Contribution ID: 99 Type: not specified

A Review of Cosmic Rays Observations by LHAASO

Monday, 10 January 2022 10:00 (30 minutes)

Large High-Altitude Air Shower Observatory (LHAASO) has one square kilometer array of scintillator detectors and muon detectors (KM2A), 18 Wide Field of View Imaging Atmospheric Cherenkov Telescopes (WFCTA) and a 78,000 square meter Water Cherenkov Detector Array (WCDA). LHAASO is located at very high altitude (around 4410 m a.s.l.) in Haizishan mountain, Daocheng, Sichuan, China. Multi-parameter observation of showers allows to measurement the energy spectrum, elemental composition and anisotropy with high resolution, which give us an excellent opportunity to understand the origin, acceleration and propagation of ultra-high energy cosmic rays. The 1/4, 1/2, 3/4 and full array of LHAASO experiment have started running in September 2019, in January 2020, in December 2020 and July 2021 respectively. Preliminary results and the prospect of the energy spectrum, elemental composition measured by LHAASO experiment will be presented.

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Session Classification: High energy cosmic rays I