Speaker: Ioannis Papadimitriou

Title: "Algebraically special solutions and accelerating black hole thermodynamics"

Abstract: Algebraically special solutions constitute a broad class of generally time dependent but analytically known solutions of Einstein's equations. The physics they describe, however, remains relatively less understood, mainly due to the boundary conditions they satisfy at asymptotic infinity. In this talk I will review algebraically special solutions with a negative cosmological constant in four dimensions and will present accelerating black holes as a particular example. I will then discuss aspects of the holographic dictionary for such solutions and will apply it to the thermodynamics of accelerating AdS black holes.