

Quantum Spacetime in the Cosmos: From Conception to Reality

May 8-12, 2023

Monday, May 8, 2023

Zoom Link: <https://pitp.zoom.us/j/94575380034?pwd=Y21DMTRqeFFGNnd5dnVBc1dac2tUQT09>

Time	Event	Location
8:30 – 9:15am	Registration	Reception
9:15 -9:30am	Niayesh Afshordi , University of Waterloo & Perimeter Institute <i>Welcome and Opening Remarks</i>	Bob Room
9:30 – 10:15am	Astrid Eichhorn , University of Southern Denmark <i>Quantum Gravity and its connection to observations</i>	Bob Room
10:15 – 11:00am	Roman Gold , University of Southern Denmark <i>Imaging Supermassive Black Holes and mapping spacetime</i>	Bob Room
11:00 – 11:30am	Coffee Break	Bistro – 1 st Floor
11:30 – 12:15pm	Ruth Gregory , Kings College London <i>The Spacetime of Acceleration</i>	Bob Room
12:15 – 2:00pm	Lunch	Bistro – 2 nd Floor
2:00 – 2:45pm	Latham Boyle , Perimeter Institute <i>What is the simplicity of the early universe trying to tell us?</i>	Bob Room
2:45 – 3:30	Jarita Holbrook , University of Edinburgh <i>Are we considering enough? Inclusivity in Quantum Gravity and Cosmology</i>	Bob Room
3:30 – 4:00pm	Coffee Break	Bistro – 1 st Floor
4:00 – 5:00pm	Panel Discussion I <i>Where and when will Quantum Gravity crack? What are we missing?</i>	Bob Room

Tuesday, May 9, 2023

Zoom Link: <https://pitp.zoom.us/j/95721802052?pwd=TE1iTGxGLzNqeTFSZlNGRXRYMHBCZz09>

Time	Event	Location
9:00 – 9:45am	Robert Brandenberger , McGill University <i>Emergent Metric Space-Time from the BFSS Matrix Model</i>	Bob Room
9:45 – 10:30am	Adam Koberinski , University of Pittsburgh <i>Where effective field theory fails: Windows into quantum gravity?</i>	Bob Room
10:30 -11:00am	Coffee Break	Bistro – 1 st Floor
11:00 – 11:45am	Matt Johnson , York University and Perimeter Institute <i>Experimental Cosmology</i>	Bob Room
11:45 – 12:30pm	Richard Dawid , Stockholm University <i>Final but Incomplete?</i>	
12:30 – 2:00pm	Lunch	Bistro – 2 nd Floor
2:00 – 2:45pm	Karen Crowther , University of Oslo <i>The role of singularities in the search for quantum gravity</i>	Bob Room
2:45 – 3:30pm	Phil Halper , Independent <i>Conversations and controversies in the Early Universe</i>	Bob Room
3:30 – 4:00pm	Coffee Break	Bistro – 1 st Floor
4:00- 5:00pm	Panel Discussion II <i>Do we need Quantum Gravity to crack the Big Bang? What about inflation? fact or fiction?</i>	Bob Room

Wednesday, May 10, 2023

Zoom Link: <https://pitp.zoom.us/j/98277900018?pwd=SW92OWYrRFpkWC9QOS9NeTIQWkY5dz09>

Colloquium: <https://pitp.zoom.us/j/98331676824?pwd=VTNOakMxWWUzT2ZFYwYzBRdWxBUT09>

Time	Event	Location
9:00-9:45am	Samir Mathur , Ohio State University <i>Universality of black hole thermodynamics</i>	Bob Room
9:45 – 10:30am	Beni Yoshida , Perimeter Institute <i>Causality at the End-of-World</i>	Bob Room
10:30- 11:00am	Coffee Break	Bistro – 1 st Floor
11:00 – 11:45am	Clara Bradley , University of California, Irvine <i>Do First-Class Constraints Generate Gauge Transformations? A Geometric Perspective</i>	Bob Room
11:45 – 12:30pm	Robert Mann , University of Waterloo <i>Quantum Superpositions of Black Holes</i>	Bob Room
12:30 – 2:00pm	Lunch	Bistro – 2 nd Floor
2:00 – 3:00pm	Colloquium: Chris Smeenk , Western University <i>In Search of Lost Spacetime</i>	Theater
3:00 – 3:30pm	Coffee Break	Bistro – 1 st Floor
3:30 – 4:15pm	Paul McFadden , Newcastle University <i>Holographic Cosmology</i>	Bob Room
4:15 – 5:00pm	Panel Discussion III <i>Holography: fact or fiction?</i>	Bob Room
5:30 – 7:00pm	Banquet	Bistro – 2 nd Floor

Thursday, May 11, 2023

Zoom Link: <https://pitp.zoom.us/j/99946149565?pwd=M2puMy9nSEtBZTg1MnRmSllHeUE0UT09>

Time	Event	Location
9:00 – 9:45am	Naritaka Oshita , Yukawa Institute <i>Echoes and Entropy of Quantum Black Holes</i>	Bob Room Virtual
9:45 – 10:30am	Jahed Abedi , University of Stavanger <i>Looking for Echoes from Quantum Black Holes</i>	Bob Room Virtual
10:30 – 11:00am	Coffee Break	Bistro – 1 st Floor
11:00 – 11:45pm	Will Percival , University of Waterloo & Perimeter Institute <i>The H_0 tension and sample variance</i>	Bob Room
11:45-12:30pm	Mike Hudson University of Waterloo <i>The S_8 tension in cosmology</i>	Bob Room
12:30 – 2:00pm	Lunch	Bistro – 2 nd Floor
2:00 – 2:45pm	Fay Dowker , Imperial College <i>Nonlocality in the causal set approach to quantum gravity</i>	Bob Room Virtual
2:45 – 3:30pm	Yasaman K. Yazdi , Imperial College <i>Everpresent Λ Cosmology</i>	Bob Room
3:30 – 4:00pm	Coffee Break	Bistro – 1 st Floor
4:00 – 5:00pm	Panel Discussion IV <i>UV/IR coupling in Quantum Gravity: Feature or Bug?</i>	Bob Room
5:00-7:00pm	Community Night	Bistro – 1 st Floor

Friday, May 12, 2023

Zoom Link: <https://pitp.zoom.us/j/93167028480?pwd=dnI0ZkNTTXd5d0tOVURUTU5qeUdjQT09>

Time	Event	Location
9:00-9:45am	Carlo Rovelli , Centre de Physique Theorique <i>Physics with non-perturbative quantum gravity: the end of the Hawking evaporation</i>	Bob Room
9:45 – 10:30am	Francesca Vidotto , Western University <i>Primordial fluctuations from quantum gravity Bang and Primordial Black Holes</i>	Bob Room
10:30- 11:00am	Coffee Break	Bistro – 1 st Floor
11:00 – 11:45am	Doreen Fraser , University of Waterloo <i>Analogical reasoning in quantum gravity</i>	Bob Room
11:45-12:30pm	Lee Smolin , Perimeter Institute <i>The emergence of spacetime is governed by a quantum Mach's principle</i>	Bob Room
12:30 – 2:00pm	Lunch	Bistro – 2 nd Floor
2:00 – 3:30pm	Steve Weinstein , University of Waterloo <i>Wrap Up and Discussion: An inclusive roadmap for cracking Quantum Gravity</i>	Bob Room
4:00 - 5:00pm	Perimeter Social	Bistro – 1 st Floor