



Contribution ID : 1216

Type : Oral

Proton-air Inelastic Cross-Section Measurement at Ultra-High Energies

Monday, 9 July 2007 13:05 (0:12)

Abstract content

We present proton-air inelastic cross-section measurement at ultra-high energy using all available data collected by the High Resolution Fly's Eye stereo fluorescence detector. A significantly improved data reconstruction procedure allows us to minimize the data quality cuts. This increases the data statistics available for the measurement and consequently reduces the statistical error. The quality cuts minimization also helps to reduce a possible systematic error, associated with a measurement bias due to the quality cuts. The result, the statistical and the systematic errors are discussed.

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

the HiRes Collaboration

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. 4 (HE part 1), pages 687-690

Primary author(s) : Dr. BELOV, Konstantin (University of Utah)

Presenter(s) : Dr. BELOV, Konstantin (University of Utah)

Session Classification : HE 3.1

Track Classification : HE.3.1