



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

Seminarios de Física Teórica Fisika Teorikoa: Hitzaldiak

Probing cosmic superstrings with gravitational waves

Lara Sousa

Centro de Astrofísica, U. de Porto

Abstract In this talk, I discuss the stochastic gravitational wave generated by cosmic superstring networks, by using current semi-analytical models to describe their dynamics. I show that approximating this spectrum using that of ordinary strings with reduced intercommuting probability (as is often done in the literature) leads, in general, to an under-estimation of the amplitude of this spectrum. I also show that heavier string types may leave distinctive signatures on the stochastic gravitational wave background that may be within the reach of current and upcoming gravitational wave backgrounds, which may allow us, in principle, to distinguish this spectrum from that of ordinary strings.

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

Wednesday, April. 10th, 2019

Time:11:40 am