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Type: **Talk**

Muon measurements at the Pierre Auger Observatory

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Muons in extensive air showers have large decay lengths and small radiative energy losses. Therefore, muons can reach surface and underground detector arrays while keeping relevant information about the hadronic cascade. Data from several air shower experiments reveal inconsistencies in our current high-energy hadronic interaction models.

In most experiments, a larger muon content is observed compared to the hadronic model predictions. In this contribution, we report on the measurements of the muon content of air showers performed with the surface detector array of the Pierre Auger Observatory. In particular, we will focus on the overall muon content and its fluctuations. We also report on the first direct measurements of the muon content using the Engineering Array of underground muon detectors.

Is this abstract from experiment?

Yes

Name of experiment and experimental site

Pierre Auger Collaboration, Observatorio Pierre Auger, Av. San Martín Norte 304, 5613 Malargüe, Argentina

Is the speaker for that presentation defined?

Yes

Details

Dr. Eva Santos, FZU - Institute of Physics of the Czech Academy of Sciences, Czech Republic, <https://www.fzu.cz/en/home>

Internet talk

Maybe

Author: SANTOS, Eva

Presenter: SANTOS, Eva

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