

Friday, October 16

Location	Time	Presenter	Abstract Title	Institution
ROOM 1 PGCLL M16	5:00	Baturalp Aslan	Fuel composition monitoring in pressurised heavy water reactors using coherent elastic neutrino-nucleus scattering	University of Toronto
	5:15	Cassia McDonald	Investigating the Decay of Excited ^{120}Sn Produced from Thermal Neutron Capture	Simon Fraser University
	5:30	Graeme Cook	Design of a Beam Profile Monitor for Measurement of Direct Current Particle Beams for Nuclear Materials Research	Queen's University
	5:45	Jonathan Ash-Roberts	Studying Negative-Parity States in ^{118}Sn with GRIFFIN via β Decay of ^{118}In	Simon Fraser University

ROOM 2 PGCLL M12	5:00	Amitha Muralitharan	ON THE SHOULDERS OF GIANTS*: THE MULTICULTURAL HISTORY OF PHYSICS	McMaster University
	5:15	Cameron Flaman	Building a peltier-cooled cloud chamber for physics outreach	McGill University
	5:30	Isabelle Robert	Analyzing enrollment, achievement, and gendered trends in STEM	University of Guelph
	5:45	Nazee Hafizi	A Brief Literature Review of Generative Artificial Intelligence in Physics Education	McMaster University

ROOM 3 PGCLL 124	5:00	Christian Ruiz	Quantum-inspired methods for partial differential equations and high-harmonic generation	University of Windsor
	5:15	Geetansh Gautam	Dissipative Dynamics of the Two-Leg Quantum Dimer Model	University of Northern British Columbia
	5:30	John Wolfram	Acoustic Event Horizons in Expanding Bose-Einstein Condensates	McMaster University
	5:45	Michelle Huang	The Different Facets of Magnetism: Varying Single Ion Anisotropy in Nd-based Magnets	University of British Columbia

ROOM 4 PGCLL B131	5:00	Hayden Klassen	An Extensible Reaction-Diffusion Solver for Radiolysis	University of Toronto
	5:15	Lucy Feng Keyes	Comparing the Response of Increasing Boreal Forest Wildfire Emissions in Two CanESM Schemes	University of Toronto
	5:30	Luis Varona	Numerical Mode-Finding in Layered Media via Banded RRQR	Mount Allison University
	5:45	Tanner Hall	Mitigating Vibration-induced Noise in a Quantum Gravimeter	University of New Brunswick

Saturday, October 16 (morning)

Location	Time	Presenter	Abstract Title	Institution
ROOM 1 PGCLL M16	9:00	Julia Brachman	From Code to Cryostat: Building a Single-Phase Liquid Argon Detector	Queen's University
	9:15	Kai Blomquist	Bio-sample Alpha Detector development for examination of cells treated with ^{225}Ac targeted alpha therapy	Simon Fraser University
	9:30	Luka Radulovic	Studying supernova nucleosynthesis with a direct measurement of the $^{13}\text{N}(\alpha, p)^{16}\text{O}$ reaction	Saint Mary's University
	9:45	Martha Yousif	Computational Optimization and Cryogenic Testing of a Trans-Stilbene and Skipper-CCD Prototype for Directional Dark Matter Detection	University of Toronto

ROOM 2 PGCLL M12	9:00	Alexander Duong	Absorption and Phase Spectroscopy using Two-Photon Interference	University of Ottawa
	9:15	Luyu Vankerkwijk	Low-cost Stokes Polarimeter for Precise Measurement of Light	University of Toronto
	9:30	Andrew Lehmann	Retrofittable Absolute Positioning Motorized Optics Mounts	University of Toronto
	9:45	Tochukwu Odiwa	Spatiotemporal Power Modulation for Customized Depth Profiles in Copper Laser Welding	Queen's University

ROOM 3 PGCLL 124	9:00	Alice Rodrigues Viana	Spectral Identification and Characterization of Small Iron Meteoroids	McMaster University
	9:15	Ibrahim King	Development of a Microfluidic Platform for Live Cell Raman Microscopy	Simon Fraser University
	9:30	Ramsha Shujaat	Biophysical Modeling of Substrate Processing in Novel Lysosome Morphologies	Toronto Metropolitan University
	9:45	Sara Osman	Linear and Rotational Motion of Paramagnetospirillum magneticum AMB-1 Across Fluid Environments	McMaster University

