Physics Colloquium

Thursday, 31 October 2019 | 17:00 – 18:00, Seminar Room, 3rd floor

Black holes, fluids and holography in string theory

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ABSTRACT

I will review the key elements of a general formalism of long-wavelength deformations of higher-dimensional black hole solutions, that has been dubbed the blackfold formalism, and its relation to hydrodynamics. This formalism has a wide range of applications in the context of string theory and the holographic AdS/CFT correspondence. I will present a recent application that elucidates the properties of charged black holes wrapping two-cycles in backgrounds with fluxes in a popular context in string cosmology and the controversial debate of de-Sitter solutions in string theory.