



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

Seminarios de Física Teórica Fisika Teorikoa: Hitzaldiak

Oscillons from String Moduli

Francesco Muia

Abdus Salam ICTP, (Italy)

Abstract A generic feature of string compactifications is the presence of many scalar fields, called moduli. Moduli are usually displaced from their post-inflationary minimum during inflation. Their relaxation to the minimum could lead to the production of oscillons: long-lived non-linear excitations of the scalar fields. One interesting consequence of oscillon dynamics is the production of gravitational waves. In this talk I will survey under which conditions oscillons can be produced in string cosmology, and I will illustrate their production and potential phenomenology with two explicit examples: the case of an initially displaced volume modulus in the KKLT scenario and of an initially displaced blow-up modulus in the Large Volume Scenario.

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

Wednesday, Nov. 29th, 2017

Time:11:40 am