On the branes behind scale-separated AdS3 flux vacua

Álvaro Arboleya*[1]

[1]Universidad de Oviedo = University of Oviedo – Calle San Francisco, 1, 33003 Oviedo, Asturias, Spain

Abstract

Understanding the brane configuration underlying scale-separated vacua is an important step towards clarifying their higher-dimensional origin and the structure of the putative dual CFT. In this talk, I will focus on a class of supersymmetric scale-separated AdS_3 vacua arising in Type IIB orientifold compactifications with G_2-structure. I will first discuss the application of the flux backtracking procedure to reconstruct the ten-dimensional brane configuration associated with these vacua. Since this method does not recover the complete ten-dimensional "zoomed-out" solution, I will complement this approach with an explicit construction of the intersecting-brane solution in ten dimensions and show how the AdS_3 vacua arise in an appropriate near-horizon limit.

Keywords: Flux vacua, scale separation, supergravity, brane constructions

*Speaker