



Universidad del País Vasco
Euskal Herriko Unibertsitatea
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Seminarios de Física Teórica Fisika Teorikoa: Hitzaldiak

Scale dependent non-gaussianity on the CMB from Scalar-Scalar-Tensor interactions

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Abstract :From CMB observations, it is well believed that at the very early universe there was a period of inflation. With more precise data, we may access to non-linear physics by measuring non-gaussianity, i.e., deviations from the gaussian spectrum. Interestingly, Planck 2015 hints the existence of a scale dependent non-gaussianity. Such scale dependence could be generated through interactions between scalar and tensor modes. However, such interactions are usually highly suppressed. In this talk, I will present a model where the transverse-traceless part of the metric, i.e. tensor modes, become massive and could have an enhanced interaction with scalar modes, thus plausibly explaining the possible scale dependent non-gaussianity in CMB.

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

Wednesday, Sept. 28th, 2016

Time:11:40 am