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The Pierre Auger Cosmic Ray Observatory, South and North: Recent Results and Plans for the Future

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The Pierre Auger Observatory is the world's largest detector for the highest energy cosmic rays. The astrophysical origins of these particles have remained a persistent mystery for decades. However, recent results from Auger indicate that we may be on the threshold of a new understanding. The Pierre Auger Observatory, in Malargue, Argentina, has been operating since 2004. We describe the latest results from Auger including measurement of the all-particle energy spectrum and limits on photon flux and tau neutrino flux. We also describe the current status of anisotropy analysis and progress towards composition measurements with possible connections to high energy particle physics. The results from the Auger experiment in Argentina motivate our current plans to deploy a new, larger detector in southeastern Colorado. We present a short summary of current plans and progress toward the development of Auger North.

Author: COVAULT, corbin (Case Western Reserve University)

Presenter: COVAULT, corbin (Case Western Reserve University)

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