Seminario Departamento de Física Teórica

"Quantum Gravity and Hamilton-Jacobi theory"

Jorge Gamboa (Universidad de Santiago de Chile)

Abstract:

Following analogies with relativistic point particles, and Schild strings, we show that the Einstein gravity and its strong coupling regime (or the Planck mass going to 0) are related to each other through a Laplace transform. The Feynman propagator of gravity in the strong coupling regime satisfies a functional diffusion equation in the three-metric space with the evolution parameter being the volume of spacetime. We conjecture that the relationship between both regimes is consistent with the existence of an evolution operator in which time is replaced by the volume of spacetime.

Fecha: Jueves 28 de abril de 2022 **Hora**: 12:10 **Lugar**: Seminario de Física Teórica





Centro de Astropartículas y Física de Altas Energías Universidad Zaragoza