15th annual conference on Relativistic Quantum Information (North)



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Type: Talk

Cosmological tests for hybrid classical-quantum gravity

Monday, 23 June 2025 16:40 (15 minutes)

A way to reconcile general relativity and quantum field theory without quantizing the geometry is requiring that the metric evolves stochastically. In this talk, I will first review the main ideas and motivations around hybrid theories that handle the interaction between classical and quantum degrees of freedom in a consistent manner. In the second half of the talk, I will describe how spacetime diffusion can produce experimentally falsifiable predictions, both at the level of tabletop experiments and of cosmological observables.

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