



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

## Seminarios de Física Teórica Fisika Teorikoa: Hitzaldiak

# Primordial black holes from axionic cosmic defects

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**Abstract** Axion models with the Peccei-Quinn symmetry broken after inflation are almost parameter-free, yet they have a rich phenomenology and provide a viable dark matter candidate. In these models, the cosmic string network coexists with domain walls once the temperature drops below the QCD scale. Walls and strings then completely annihilate, transferring their energy into dark matter. Additionally, the string-wall network decay can lead to gravitational collapse and therefore a fraction of the dark matter can be in the form of black holes. I will fill in some of the details of this black hole formation mechanism.

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

**TUESDAY, May 22nd, 2018**

**Time:11:40 am**