



Universidad del País Vasco
Euskal Herriko Unibertsitatea
The University of the Basque Country

Seminarios de Física Teórica
Fisika Teorikoa: Hitzaldiak

Perturbative Stability along the Supersymmetric Directions of the Landscape

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Abstract We consider the perturbative stability of de Sitter configurations in $N = 1$ supergravity models with a large spectator sector not involved in supersymmetry breaking. We describe the couplings of the spectator fields by a random ensemble of supergravity theories, and we perform the analysis using tools from Random Matrix Theory. We show that, in theories consistent with the supersymmetric truncation of the spectator fields, the fraction of meta-stable vacua grows exponentially with respect to supergravity models with generic couplings. We discuss the implications of our results for KKLT scenarios and Large Volume Compactifications of Type-IIB superstrings.

Seminar Room, Dept. of Theoretical Physics, Corridor 4.-2.

Wednesday, January 28th, 2015

Time:11:40