

de Sitter constructions in String Theory



ID de Contribution: 13

Type: **Non spécifié**

Constraints on dS from Higher Dimensions

mercredi 11 décembre 2019 10:00 (40 minutes)

After a review of some existing constraints on obtaining 4-dimensional de Sitter space in models with static extra dimensions, I discuss a new set of constraints, based on the null Raychaudhuri equation. These constraints indicate that dS spacetimes must have (choose at least one): positive internal curvature, or warping sourced by the 4-d cosmological constant, or violate the null energy condition pointwise everywhere in the extra dimensions. I will compare these constraints to previous ones and explore their application to known models of 4-dimensional dS space with extra dimensions, drawing lessons for future model-building along the way.

Orateur: UNDERWOOD, Bret