Contribution ID : **590** Type : **Oral**

Measurements of High-Energy Heavy Nuclei with the CREAM-I TRD

Friday, 6 July 2007 08:30 (0:12)

Abstract content

The balloon-borne cosmic-ray experiment CREAM-I (Cosmic-Ray Energetics And Mass) completed a successful 42-day flight during the 2004-2005 NASA/NSF/NSBF Antarctic expedition. CREAM-I combines an imaging calorimeter with charge detectors and a precision transition radiation detector (TRD). The TRD component of CREAM-I is targeted at measuring the energy of cosmic-ray particles with charges greater than Z˜3. A central science goal of this effort is the determination of the ratio of secondary to primary nuclei at high energy. This measurement is crucial for the reconstruction of the propagation history of cosmic rays and consequently, for the determination of their source spectra. Initial results from the TRD portion of the science stack will be presented.

If this papers is presented for a collaboration, please specify the collaboration

CREAM-I

Summary

Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 2 (OG part 1), pages 187-190

Primary author(s) : Prof. WAKELY, Scott (University of Chicago)

Presenter(s) : Prof. WAKELY, Scott (University of Chicago)

Session Classification : OG 1.3, OG 1.5

Track Classification : OG.1.3