

SEMINARIO
Departamentos de Física Teórica I y II
Universidad Complutense de Madrid

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TITULO: Antiproton Limits on Decaying Gravitino Dark Matter

LUGAR: FACULTAD DE CIENCIAS FÍSICAS UCM

DÍA: 22 de mayo, 2013 (Miércoles)

HORA: 14:30

AULA: Seminario Depto. Física Teórica I, Planta 3ª

ABSTRACT

The nature of dark matter is one of the greatest mysteries of modern cosmology and particle physics. In this talk I will discuss a theory with broken R-parity where the gravitino forms a well-motivated candidate for unstable dark matter. After a brief review of the cosmological motivation for the scenario I will discuss its phenomenology with respect to indirect dark matter searches using observations of cosmic rays. In particular, I will elaborate on lower limits on the gravitino lifetime derived from antiproton data and the impact on the parameter space of the model.