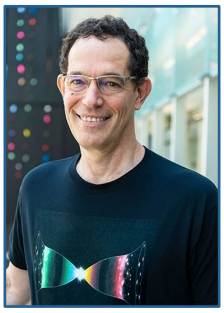
2026 CAP CONGRESS PROGRAM HIGHLIGHTS, JUNE 22-26

HOSTED BY UNIVERSITY OF OTTAWA AND CARLETON UNIVERSITY

All events to be held at the University of Ottawa, unless otherwise specified

(Please visit https://www.cap.ca/congress-conference/congress2026/ for speakers' abstracts and bios and symposia details)

HERZBERG PUBLIC LECTURE



NEIL TUROK, Higgs Chair of Theoretical Physics, University of Edinburgh and Roger Penrose Distinguished Visiting Chair, Perimeter Institute for Theoretical Physics

"A Simpler Cosmology"

Monday, June 22, 2026, 20h00-21h00, Carleton University

PLENARY SPEAKERS

JOHN DONOHUE, Scientific Outreach Manager, Institute for Quantum Computing, University of Waterloo

"Quantum for Educators and Young Students"

Monday, June 22, 2026, 9h00-9h45

NORMAND MOUSSEAU, Professor of Physics at the Université de Montréal, Scientific Director of the Trottier Energy Institute at Polytechnique Montreal, and co-Scientific Director of the Energy Modeling Hub.

"What can physicists contribute to the climate challenge?"

Tuesday, June 23, 2026, 9h00-9h45

SANIYA HEEBA, Institute of Particle Physics Connect Fellow, Carleton University

"The Universe as a Dark Matter Laboratory"

Thursday, June 25, 2026, 9h00-9h45

SYMPOSIA DAY WEDNESDAY JUNE 24, 2026

FUTURE PARTICLE PHYSICS ENERGY FRONTIERS FACILITIES

Researchers working on new facilities that will enable exploration of the energy frontier will discuss theory motivations, experimental developments, and accelerator technologies that enable the next generation of experiments. *Organizers: Max Swiatlowski (TRIUMF), Jesse Heilman (Carleton University), Dag Gillberg (Carleton University), Alison Lister (University of British Columbia), Thomas Koffas (Carleton University), Luise Poley (TRIUMF).*

BIG DATA IN MATTER, MATERIALS, AND BEYOND

This symposium will draw together physicists working across disciplinary borders to forge new approaches to empirical science in the 21st century. Topics to be discussed include machine learning and artificial intelligence, information geometry, big data, and applications in materials, condensed matter, biophysics, and the physics of medicine. *Organizers: Bill Atkinson (Trent University), Greg van Anders (Queen's University).*

ADVANCING QUANTUM SIMULATION BASED ON 2-DIMENSIONAL MATERIALS THROUGH CANADIAN COLLABORATION

Presenting recent advances and ongoing challenges of the Programmable Quantum Simulators Based on 2-Dimensional (2D) Materials initiative, supported by the Natural Sciences and Engineering Research Council of Canada (NSERC), this symposium aims to highlight potential industrial and academic impacts and foster new collaborations within the Canadian quantum research ecosystem. *Organizers: Adina Luican-Mayer (University of Ottawa, University of Illinois Chicago), Pawel Hawrylak (University of Ottawa), Louis Gaudreau (University of Ottawa, National Research Council Canada (NRC)), Didier Guignard (University of Ottawa).*

NOVEL IMAGING OF THE RETINA OF THE EYE

This special memorial Symposium will recognize the research and training in the area of retinal imaging and their impact on the diagnosis of eye diseases undertaken by Prof. Kostadinka Bizheva, of the Department of Physics and Astronomy, University of Waterloo. *Organizer: Melanie Campbell (University of Waterloo).*

PRIVATE SECTOR PHYSICS

Physicists interested in learning about physics career paths outside academia are encouraged to attend this interactive symposium, which will provide insights into the careers of private sector physicists and offer insights and advice into the possible pathways and training needed to transition your physics training into an engaging and rewarding career beyond academia. *Organizers: Ian D'Souza (CAP Director of Private Sector Relations), Daniel Cluff (CanMIND Associates), and Steffon Luoma (SNOLAB).*

Fusion Energy in Canada

Growth in fusion energy supports national aims in research, technological diversification, defense, and national technological sovereignty in addition to energy independence. This meeting will showcase the potential of fusion energy, identify and highlight Canadian expertise in academia, and on-going work in associated industries in Canada. *Organizers: Émile Carbone (emile.carbone@inrs.ca) and Amina Hussein (aehussein@ualberta.ca).*

Q-STATE: Quantum Science, Technology, Applications, Training, and Education

Learn about current directions in the field and the unique Canadian quantum landscape across research, education and industry. *Organizers: Daria Ahrensmeier (Simon Fraser University) and Olivia Di Matteo (University of British Columbia).*

Transforming physics: EDIT-STEM tools to advance equity, diversity, and inclusion

Practical tools to support physicists in learning about how they can address challenges to equity, diversity, and inclusion (EDI) in their professional activities. *Organizers: Rowan Thomson (Carleton University), Alisha Szozda (Carleton University). Sponsored by: Carleton University, IVADO, and the Perimeter Institute.*