

Antiproton Flux and Properties of Elementary Particle Fluxes in Primary Cosmic Rays Measured with the Alpha Magnetic Spectrometer on the ISS

Thursday 15 July 2021 19:18 (12 minutes)

The fluxes and flux ratios of charged elementary particles in cosmic rays are presented in the absolute rigidity range from 1 up to 2000 GV. In the absolute rigidity range ~60 to ~500 GV, the antiproton, proton, and positron fluxes are found to have nearly identical rigidity dependence and the electron flux exhibits different rigidity dependence. Below 60 GV, the antiproton-to-proton, antiproton-to-positron, and proton-to-positron flux ratios each reaches a maximum. Particular emphasis is made on new observations of the properties of elementary particles in the rigidity range above 500 GV.

Keywords

Collaboration

AMS

other Collaboration

Subcategory

Experimental Results

Primary authors: CHOU, Hsin-Yi; LI, Zuhao; TANG, Zhi-Cheng; WENG, Zhili; KOUNINE, Andrei

Presenter: CHOU, Hsin-Yi

Session Classification: Discussion

Track Classification: Scientific Field: CRD | Cosmic Ray Direct