Friday, 17 October 2025

12:00 - 15:00	**Welcome Desk Opens** CIBC Student Welcome Center
12:30 - 13:00	**CS Programming Competition briefing** B201
13:00 - 18:00	**Computer Science Programming Competition** B201
14:00 - 17:30	**Mathematics Competition** A114
14:30 - 16:00	**Joint MSCS Division Meeting** CE308
16:00 - 17:30	**Computer Science Division Meeting** CE309
16:00 - 17:30	**Mathematics & Statistics Division Meeting** CE308
17:30 - 19:00	**Pizza Party** Verschuren Centre Atrium
18:00 - 18:30	**Women+ Meetup** TBA
19:00 - 19:15	**Official Welcome & Opening Remarks** RBC Theatre
19:15 - 20:15	**Blundon Lecture (Mathematics): Pengfei Guan** RBC Theatre
20:15 - 21:15	**Reception** Verschuren Centre Atrium
20:30 - 22:00	**Student Board Game Night** B118

Saturday, 18 October 2025

08:00 - 08:30 **Morning Coffee**
CIBC Student Welcome Center

08:30 - 10:30 **Graduate Talks - 1**
CE308

08:30 - 08:50 **Comparing Correction Methods for Measurement Error and Unbalanced Data in Composite Outcomes in Nutritional Epidemiologic Data** Patrick Talbot[1] [1]University of New Brunswick, Saint John — 12

08:50 - 09:10 **Estimation of Time-dependent Infection Rates and Change Points in Epidemic Model** Jingyu Li[1] [1]Dalhousie University — 31

09:10 - 09:30 **Sparse Bayesian Random Feature Models for Delay-Embedded Time Series** Thu Nguyen[1] [1]Dalhousie University — 29

09:30 - 09:50 **Une nouvelle approche de sélection des variables pour l'analyse de la médiation causale** Simeon Lappa Tchoffo[1] [1]université de moncton — 23

09:50 - 10:10 **Methods for Improving Compilation of Quantum Circuits to Lattice Surgery** Rory Schepp[1] [1]Dalhousie — 36

10:10 - 10:30 **Generalized Quantum Conditional Statements** Scott Wesley[1] [1]Dalhousie University — 38

08:30 - 10:30 **Undergraduate Talks - 1**
CE309

08:30 - 08:50 **Exploring Connections Between Causal Inference and Mathematical Finance** Hemisha Saminathen[1] [1]upei — 21

08:50 - 09:10 **Spatially Analyzing Mortality of 20 to 24 Year Olds in Atlantic Canada as a Response to Mental Health Indicators** Christopher Richard[1] [1]St. FX University — 20

09:10 - 09:30 **Achebe Meets Afrobeats: Lexical Diversity in the Afrobeats Musical Genre** Olamipo Amusa[1] [1]University of Prince Edward Island — 17

09:30 - 09:50 **On the Construction of Sequential Initialization Method for K-Means Clustering Algorithm** Dibaba Gemechu[1] [1]Namibia University of Science and Technology — 3

09:50 - 10:10 **QFASA - A New Approach With Quadratic Programming** Anson Green[1] [1]University of New Brunswick, Saint John — 18

08:30 - 10:30 **Undergraduate Talks - 2**
CE315

08:30 - 08:50 **Think Out-of-LLM: How Agentic Workflow can empower Text2Cypher?** Yilin Huang[1] [1]Saint Mary's University 2

08:50 - 09:10 **A Unified Interface for Matrix Bandwidth Reduction Algorithms** Luis Varona[1, 2] [1]Department of Politics & International Relations, Mount Allison University, Sackville, NB E4L 1E4, [2]Department of Mathematics & Computer Science, Mount Allison University, Sackville, NB E4L 1E4 1

09:10 - 09:30 **Methods for Optimizing Ray Tracing** Devin Smith[1] [1]St. Francis Xavier University 35

09:30 - 09:50 **A Human-in-the-Loop Pipeline for Accelerating MSX Diagnosis in Eastern Oyster (Crassostrea virginica) Histology** Jonathan Zul Luna[1] [1]University of Prince Edward Island 9

08:30 - 10:30 **Undergraduate Talks - 3**
CE325

08:30 - 08:50 **Blow Up of Solutions for Semilinear Parabolic Partial Differential Equations** Marcus Lawless[1] [1]Cape Breton University 8

08:50 - 09:10 **An Introduction to BMO and the Tale of Two Jumps** Jesse Milley[1] [1]Cape Breton University 5

