

Recent Results from the Tibet AS γ Experiment: Gamma-Ray Observations and a Related Study on Cosmic-Ray Composition

Wednesday, 15 July 2026 11:20 (30 minutes)

This presentation introduces three recent peer-reviewed papers related to the Tibet AS γ experiment published in 2025–2026. The first presents a study of the ultra-high-energy γ -ray halo surrounding the Geminga pulsar, providing new constraints on the magnetohydrodynamic turbulence around the source. The second demonstrates the experimental verification of a convolutional neural network (CNN)-based gamma/hadron separation method for TeV gamma-ray observations. The third reports a Monte Carlo simulation study of elemental cosmic-ray energy spectra using the Tibet Air-Shower and Muon Detector Arrays with the Bayesian unfolding method, demonstrating the feasibility of elemental spectrum reconstruction around the knee region.

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