

Department of Theoretical Physics

## THE QUANTUM SPACETIME SEMINAR SERIES

Quantum gravity meets statistical physics (Zoom Seminar)

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Date: May 17, 2021

Time: 3.00 pm IST

Zoom link shall be shared separately



Recent work on quantum gravity has revealed deep connections with subjects like quantum information, statistical physics and quantum chaos. In particular, low-energy effective field theories that include gravity turn out to have more access to high-energy degrees of freedom than their non-gravitational Wilsonian counterparts. While precise microscopic high-energy information is inaccessible, certain statistical high-energy information does manifest itself in an interesting way at low energies. I will describe some recent work trying to make this connection more precise, and explain how it connects to issues like wormholes, averaging over theories and the black hole information paradox.

## Infosys