

Abstract Submitted  
for the APR20 Meeting of  
The American Physical Society

**Telescope Array Experiment**<sup>1</sup> DMITRI IVANOV, University of Utah, TELESCOPE ARRAY COLLABORATION — Cosmic rays of energies  $10^{15}$  to  $10^{20}$  eV and beyond are believed to be charged nuclei of galactic and extragalactic origins that are accelerated by violent events in the Universe and which propagate through the galactic and extragalactic fields and photon backgrounds before they finally reach the Earth, where they can be observed using very large cosmic ray detectors. To understand cosmic ray origin and propagation mechanisms, physicists study cosmic ray energy spectrum, mass composition, and anisotropies of their arrival directions. In this presentation, we report on the recent progress of these measurements by the Telescope Array Experiment, the largest cosmic ray detector in the Northern hemisphere, that was built in Utah, which consists of large ground arrays of plastic scintillator counters overlooked by the fluorescence detectors.

<sup>1</sup>Funded by NSF

Dmitri Ivanov  
University of Utah

Date submitted: 10 Jan 2020

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