eman ta zabal zazu

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

Seminarios de Física Teórica
Fisika Teorikoa: Hitzaldiak

Conformal and non Conformal Dilaton Gravity

Enrique Alvarez

Instituto de Fisica Teorica (IFT)

Abstract The non-minimally coupled scalar field-gravitational field system is studied in the broken phase. For a particular value of the coupling the system is classically conformal, and can actually be understood as the group averaging of Einstein-Hilbert's action under conformal transformations. Contradicting cherished beliefs, a conformal anomaly is found in the trace of the equations of motion. To one loop order, this anomaly vanishes on shell. Arguments are given supporting the fact that this does not happen to two loop order, where the anomaly is argued to be a real physical effect.

Seminar Room, Dept. of Theoretical Physics, Corridor 4.-2.
FRIDAY, March 28th, 2014
Time:**11:40**