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Solar modulation of galactic cosmic rays electrons and positrons over the 23rd solar minimum with the PAMELA experiment.

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The satellite-borne PAMELA experiment was launched in June 2006 from the Baikonur cosmodrome and since than it has been taking data.

The apparatus design is particularly suited for particle and antiparticle identification. At this conference we present

the half-yearly galactic cosmic ray electron and positron spectra measured down to 70 MeV and from July 2006 to December 2009.

The most recent period of solar minimum activity and the consequent minimum modulation conditions for cosmic rays were unusual. This period

of prolonged solar minimum activity is well suited to study the modulation processes. Hence, these fluxes provide important information about the cosmic rays propagation mechanism inside the heliosphere.

Moreover, a direct comparison of electron and positron spectra allows a detailed study of charge-sign dependent solar modulation.

Collaboration

- not specified -

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