



Contribution ID: 43

Type: **Invited**

## The PAMELA experiment and antimatter in the Universe

*Monday, 10 June 2013 14:50 (30 minutes)*

for the PAMELA collaboration.

On the 15th of June 2006, the PAMELA satellite-borne experiment was launched from the Baikonur cosmodrome and it has been collecting data since July 2006. The primary scientific goal is the measurement of the antiproton and positron energy spectra. Antiparticles are a natural component of the cosmic radiation being produced in the interaction between cosmic rays and the interstellar matter. They have been shown to be extremely interesting for understanding the propagation mechanisms of cosmic rays. Furthermore, novel sources of primary cosmic-ray antiparticles of either astrophysical or exotic origin (e.g. annihilation of dark matter particles) can also be probed. In this talk we will review the PAMELA antiparticle results and their significance for the field of astroparticle physics.

**Primary author:** Dr BOEZIO, Mirko (INFN - Sezione di Trieste)

**Presenter:** Dr BOEZIO, Mirko (INFN - Sezione di Trieste)

**Session Classification:** Universe

**Track Classification:** Antimatter in the Universe