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## Overview of the Auger@TA project and preliminary results from Phase I

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Auger@TA is a joint experimental program of the Telescope Array experiment (TA) and the Pierre Auger Observatory (Auger), the two leading ultra-high energy cosmic-ray experiments located respectively in the northern and southern hemispheres. The aim of the program is to achieve a cross-calibration of the Surface Detector (SD) from both experiments. The first phase of this joint effort is currently underway and consists of comparing the response of two Auger and TA SD stations co-located at the TA central laser facility for a set of high-energy showers reconstructed by TA. The Auger and TA SD stations are based on different detection media and respond differently to the electromagnetic and muonic components of the shower. Hence, the study ultimately relies on comparing the signals induced in the SD stations with simulations using the shower parameters obtained by TA. Preliminary results will be presented. Phase II of the program consists of the deployment of a micro-array of six one-PMT Auger stations collocated with TA SD stations within TA, which will take data independently. In this phase, both station-level and event-level comparisons, including reconstruction parameters, can be performed for a subset of showers landing within the micro-array. We anticipate a deployment of the Auger micro-array in the first half of 2019.

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