

Detection of High Energy Cosmic Rays with the Auger Engineering Radio Array

Thursday, February 18, 2016 9:00 AM (20 minutes)

Ultra High Energy Cosmic Rays induce extensive air showers in the Earth's atmosphere. Within the Pierre Auger Observatory in Argentina, the Auger Engineering Radio Array has been built to measure MHz radio emission of these showers in addition to established techniques based on fluorescence emission and particle detection on ground. An area of around 17km² has been instrumented by 153 autonomous radio stations which record radio signals with frequencies between 30 to 80 MHz, covering the full zenith angular range with a duty cycle close to 100%. Recent progress will be presented on thorough calibration efforts of the radio array, and on measurements of the primary cosmic ray energies.

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Session Classification: Astroparticle Detectors

Track Classification: Astroparticle Detectors