



PHYSICS AND ASTRONOMY SEMINAR

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“A pedagogical introduction to the Page Curve”

Abstract

The Page Curve is a characteristic signature of unitary evolution of a quantum system. Deriving the Page Curve within a theory of quantum gravity is thought to be the key to resolving the apparent contradiction between the unitary time evolution of a pure state of a closed quantum system and the eventual production of a mixed state of such system due thermal evaporation of a black hole. In this talk, I will give an overview of recent progress on deriving the Page Curve within semi-classical quantum gravity. In particular, I will discuss the Page Curve as measured by asymptotic observers and whether this is sufficient to resolve black hole unitarity. The talk will be pedagogical and is intended to be accessible to those with a basic understanding of general relativity and quantum field theory.

Wednesday, February 3, 2021

10:00 a.m.

Zoom link:

<https://uvic.zoom.us/j/88976589165?pwd=NFJzSzJWdUlWZEFRNzI0a2dHOEoxZz09>