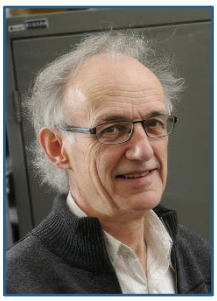
RENÉ ROY (1943-2024)



Originally from Cap-Chat, Quebec, René Roy completed his classical studies at the Séminaire de Rimouski, graduating in 1964 with the Governor General of Canada's Medal. He began a bachelor's degree in engineering physics at Université Laval in 1965, then pursued doctoral studies in nuclear physics from 1969 to 1973 as a National Research Council of Canada (NRC) scholarship holder, under the supervision of Professor Rodolfo Slobodrian. During this period, he conducted a variety of experiments using the Van de Graaff accelerator at the Nuclear Physics Laboratory of Université Laval, as well as at the 88-inch cyclotron at Lawrence Berkeley National Laboratory (LBNL). His Ph.D. dissertation, entitled "Studies of the continuum spectra of unbound states of ^{8}Be and of the mechanisms of the ^{7}Li(d,n)^{8}Be, ^{9}Be(τ,α)^{8}Be and ^{10}B(d,α)^{8}Be reactions," was defended in 1973.

He subsequently undertook postdoctoral training at LBNL, supported by an NRC fellowship, under the direction of Dr. H. E. Conzett. He remained there until May 1976 but continued his collaboration and experimental work at LBNL through the late 1980s. This research focused on the measurement of reaction cross sections, polarization, symmetry tests and invariance under time reversal, among other topics.

On June 1, 1976, he was appointed as an assistant professor (grant-funded position) in the Department of Physics at Université Laval, where he would spend his entire academic career. He became an associate professor in 1981 and a full professor in 1986. His brother, Denis Roy, a researcher in solid-state physics, was also a professor in the Department of Physics throughout his career. Notably, over the course of his career, Professor Roy served for nearly 25 years as Director of the Engineering Physics program and for eight years as Chair of the department. He supervised or co-supervised more than sixty Master's and Ph.D. students.

Through his research activities, he established numerous collaborations and led the design of several instruments associated with heavy-ion research. This work began at the National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University as early as 1985 and continued from 1989 to 1997 at the Tandem Accelerator SuperConducting Cyclotron (TASCC) in Chalk River, Ontario. During this period, his team built the Héraclès multi-detector array, composed of an ensemble of CsI(Tl) and BaF_2 detectors. The system was subsequently used at the Cyclotron Institute in College Station, Texas (1997–2004 and 2007). Professor Roy also initiated a collaboration with GANIL in Caen (France) beginning in 1990. Among other contributions, he participated in the INDRA collaboration, a highly productive partnership associated with numerous joint doctoral supervisions. This collaboration continued until his retirement in 2017. Finally, from 2008 to 2016, he took part in experiments involving radioactive beams and stable beams accelerated by the ISAC II facility at TRIUMF (UBC).

An active member of the Canadian physics and nuclear physics communities, Professor Roy notably served as Secretary of the Division of Nuclear Physics of the Canadian Association of Physicists (CAP),

as a councillor for South and East Québec on the CAP Council, and as a member of the editorial board of *Physics in Canada / La Physique au Canada*. Although an engineer by training, he was a strong advocate of the P. Phys. / phys. professional designation—himself licensed—and served for several years as an active member of the designation's certification committee. Within CAP, he also held the positions of Chair of the Division of Nuclear Physics; Secretary of the Division of Industrial and Applied Physics for two terms; Chair of the Division of Industrial and Applied Physics (at different times); and several other terms as a councillor. In addition, he served on numerous NSERC committees, including those related to subatomic physics grants, the Canadian Subatomic Physics Long-Range Planning Committee, the Advisory Committee for Nuclear and Particle Physics, the assessment of research chair applications for the Canada Research Chairs program, and as a member of the committee that awarded the first Gerhard Herzberg Gold Medal, among many other contributions.

A true scholar, passionate lover of classical music, collector of comic books, and excellent billiards player (since his years at the Séminaire de Rimouski), Professor René Roy left an indelible mark on the department through his passion for physics; his sustained support for an Engineering Physics program alongside Physics within the same department; and his unwavering commitment to the development of research and teaching activities in medical physics, which he viewed as a natural extension of nuclear physics. In that regard, the René-Roy Fund in Medical Physics was established within Université Laval's Faculty of Science and Engineering, with the aim of supporting studies in science and engineering within the CAMPEP-accredited Medical Physics program.

LUC BEAULIEU, Université Laval