

On M-theory and string flux vacua in three dimensions

Thursday, 27 June 2024 15:30 (15 minutes)

I will discuss supersymmetric AdS₃ flux vacua of massive type IIA supergravity on G2 orientifolds, focusing on (non) scale separated configurations at large volume and weak coupling, even highly anisotropic. I will also present the realization of the Swampland Distance Conjecture within such setups via the inclusion of appropriate D4-branes.

In addition, inspired by the desire of finding all possible flux choices which give rise to the aforementioned AdS₃ scale-separated configurations, I will discuss some recent developments concerning a systematic study of M-theory and type-II flux vacua in three dimensions, including gauge and metric fluxes, O-planes and D-branes, and admitting a description in terms of three-dimensional gauged supergravities with half-maximal supersymmetry.

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Session Classification: Parallel session