Saturday, October 16 (afternoon)

Location	Time	Presenter	Abstract Title	Institution
ROOM 1 PGCLL M16	1:30	Maxen Morrison	Analysis of light guides for the Electron Ion Collider (EIC)	Mount Allison University
	1:45	Spencer Reyno	Nucleosynthesis in classical novae: nuclear physics and astrophysics uncertainties	Saint Mary's University
	2:00	Will Gray	Testing a Pulse-IV Multiplexer for Large Silicon Photomultiplier Array Characterization	McGill University
	2:15	Lyssa Dale-Davies	Developing a Machine Learning Algorithm for Position Prediction in Direct Detection Dark Matter Search	University of Toronto
	BIO BREAK: 15 MINUTES			
	2:45	Katana Parker	An Experimental Test for Almost Quantum Correlations	Queen's University
	3:00	Annalisa Teixeira	Complete Coherent Control of Ultracold Inelastic Atom-Molecule Scattering	University of Toronto
	3:15	Emmanuel Kmahon	An analysis of Geometric tuning within causal set growth dynamics	University of Toronto

ROOM 2 PGCLL M12	1:30	Ricardo Cardoso	Investigation of Techniques for Side-Locking External Cavity Diode Lasers	York University
	1:45	Sylvain Joanis	True Random Bit Generation using Rayleigh Scattering Interactions in a Fiber Optic Pseudo-Cavity	University of Ottawa
	2:00	Aaron Carey	TOWARD CLINICALLY ROBUST RADIOMICS: FEATURE CLUSTERING AND HARMONIZATION FOR SEX PREDICTION IN GLIOMA	Dalhousie University
	2:15	Goodluck Nwankwo	Development of an automatic tandem localization method in transrectal ultrasound images for gynecologic brachytherapy	University of Manitoba
	BIO BREAK: 15 MINUTES			
	2:45	Mila Vasquez	Quantitative evaluation of magnetic resonance imaging sampling schemes for mapping severe magnetic field distortions near metal implants	University of Windsor
	3:00	Sidhi Ramakrishnan	Addressing the Challenges of Acquiring Soma and Neurite Density Image Metrics on a Clinical MRI Scanner	McMaster University

ROOM 3 PGCLL 124	1:30	Maxime Laniel	Strain-tunable topological features in antiferromagnetic Kagome FeGe	University of Ottawa
	1:45	Yumi Palleschi	Strain-Tunable Quantum Transport in Suspended Graphene Devices	Concordia University
	2:00	Natalie Dafoe	Investigating Memory in Crumpled Mylar	McMaster University
	2:15	Anya Seenuvasan	Simulation of the Tip enhanced Raman spectroscopy of graphene	Ontario Tech University
	BIO BREAK: 15 MINUTES			
	2:45	Evan Harley	Modification of Magnetite Nanoparticles using Phytoglycogen	University of Guelph
	3:00	Hannah Mayers	Fluorescent Tagging of Macromolecules for FCS Crowding Experiments	University of Guelph
	3:15	Alexa Hlus	From Stability to Collapse in Cohesive Granular Matter	McMaster University

ROOM 4 PGCLL B131	1:30	Alexis Li	Searching for Precursor Outbursts in a Type IIa-"Like" SN	University of Toronto
	1:45	Dia Kalra	13CO/12CO Line Ratios Reveal Star Formation's Imprint on Molecular Clouds in the LMC	University of Alberta
	2:00	Maria Bayder	The Long and Winding Equation: Symbolic Regression for Power Spectra from the Cosmic Dawn and Epoch of Reionization	McGill University
	2:15	Rizkallah Botros	A New Simulation-Based Estimator for Galaxy Infall Times	McMaster University
	BIO BREAK: 15 MINUTES			
	2:45	Serena Davis	Exploring Convective Boundary Mixing Through Stellar Pulsations	Mount Allison University
	3:00	Timothy Manukian	Stellar Temperature Measurement for the Broken or Under-Funded: A Novel and Cost-Effective Method Involving Analyzing Diffraction Spikes	McMaster University