

Gravity at the Tip of the Throat

jeudi 2 juin 2022 15:20 (20 minutes)

Warped throats have been used in countless works in the context of string theory compactifications, in particular for their ability to suppress high energy scales. The Klebanov-Strassler solution gives us an explicit description of the geometry of a warped throat which we can use to perform computations —my focus will be on the gravitational sector of the resulting 4d EFT, with its tower of Kaluza-Klein (KK) gravitons. By assuming that we live on a (3+1)-dimensional brane somewhere along the throat, we can study how the warping influences the effects of the tower on the brane. In particular, I will show how the tower corrects the Newtonian potential and discuss how gravitational experiments and observations may be used to test the possibility that our Universe corresponds to a brane living in a warped throat.

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Classification de Session: Parallel session 2