

Observation of ultra-high-energy diffuse gamma rays from the galactic plane with the Tibet air shower array

Monday 19 July 2021 19:18 (12 minutes)

The Tibet air shower (AS) array and underground water-Cherenkov-type muon detector (MD) array have been successfully operated since 2014, at an altitude of 4,300m in Tibet, China. The gamma-ray energy and arrival direction are determined by the Tibet AS array, while the MD array enable us to suppress more than 99.9% of background cosmic rays above 100 TeV, by means of counting number of muons in an air shower at 2.4m underground. We search for ultra-high-energy diffuse gamma rays from the galactic plane with the Tibet AS+MD array. In this presentation, we will report on observational results and the analysis method using the air shower and muon data collected by the Tibet AS+MD array.

Keywords

Collaboration

other (fill field below)

other Collaboration

Tibet ASgamma

Subcategory

Experimental Results

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Session Classification: Discussion

Track Classification: Scientific Field: GAI | Gamma Ray Indirect