

Theory Canada 16 2024 - Programme

Schedule Overview

Location: Institute for Quantum Computing, University of Waterloo

Friday, May 24

0846 - 09 00	Welcome
0900 - 09 30	Plenary 1
0945 - 1045	Parallel Sessions 1A & 1B (3 talks each)
1045 - 1115	Refreshments break
1115 - 1235	Parallel Sessions 2A & 2B (4 talks each)
1235 - 1400	Lunch
1400 - 1500	Parallel Sessions 3A & 3B (3 talks each)
1500 - 1515	Refreshments break
1515 - 1545	Plenary 2
1545 - 1600	Break
1600 - 1700	Parallel Sessions 4A & 4B (3 talks each)

Saturday May 25

0900 - 09 30	Plenary 3
0945 - 1045	Parallel Sessions 1A & 2A (3 talks each)
1045 - 1115	Refreshments break
1115 - 1235	Parallel Sessions 2A & 2B (4 talks each)
1235 - 1400	Lunch
1400 - 1500	Parallel Sessions 3A & 3B (3 talks each)
1500 - 1515	Refreshment break
1515 - 1545	Plenary 4
1545 - 1600	Break
1600 - 1700	Parallel Session 4A & 4B (3 talks each)

Friday May 24

Day 1: Plenary Session (QNC 0101)

Time	Speaker	Title
0845-0900	R Mann, H Kunduri	Opening Remarks
0900-0930	Saeed Rastgoo	Quantization of black holes: LQG, GUP, and beyond
0930-0945	Break	

Day 1: Parallel Session 1A (QNC 0101)

Time	Speaker	Title
0945-1005	Sergey Sibiryakov	Theoretical status of quantum gravity with anisotropic scaling
1005-1025	Viqar Husain	Quantum gravitational collapse as a Dirac particle on the half-line
1025-1045	Jonathan Barenboim	Evaporating non-singular black holes in 2D gravity

Day 1: Parallel Section 1B (IQC 1204)

Time	Speaker	Title
0945-1005	Richard Mackenzie	Edge states and their cousins in an open SSH model
1005-1025	Ayana Sarkar	GinOE-GinUE crossover in correlated disordered non-hermitian spin chains
1025-1045	Mustafa Amin	On Some Classical Features of Quantum Mechanics

1045-1115 Coffee Break

Day 1: Section 2A (QNC 0101)

Time	Speaker	Title
1115-1135	Adam Teixido Bonfill	Experimental Entanglement Harvesting: Bridging the gap between theory and experiments
1135-1155	Lana Bozanic	Correlation harvesting between particle detectors in uniform motion
1155-1215	Ruhi Shah	Measuring gravity with spin-spin coupling
1215-1235	Caroline Lima	Unruh phenomena and thermalization for qudit detectors

Day 1: Parallel Section 2B (IQC 1204)

Time	Speaker	Title
1115-1135	Manu Paranjape	Fractional Skyrmions
1135-1155	Paul Balduf	Weighted Monte-Carlo sampling of Feynman graphs in ϕ^4 -theory
1155-1215	Maryam Bibi	Exploring Rare B-Decay: Analyzing Effective Vertices without Unitarity Condition using Mathematica
1215-1235	Yingtao Yang	The Theory of Electrodynamical Spacetime Relativity: An attempt to inherit and develop the special theory of relativity

1235-1400 Lunch

Day 1: Parallel Session 3A (QNC 0101)

Time	Speaker	Title
1400-1420	Raquel Izquierdo Garcia	Exact results for surface operators in $\mathcal{N} = 4$ super Yang-Mills
1420-1440	Ming Zhang	Quantum Charged Black Holes
1440-1500	Jacqueline Caminiti	Holographic scattering and non-minimal RT surfaces

Day 1: Parallel Session 3B (IQC 1204)

Time	Speaker	Title
1400-1420	Ivan Booth	Dissolving a black hole
1420-1440	Matin Tavayef	Distorted static black holes with a bubble
1440-1500	Jonas Murieka	TBA

1500-1515 Coffee Break

Day 1 Plenary Session (QNC 0101)

Time	Speaker	Title
1515-1545	Philippe Landry	Neutron star science with gravitational waves

