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Understanding the Origin of Cosmic-Ray Electrons

The electron flux measured by the Alpha Magnetic Spectrometer exhibits complex energy dependence. In the entire energy range the electron and positron spectra have distinctly different magnitudes and energy dependences. At high energies, AMS data show that the electron spectrum can be best described by the sum of two power law components and a positron source term. This is the first indication of the existence of identical charge symmetric source term both in the positron and in the electron spectra and, as a consequence, the existence of new physics.

Collaboration(s)

AMS

Author: LI, Shanglin (Chinese Academy of Sciences (CN))

Presenter: LI, Shanglin (Chinese Academy of Sciences (CN))

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