

## Seminarios de Física Teórica Fisika Teorikoa: Hitzaldiak

## On light dilaton extensions of the Standard Model

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**Abstract** We discuss the presence of a light dilaton in Conformal Field Theories deformed by a nearly marginal operator, in the holographic realization consisting of confining Renormalization Group flows that end on a soft wall. Then, we apply this formalism to study the extension of the Standard Model with a light dilaton in a 5-dim warped model. We study the scalar, vector and tensor perturbations, compare the model predictions with Electroweak Precision Tests and find the corresponding bounds for the lightest modes. Finally, we analyze the possibility that the Higgs resonance found at the LHC can be a dilaton.

Seminar Room, Dept. of Theoretical Physics, Corridor 4.-2. MONDAY, Nov. 16th, 2015

Time:11:40 am