Advisory Panels and Editorial Boards of numerous journals in mathematics and physics, including *Symmetry*, *SIGMA*, and the *Journal of Physics A: Mathematical and General*.