

Measurement of the cosmic-ray secondary-to-primary ratios with CALET on the International Space Station

Monday 19 July 2021 19:18 (12 minutes)

CALorimetric Electron Telescope, CALET, has been measuring high-energy cosmic rays on the International Space Station since October 2015. One of the scientific objectives of the CALET mission is the precise measurements of the energy spectra of individual cosmic-ray nuclei and the energy dependence of secondary-to-primary abundance ratio to reveal the detail of the cosmic-ray acceleration and propagation in the Galaxy. The instrument, consisting of two layers of segmented plastic scintillators, a 3 radiation length thick tungsten-scintillating fiber imaging calorimeter, and a 27 radiation length thick PWO calorimeter, has capabilities to identify individual nuclei elements up through Iron with excellent charge resolution and cover the wide energy range from 10 GeV to a PeV scale. Long-term observation with CALET for over five years of operation allows to investigate the TeV region of the secondary components. In this contribution, the details about the analysis of secondary-to-primary cosmic-ray ratios such as B/C and their preliminary results will be presented.

Keywords

secondary to primary ratio; propagation in Galaxy;

Collaboration

CALET

other Collaboration

Subcategory

Experimental Results

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Session Classification: Discussion

Track Classification: Scientific Field: CRD | Cosmic Ray Direct