Contribution ID: 45

Type: Invited

## **Results from the telescope array**

Monday 8 July 2024 10:00 (30 minutes)

The Telescope Array is the largest cosmic ray observatory in the northern hemisphere. Ultra high energy cosmic rays are observed indirectly via the extensive air shower they induce when they collide with a nucleus in the upper atmosphere. A large array of scintillator detectors is spread over ~1800 sq km in the west desert of Utah, USA to sample the footprint of the showers when they arrive at the Earth's surface. Meanwhile, batteries of telescopes are employed to observe the longitudinal development of the showers via the nitrogen fluorescence light generated as the shower particles traverse the atmosphere. The data from the scintillators and telescopes is used to study the spectrum, composition, and anisotropy in arrival direction of cosmic rays. Recent results from the Telescope Array will be presented.

Author: Dr MATTHEWS, John (University of Utah)Presenter: Dr MATTHEWS, John (University of Utah)Session Classification: Invited talks