

Abstract Submitted
for the MAS14 Meeting of
The American Physical Society

The Pierre Auger Observatory: Overview and recent results

FOTEINI OIKONOMOU, Pennsylvania State Univ — The Pierre Auger Observatory is the largest cosmic ray detector ever built to study cosmic rays with energies $E > 10^{18}$ eV. These are the highest energy particles to have ever been observed and their study can teach us about the most extreme accelerators in the Universe as well as about hadronic interactions at unprecedentedly high center-of-mass energies. The observatory, which covers 3000 km^2 in Argentina, has accumulated the world's largest data set of extensive air showers since 2004, when operation started. In this talk, I will give an overview of the experiment and summarize some of the latest results, including the status of searches for a correlation of ultra-high energy cosmic rays with extragalactic astrophysical accelerators.

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Date submitted: 29 Aug 2014

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