Applications of Quantum Information in Astrophysics and Cosmology

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Quantum Chaos and Phase Transitions

Wednesday 26 April 2023 16:45 (15 minutes)

Quantum Complexity has emerged in the past few years as a candidate for quantum chaos diagnostic. This talk is based on a work that appeared last year, in which we show that a notion of quantum complexity (spread complexity) is sensitive to Topological Phase Transitions - at least for the prototypical Kitaev chain. I'll give a brief overview of what we mean when we say "quantum" chaos and proceed to discuss our results by introducing the Krylov subspace methods.

Presenter: GUPTA, Nitin (University of Cape Town)

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