Short Biography

Francis Clarke was born in 1948 in Montréal. His PhD is from the University of Washington (1973); he became full professor at the University of British Columbia in 1978.

In 1984 he was named director of the Centre de Recherches Mathématiques (CRM) at l'Université de Montréal. During his nine-year tenure, CRM evolved into Canada's first national research center for mathematics and its applications. This transition involved the creation of workshop and postdoctoral programmes, thematic years, two publication series, research prizes, and an endowment. Clarke was also founding director of Québec's Institut des Sciences Mathématiques (ISM), a mathematics institute spanning Montréal's four universities, and dedicated to educational activities.

He is now a faculty member at l'Université de Lyon, in l'Institut Camille Jordan, and also holds a chair in mathematical control theory at l'Institut universitaire de France.

Francis Clarke's research interests lie in nonsmooth analysis (a term he coined), optimization, differential equations, control theory, and the calculus of variations, as well as modeling in various applied areas. His contributions have involved the development of nonsmooth calculus, its applications to dynamic optimization, regularity and existence theory in the calculus of variations, Hamiltonian mechanics, generalized solutions of the Hamilton-Jacobi equation, and feedback control synthesis.

Francis Clarke is the author of the book *Optimization and Nonsmooth Analysis* (Wiley 1983, now in SIAM's Classics in Applied Mathematics Series), which has been translated into Russian. A Fellow of the Royal Society of Canada, he has received the Coxeter-James and the Archambault research prizes, and a Killam Fellowship. He has been a featured speaker at the International Congress of Mathematicians (ICM, Helsinki 1978), plenary speaker at the Conference on Decision and Control (CDC, Brighton 1991), the European Control Conference (ECC, Porto 2001), and the International Symposium on Mathematical Programming (Copenhagen 2003), and keynote speaker at the Congress of Nonlinear Analysts (Athens 1996). In 2004 he was president of the scientific committee for the first joint meeting of the six mathematical societies of Canada and France.