## ERNEST LESLIE MCFARLAND (1946-2024)

he Canadian physics community has lost a very dear member.
Ernie McFarland, retired professor and former Associate Chair in the
Department of Physics at the University of Guelph, passed away suddenly on
December 16, 2024. He is survived by his loving wife, Mary, two sons Grant and
Steve, as well as stepson Dan, stepdaughter Lianna, and step-granddaughters Lotte
and Margo.

Ernie first joined the department in 1974 as a lecturer and he soon became an integral member of the team. Although Ernie did not have a doctoral degree, his position was converted to tenure-track in 1985, and he became a tenured faculty member with a focus on physics education in 1988. This was a controversial move at the time, but it paved the way for the physics department at the University of Guelph to become recognized nationally for its commitment to excellence in pedagogy — a reputation maintained to this day.

In the words of a colleague at another institution: "Ernie was a vessel of energy, creativity and compassion, and few could match his captivating ability as a teacher and mentor". He truly marveled at the wonders of the natural world and always infused his lectures with a joyful playfulness. He loved to start a session with a demonstration related to the subject matter of the day, asking students to predict what would happen and then collectively observing the result. Sometimes these demonstrations involved nothing more than a coffee mug on a string, but regardless of how simple or elaborate the setup, they were always designed to get students' attention and cause them to wonder why. You never knew what was in his pockets when he arrived, but you could be sure it would be intriguing.

Ernie won many awards for his outstanding skills in the lecture hall, locally as well as at the provincial and national levels. Most notably, Ernie was named a 3M National Teaching Fellow in 1987 and received the CAP Medal for Excellence in Undergraduate Teaching in 1997. He played a key role in the founding of the Ontario Association of Physics Teachers in 1979, with the first OAPT conference held at the University of Guelph that summer. Ernie served as the editor of the Demonstration Corner column for the OAPT newsletter for 25 years (The Demonstration Corner Archives). He was awarded an honorary lifetime membership in 1987.

Writing textbooks and journal articles, Ernie had a passion for sharing his approach to physics teaching with colleagues in secondary and post-secondary education, giving many conference presentations and colloquia as well. He was truly honored to deliver the Herzberg Memorial Public Lecture at the 2006 CAP Congress at Brock University. Ernie also loved to wow junior scientists in elementary schools around the province, bringing the Physics Road Show to hundreds of students every year with physics department staff member Tom Kehn. They also appeared on the morning show on CTV with these engaging demonstrations – Ernie and Tom were a fabulous team.

## IN MEMORIAM

With his longstanding reputation as a pioneer in physics education in Canada, Ernie was asked to share his expertise in a number of ways: he was a member of the CAP Teaching Medal selection committee for many years, as well as the Canadian National IUPAP Liaison Committee and the International Commission on Physics Education.

Ernie carried his child-like wonder and playful approach to life long learning into retirement, enjoying his chats with physics colleagues about the current antics of the department's outreach team until the end. We have lost a generous former colleague, a caring educator, a thoughtful mentor, and a true friend. In the words of one department alumnus: "He was one of the greats. ... His legacy will live on in his many students."

In his memory, Ernie's family has asked for donations to either of two organizations that held a special place in his heart: the OAPT (Ontario Association of Physics Teachers - Donate) and Royal City Science, a non-profit organization in Guelph that continues his legacy of community-based science programming for people of all ages and backgrounds.

JOANNE O'MEARA, Professor of Physics, University of Guelph