

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

Seminarios de Física Teórica Fisika Teorikoa: Hitzaldiak

Chiral Symmetry Breaking and Geometry

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Abstract Spontaneous chiral symmetry breaking is an ubiquitous phenomena characterizing very different physical systems in nature ranging from condensed matter systems, to elementary particles, to gravitational systems. In this talk I will review my recent work on the subject. In particular, I will discuss how the background geometry of a interacting field theory affect the spontaneous breaking of chiral symmetry and, in turn, the phase structure of the theory. Concrete examples will be presented.

Seminar Room, Dept. of Theoretical Physics, Corridor 4.-2. **THURSDAY**, **November 28th**, **2013** Time:**11:40**