

Abstract Submitted
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Measurement of the UHECR Energy Spectrum by the Telescope Array Fluorescence Detectors THOMAS STROMAN, DOUGLAS BERGMAN, University of Utah, TELESCOPE ARRAY COLLABORATION — Ultra-high-energy cosmic rays (UHECRs), subatomic charged particles of extraterrestrial origin and with kinetic energies near or exceeding 10^{18} eV, are very rare. The Telescope Array (TA) experiment in western Utah is the northern hemisphere's largest UHECR detector, and consists of three atmospheric fluorescence detectors (FDs) and a ground array of 507 scintillator detectors. In stand-alone “monocular” operation, the FDs can observe the widest range in primary UHECR energies. One FD employs refurbished hardware from the High-Resolution Fly's Eye experiment; the remaining two FDs were designed for TA and employ new hardware and analysis. We will present the UHECR energy spectrum measured by the FDs in monocular mode using data collected during the first four years of operation.

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