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## Cosmic Rays Energy Spectrum observed by the TALE detector using Cerenkov light

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We report on a cosmic ray energy spectrum measurement by the Telescope Array Low-Energy extension (TALE) fluorescence detector (FD). The TALE FD is an air fluorescence detector which is also sensitive to the Cerenkov light produced by shower particles. Low energy cosmic rays, in the PeV energy range, are detectable by TALE as “Cerenkov Events”. Using these events, we measure the energy spectrum from a low energy of ~ 4 PeV to an energy greater than 100 PeV. In this talk, we will describe the detector, explain the technique, and present results from a first measurement of the spectrum in this energy range.

### Collaboration

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