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Results from the Telescope Array Experiment (15' + 5')

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Since 2008, the Telescope Array (TA) has been the largest experiment observing ultrahigh energy cosmic rays in the northern sky. TA combines the precision of the air fluorescence technique with the efficiency of a ground array. Currently, TA consists of a surface detector with 507 scintillation counters, covering over 700 square kilometers, along with 38 fluorescence telescopes divided over three fluorescence stations located along the periphery of the array. TA has now collected over eight years of data. We will present the cosmic ray spectra from both TA and its low energy extension (TALE), covering a range of energies from just below 10 PeV to over 100 EeV. We will also present an update of the measurement of mass composition by TA, and show the latest results from our search for arrival direction anisotropy, including the apparent hotspot at the highest energies, seen in the vicinity of Ursa Major. Lastly, we will discuss the planned upgrade, TAx4, which will quadruple the detection area of our experiment, and allow us to collect 20 TA-years equivalent of data by 2020.

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