

Highlights of LHAASO Cosmic Ray Energy Spectrum and Composition Measurements

Tuesday 26 August 2025 16:25 (25 minutes)

The Large High-Altitude Air Shower Observatory (LHAASO) is a hybrid detector experiment, including one square kilometer array of scintillator detectors and muon detectors, a 78,000 square meter water Cherenkov detector array and 18 wide field of view Cherenkov telescopes. This multi-parameter observation of air showers enables LHAASO to measure the energy spectrum and composition of individual cosmic ray elements with high resolution, providing a unique opportunity to explore the origin, acceleration, and propagation of high-energy cosmic rays. In this presentation, we will focus on the main results regarding the energy spectra of protons, helium, the combined spectrum of proton and helium, and the all-particle spectrum in the knee region as accurately measured by LHAASO.

Collaboration you are representing

LHAASO

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Session Classification: High-Energy Astrophysics and Cosmic Rays

Track Classification: High-Energy Astrophysics and Cosmic Rays