d14 1st cosmic ray antideuteron workshop

Contribution ID: **6** Type: **not specified**

Antiprotons and Antideuterons from Gravitino Decay

Thursday, June 5, 2014 11:10 AM (30 minutes)

I will discuss antiprotons and antideuterons produced in the decays of gravitino dark matter in the Milky Way. The gravitino in models with bilinear (or trilinear) R-parity violation is a well-motivated candidate for decaying dark matter in supergravity theories. I will show that observations of cosmic-ray antiprotons allow to set stringent constraints on the gravitino lifetime. Moreover, I will present an updated calculation of the antideuteron flux expected from gravitino decays and briefly comment on the detection prospects in current and planned experiments.

Primary author: Dr GREFE, Michael (Universität Hamburg)

Presenter: Dr GREFE, Michael (Universität Hamburg)