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Muon Production Height in the Air-Shower Experiment KASCADE-Grande.

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Abstract content

A large area streamer tube detector (128mˆ2), located within the KASCADE- Grande Experiment, has been built with the aim to identify muons (E>0.8GeV) and their direction in extensive air showers. Besides the investigation of the muon pseudorapitity in EAS, the application of the tracking detector in reconstructing the muon production height is evaluated. The combination of the muon production height with shower parameters from the surface array is demonstrated. Almost model independent energy spectra for different mass groups are obtained. The muon production height distributions are reproduced differently by different interaction models which are employed in the air-shower simulation code CORSIKA.

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

KASCADE-Grande

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 115-118

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