



ID de la contribución : 884

Tipo : no especificado

Precision measurements of Electron and Positron Fluxes with the Alpha Magnetic Spectrometer on the International Space Station

miércoles, 20 de noviembre de 2024 10:15 (15)

The Alpha Magnetic Spectrometer (AMS) is a multipurpose particle detector operating on the International Space Station since May 2011. After 13 years, AMS has measured more than 240 billion cosmic rays with unprecedented precision. The measurements of positron and electron fluxes have shown unforeseen spectral features that cannot be explained with the traditional models of galactic cosmic rays. The accurate measurement of the arrival directions and time evolution of electron and positron fluxes can help to understand their origin and propagation mechanisms and thus may clarify the causes of the observed features. In this talk, the latest AMS results on electrons and positrons will be presented.

Abstract

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Clasificación de la sesión : RENATA (Red Nacional Temática de Astropartículas)

Clasificación de temáticas : Red Temática de Astropartículas (RENATA)