09:10 - 09:30 **Uncentered Maximal Functions and the BMO Norm** Luke MacKinnon[1] [1]CBU 6

09:30 - 09:50 **Counting the Twist Isoclasses of the Irreducible Representations of M_5** Jase Kochhar[1] [1]Cape Breton University 22

09:50 - 10:10 **The Unique Factorization of Clustering Words** Myles Dugas[1] [1]Université de Moncton 4

10:10 - 10:30 **How does a quantum state gravitate?** James Petersen[1] [1]University of New Brunswick 32

10:30 - 11:00 **Refreshment Break**
CIBC Student Welcome Center

11:00 - 12:00 **Field Lecture (Statistics): Neil Spencer**
RBC Theatre

12:00 - 13:30 **Lunch Break**
The Pit Lounge

13:30 - 15:30 **Graduate Talks - 2**
CE308

13:30 - 13:50 **Playing dominoes in the correct dimension** Thiago Holleben[1] [1]Dalhousie University 37

13:50 - 14:10 **Optimizing Race Track Lap Times Using Reinforcement Learning** Elizabeth MacDonald[1] [1]St. Francis Xavier University 34

14:10 - 14:30 **The combinatorial game theory of Reverse Hex** Jeremiah Hockaday[1] [1]Dalhousie University 28

14:30 - 14:50 **The Cop Number of the Snort Product of Graphs** Melanie Gauthier[1] [1]Dalhousie 25

14:50 - 15:10 **Adaptive QoE-Driven DVFS for Concurrent Workloads: A User-Centric Approach to Power and Performance Management** Aravind Kashyap Kaveripakkam Raghuraman[1] [1]St. Francis Xavier University, Nova Scotia, Canada 19

15:10 - 15:30 **Identifying Geographical Bias in Large Language Models for Rural Users** Patrick Bowen[1] [1]St. Francis Xavier University 14

13:30 - 15:30 **Undergraduate Talks - 4**
CE309

13:30 - 13:50 **DEEP LEARNING APPROACHES FOR SENSOR BASED HUMAN ACTIVITY RECOGNITION** Ibrahim Harunur Rashid[1] [1]None 16

13:50 - 14:10 **Teaching Phi-4 to Speak Hausa** Ufedo-Ojo Omale[1] [1]University of Prince Edward Island 13

14:10 - 14:30 **Enhancing Intrusion Detection Systems with CNN+LSTM and SMOTE for Imbalanced Datasets** Mohammod Haque[1] [1]Acadia University 7

13:30 - 15:30 **Undergraduate Talks - 5**
CE315

13:30 - 13:50 **Modeling Fish Migration and Probability of Interaction With a Tidal Turbine** Sophie Farina[1] [1]Acadia University 39

13:50 - 14:10 **Understanding Opioid Mortality during COVID-19 - An Individual-Based Model** Carter Clifton[1] [1]St. Francis Xavier University 15

14:10 - 14:30 **Recurrent Epidemic Outbreaks in an Extended SIR Model** Youran Zheng[1] [1]Dalhousie University 10

	14:30 - 14:50 **The combinatorial game theory of Rex+** Veronika Keras[1] [1]Dalhousie University	26
	14:50 - 15:10 **A Partial Differential Equation Framework for Modeling Economic Growth** Timothy Power[1] [1]Dalhouise University	41
13:30 - 15:30	**Undergraduate Talks - 6** CE325	
	13:30 - 13:50 **Laplacian eigenvectors of grid graphs and Mobius grid graphs** Hoang Dao[1] [1]Dalhousie University	33
	13:50 - 14:10 **An Introduction to Graph Domination and Eternal Domination** Ewan MacDuff[1] [1]St. Francis Xavier University	27
	14:10 - 14:30 **Dominated moves in Snort on n-ary trees** Cain Parsons[1] [1]Mount Saint Vincent University	30
	14:30 - 14:50 **Exploring Binary Trees Generated from Linear Operations** Jessica Ryuzaki[1] [1]Mount Saint Vincent University	40
	14:50 - 15:10 **Failed zero forcing sets on trees** Nimar Bajwa[1] [1]Acadia University	24
	15:10 - 15:30 **An Adaptation of the Grid Sum Puzzle to Graph Theory** Anna Lukeman[1] [1]Acadia University	11
15:30 - 16:00	**Refreshment Break** CIBC Student Welcome Center	
16:00 - 17:30	**Sedgwick Lecture (CS): Rita Orji** RBC Theatre	
17:30 - 19:00	**Conference Banquet** The Pit Lounge	