## Abstract Submitted for the APR12 Meeting of The American Physical Society

Measuring the Ultra-High Energy Cosmic Ray Energy Spectrum with the Telescope Array BENJAMIN STOKES, University of Utah, DMITRI IVANOV, Rutgers University, GORDON THOMSON, University of Utah, TELE-SCOPE ARRAY COLLABORATION — The Telescope Array experiment (TA) is the largest cosmic ray observatory in the northern hemisphere. TA consists of an array of 507 scintillation counter surface detectors (SD) augmented by three optical fluorescence telescope observatories (FD). In analyzing the data collected by the TA SD, a novel technique is employed which consists of generating a very detailed simulation that can be directly compared against actual observations. This method enables a very careful analysis with a thoroughgoing understanding of the resolution constraints in the data. The method above will be described and the most recent SD, FD, and hybrid measurements of the cosmic ray energy spectrum will be presented.

Benjamin Stokes University of Utah

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