1545-1600 Mental Break

Day 1: Parallel Session 4A (QNC 0101)

Time	Speaker	Title
1600-1620	Luca Marchetti	Scalar cosmological perturbations from quantum-gravitational entanglement
1620-1640	Lakshay Goel	Accelerated detector in a superposed spacetime
1640-1700	Cendikiawan Suryaatmadja	Quantum Signature of Black Holes in Quantum Superposition

Day 1: Parallel Section 4B (IQC 1204)

Time	Speaker	Title
1600-1620	Robert Mann	A New Look at Quark Stars
1620-1640	Michael Gammon	Charged Quark Stars in Regularized 4D Einstein-Gauss-Bonnet Gravity
1640-1700	Jens Boos	Kilometer-scale ultraviolet regulators and astrophysical black holes

End of Day 1

Saturday May 25

Day 2: Plenary Session (QNC 0101)

Time	Speaker	Title
0900-0930	Sizheng Ma	Cauchy-characteristic matching
0900-0930	Break	

Day 2: Parallel Session 1A (QNC 0101)

Time	Speaker	Title
0945-1005	Irfan Javed	Entanglement production through a cosmological bounce
1005-1025	Maria Rosa Preciado-Rivas	A quantum detector freely falls into a three-dimensional black hole
1025-1045	Sijia Wang	Freely Falling UDW Detector in Rotating BTZ Space-time

Day 2: Parallel Section 1B (IQC 1502)

Time	Speaker	Title
0945-1005	Hubert de Guise	Many-particle representations of $SU(1,1)$ and the orthogonal group.
1005-1025	Amit Anand	Non-linearity and chaos in the quantum kicked top
1025-1045	Juan Margalef	Generalized Husain-Kuchar models in manifolds with boundaries

1045-1115 Coffee Break

Day 2: Parallel Section 2A (QNC 0101)

Time	Speaker	Title
1115-1135	Marina Maciel Ansanelli	Distinguishing Underlying Causal Explanations from Statistical Data
1135-1155	David Amaro Alcala	Randomised benchmarking for universal qudit gates
1155-1215	Carlo Maria Scandolo	Choi-defined resource theories
1215-1235	Amir Arqand	Generalized Renyi entropy accumulation theorem and generalized quantum probability estimation

Day 2: Parallel Section 2B (IQC 1502)

Time	Speaker	Title
1115-1135	Michael Gennari	How to improve CKM unitarity bounds with nuclear theory
1135-1155	Georgios Palkanoglou	Exotic nuclear superfluidity in heavy nuclei
1155-1215	Lotta Jokiniemi	Neutrinoless double-beta decay and how to probe it with muon capture
1215-1235	Ryan Curry	Second order perturbation theory in quantum Monte Carlo

1235-1400 Lunch

Day 2: Parallel Session 3A (QNC 0101)

Time	Speaker	Title
1400-1420	Shohreh Abdolrahimi	Quantum Fields near Black Holes and Black Holes Evaporation
1420-1440	Joanna Karczmarek	Lorentzian spacetimes in the IKKT model
1440-1500	Mengqi Lu	Lagrangian Partition Functions Subject to a Fixed Spatial Volume Constraint in the Lovelock Theory

Day 2: Parallel Session 3B (IQC 1502)

Time	Speaker	Title
1400-1420	Jiayue Yang	Dynamic behaviours of black hole phase transitions near quadruple points
1420-1440	Valerio Faraoni	More on the first-order thermodynamics of scalar-tensor gravity
1440-1500	Billy Sievers	MOTS in Kruskal-Schwarzschild-AdS

1500-1515 Coffee Break

Day 2 Plenary Session (QNC 0101)

Time	Speaker	Title
1515-1545	Geremia Massarelli	The Properties of Dirac Materials: Strain, Magneto-electrics and Krein-Hermiticity (Ph.D Prize talk)

1545-1600 Mental Break

Day 2: Closing Session (QNC 0101)

Time	Speaker	Title
1540-1600	Amir Hossein Dehghanizadeh	Bouncing cosmology; a solution to the singularity problem and more.
1620-1640	Turkuler Durgut	A Beginner's Struggle: How to incorporate EDI into teaching theoretical physics?