

Cosmic Ray Physics with TeV Muons in Large Volume Detectors

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Large volume detectors designed for the detection of astrophysical neutrinos such as IceCube register cosmic ray-induced atmospheric muon bundles at a rate of several thousand events per second. Due to the large amount of surrounding material, the effective energy threshold for muons reaching the detector lies at approximately one TeV. By careful evaluation of event profiles it is possible to address cosmic ray and particle physics issues in an unprecedented energy range. First results from the analysis of one year of IceCube data will be presented and their implications discussed.

Presentation type

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