

# Prospect of Cosmic Ray Energy Spectrum and Composition Measured by LHAASO Experiment

*Tuesday, 3 December 2019 15:30 (20 minutes)*

One of main scientific goals of Large High Altitude Air Shower Observatory (LHAASO) is to measure individual cosmic ray spectra from 30 TeV to several EeV. A quarter array of LHAASO experiment, 6 Cherenkov telescopes, one 150 m × 150 m water Cherenkov pool, about 300 muon detectors and 1300 scintillator detectors, has been completed, and they started operation in October. The combined detection of showers can improve the energy reconstruction, the measurement of the direction and the core position of showers, and the composition identification. Thus, accurate cosmic ray energy spectrum and composition measurement can be obtained. A preliminary analysis result of the data and prospect of cosmic ray energy spectrum measured by a quarter array of LHAASO experiment will be presented in this talk

**Primary author:** ZHANG, Shoushan (Institute of High Energy Physics)

**Presenter:** ZHANG, Shoushan (Institute of High Energy Physics)

**Session Classification:** Parallel

**Track Classification:** Cosmic rays