



Contribution ID: 580

Type: Parallel Talk

Unique Properties of the 3rd Group of Cosmic Rays: Results from the Alpha Magnetic Spectrometer

Thursday, 7 July 2022 17:30 (15 minutes)

Cosmic Nitrogen, Sodium, and Aluminum nuclei are a combination of primaries, produced at cosmic-ray sources, and secondaries resulting from collisions of heavier primary cosmic rays with the interstellar medium. We present high statistics measurements of the N, Na and Al rigidity spectra. We discuss the properties and composition of their spectra and present a novel model-independent determination of their abundance ratios at the source. The systematic comparison with the latest GALPROP cosmic ray model is presented.

In-person participation

Yes

Primary author: CHEN, Yao (Shandong Institute of Advanced Technology (SDIAT))

Co-authors: CHOUTKO, Vitaly (Massachusetts Inst. of Technology); OLIVA, Alberto (INFN Bologna); PAN-ICCIA, Mercedes (Universite de Geneve); YAN, Qi (Massachusetts Inst. of Technology); ZHANG, Cheng (Chinese Academy of Sciences); THE AMS COLLABORATION

Presenter: CHEN, Yao (Shandong Institute of Advanced Technology (SDIAT))

Session Classification: Astroparticle Physics and Cosmology

Track Classification: Astroparticle Physics and Cosmology