

Abstract Submitted
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Measuring the Energy Spectrum with Telescope Array Surface Detector DMITRI IVANOV, Rutgers University, BENJAMIN STOKES, GORDON THOMSON, University of Utah, TELESCOPE ARRAY COLLABORATION — The Telescope Array experiment (TA) is the largest cosmic ray experiment in the northern hemisphere. It consists of a surface detector (SD) of 507 scintillation counters and three fluorescence detector stations overlooking the SD. We are analyzing the SD data using a new technique, which consists of generating a Monte Carlo (MC) simulation of the SD that has all the characteristics of the actual data, comparing the MC with the data to verify the validity of the MC, and calculation of the SD aperture from the MC information. We will present our analysis, based solely upon the data, our method of generating CORSIKA showers without the problems caused by thinning, comparisons of MC with data, and the latest TA SD energy spectrum result.

Dmitri Ivanov
Rutgers University

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