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With AugerPrime to the Phase 2 of the Pierre Auger Observatory

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AugerPrime, the upgrade of the Pierre Auger Observatory, is nearing completion and the Observatory is now prepared to collect physics data after the commissioning of the new components. The Pierre Auger Observatory has demonstrated, based on the data collected thus far, the existence of the cutoff in the spectrum with high accuracy. However, the origin of this cutoff remains incompletely understood. The upgraded Observatory is designed to address the unresolved questions regarding the nature of the cosmic ray flux cutoff thanks to its capability to disentangle the muon and electromagnetic components of extensive air showers. Furthermore, the measurement of the muon component at ground level can verify the accuracy of hadronic interaction models currently used.

This presentation will provide an overview of the status of the Observatory and the accurate commissioning done before the start of the physics run. Furthermore, we will present the initial data from Phase 2 data mainly dedicated to proving the continuity of operation of the Observatory from Phase 1 to Phase 2.

Submitted on behalf of a Collaboration?

Yes

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