

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

## Seminarios de Física Teórica Fisika Teorikoa: Hitzaldiak

## An anisotropic universe due to dimension-changing false vacuum decay

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**Abstract** In this talk I will consider the observational consequences of models of inflation after false vacuum decay in which the parent vacuum has a smaller number of large dimensions than our current vacuum. After introducing and briefly discussing in general the topic of inflation after false vacuum, I will then explain how such events can occur which change the number of large dimensions and lead to an anisotropic universe. The effects on the CMB of anisotropy at late times might be expected to render irrelevant the effects of primordial anisotropy, however after showing how to properly deal with the latter I will demonstrate how for the tensor perturbation modes the primordial effects are much larger than expected and can in fact be dominant.

Seminar Room, Dept. of Theoretical Physics, Corridor 4.-2. Wed, Oct. 13th, 2015 Time:11:40 am