### 30th International Cosmic Ray Conference



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# The First Year in Orbit of the PAMELA experiment

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## Abstract content

On the 15th of June, the PAMELA experiment mounted on the Resurs DK1 satellite, was launched from the Baikonur cosmodrome and since July 2006 it is collecting data. PAMELA is a satellite-borne apparatus designed to study charged particles in the cosmic radiation, to investigate the nature of dark matter, measuring the cosmic-ray antiproton and positron spectra over the largest energy range ever achieved, and to search for antinuclei with unprecedented sensitivity. The PAMELA apparatus comprises a time-of-flight system, a magnetic spectrometer, a silicon-tungsten electromagnetic calorimeter, an anticoincidence system, a shower tail catcher scintillator and a neutron detector. We will present the status of the apparatus after one year in orbit. Furthermore, we will discuss the PAMELA in-flight performances and their effects on the scientific goals of the mission.

### If this papers is presented for a collaboration, please specify the collaboration

PAMELA Collaboration

#### Summary

#### Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 2 (OG part 1), pages 99-102

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