

Zenith angle dependence of pressure effect in GRAPES-3 muon telescope

Friday 16 July 2021 19:18 (12 minutes)

A large area (560 m^2) muon telescope in the GRAPES-3 experiment at Ooty, India records muon intensity at high cutoff rigidities (15–24 GV) along 169 independent directions spanning a field of view of 2.3 sr. The threshold energy of the recorded muons is $\sec(\theta)$ GeV along a direction with a zenith angle (θ) and with the average angular accuracy of $\sim 4^\circ$. The directional capabilities of the muon telescope are exploited for studying the effect of atmospheric pressure on the muon flux as a function of θ . The analysis details and results will be presented.

Keywords

Collaboration

other Collaboration

GRAPES-3

Subcategory

Experimental Results

Primary authors: ZUBERI, Meeran (Tata Institute of Fundamental Research); FOR THE GRAPES-3 COLLABORATION

Presenter: ZUBERI, Meeran (Tata Institute of Fundamental Research)

Session Classification: Discussion

Track Classification: Scientific Field: CRI | Cosmic Ray Indirect