

A northern sky survey for ultra-high-energy gamma-ray source using the Tibet air-shower array and muon-detector array.

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The Tibet AS γ experiment located at 4300 m above sea level, Tibet, China, has a wide field of view and large effective area. It consists of the Tibet air-shower array (Tibet-AS), the air-shower core-detector array (YAC) and the underground water-Cherenkov muon-detector array (Tibet-MD). The Tibet-MD array significantly improves gamma-ray sensitivity in the 10-1000 TeV energy region by an order of magnitude better than any other previously existing experiments in the world. In this talk we will present the catalog of TeV gamma-ray sources using 720 days of data from the Tibet AS γ experiment. The catalog represents the most sensitive survey of the northern gamma-ray sky at energies above several tens of TeV. These ultra-high-energy gamma-ray sources are believed to be related to pulsars and supernova remnants.

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Collaboration

other (fill field below)

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The Tibet AS γ Collaboration

Subcategory

Experimental Results

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