

1960) produced more than 100 Ph.D. graduates who staffed various Canadian and U.S. institutions.

No description of Foster is complete without reference to his sense of humour, which could be depicted as Mark Twain or Stephen Leacock with a down-east background. Examples abound. To a traffic policeman, threatening a \$20 fine: "Haven't you got anything cheaper?" During a tour of Leningrad, when the guide from the Soviet Academy of Science was boasting about the efficiency of their underground system in comparison with those in Paris, London and New York, Foster remarked: "Seems reasonable." To the humanists who complained about their lot: "They can go to work too." To a geologist talking about his research problem: "When you get stuck, turn on the water."

As devoted to physics as he was, Foster was exceptionally quick to appreciate good work in art, music and letters

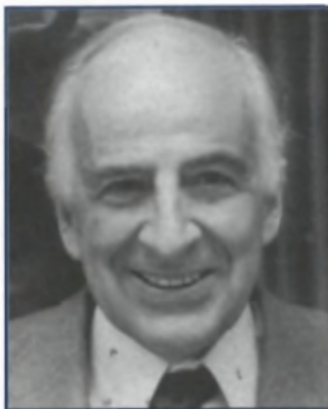
generally. He liked to recognize the musical or artistic talents among his graduate students and their families. He was fiercely loyal to McGill, his family, friends and graduate students. Once convinced of a student's worth, he would tirelessly promote his interests long after graduation.

Foster received many honours and awards which are too numerous to be listed here. Apart from those already mentioned above, suffice it to add: Tory Medal of the Royal Society of Canada (1946); President of Section III of the Royal Society of Canada (1948-49); D.Sc. from McMaster (1950) and from Dalhousie (1960); Medal of Achievement in Physics of CAP (1958). His achievement is, as he used to say of the others, "enough for any one man." Throughout his life, until his death in 1964, Foster was a mover and shaker of modern Canadian science.

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BRUNO PONTECORVO, 1914 - 1993

Bruno Pontecorvo was only briefly in Canada (1943-1948) but he was the most legendary and flamboyant of the stars that illuminated Canadian physics during the past century. Born in Pisa, Italy, on August 22, 1914, he was the youngest and most dashing member of Fermi's group in Rome, perhaps almost the opposite in personality to Rasetti who had such a strong influence on Laval University. Pontecorvo will be remembered for the depth and elegance of his ideas, particularly for experimental neutrino physics and neutrino astrophysics, two fields for which he was the founder and leader for many decades.



Bruno Pontecorvo

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At the Montreal Laboratories (see Phillip Wallace's article on "Atomic Energy in Canada: Personal Recollections of the Wartime Years", in this issue) and in the early days of Chalk River, Pontecorvo was very impressive. Working with Geoffrey Hanna and others, he suggested the chlorine absorption of neutrinos as the basis for radiochemical detection of neutrinos. It later was this method which allowed the first detection of solar neutrinos. From the spectrum of tritium beta decay, he found the first good limit for the neutrino mass. Also, at the Chalk River Nuclear

Laboratories (CRNL), he pioneered the study of muon decays and proposed the universality of the weak decay for electrons and muons. His imagination and creativity were extraordinary, similar to that of his great teacher, Fermi, whom he emulated.

Pontecorvo's verve extended to his private life. He excelled at tennis, let his furnace ashes simply accumulate in his Deep River basement and, in the close-knit community of Deep River, his escapades sometimes bent the rules. After a brief sojourn in England, he shocked his friends in the West by leaving with his family for Russia in 1950.

At Dubna, near Moscow, his physics continued to flourish, but he could not travel outside Eastern Europe until 1978.

Pontecorvo died in Dubna on September 24, 1993. His brilliance as an experimental and theoretical physicist was long remembered at CRNL.

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