



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

Seminarios de Física Teórica  
Fisika Teorikoa: Hitzaldiak

# Holographic Description of the Inflationary Scenario

Yuko Urakawa

Universitat de Barcelona

**Abstract** It has recently been suggested that a strongly coupled phase of inflation may be described holographically in terms of a weakly coupled quantum field theory (QFT). We explore the possibility that the wave function of an inflationary universe is given by the partition function of a boundary QFT. We consider the case when the field theory is a small deformation of a conformal field theory, by the addition of a relevant operator and calculate the primordial spectrum predicted in the corresponding holographic inflation scenario. We also discuss the observational constraints from the recent CMB measurements.

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

**THURSDAY, DECEMBER 5th, 2013**

Time:11:40