



ID de Contribution: 150

Type: POSTER

## TA SD Spectrum

*mercredi 10 octobre 2018 10:42 (3 minutes)*

Telescope Array (TA) is a large cosmic ray detector in the Northern hemisphere that measures cosmic rays of energies from PeV to 100 EeV and higher. Main TA consists of a surface detector (SD) of 507 plastic scintillation counters of 1200 m separation on a square grid that is overlooked by three fluorescence detector stations. We present the cosmic ray energy spectrum measured by the TA SD above  $10^{18.2}$  eV and discuss the TA SD measurement and reconstruction techniques that are based on a detailed Monte Carlo simulation of the detector. We will also demonstrate that two different analysis approaches, the constant intensity cuts method and the Monte-Carlo based energy estimation procedure produce the same answer in the energy domain where the TA SD acceptance is constant with energy.

**Auteur principal:** IVANOV, Dmitri (University of Utah)

**Orateur:** IVANOV, Dmitri (University of Utah)

**Classification de Session:** POSTER SESSION