



Contribution ID: 276

Type: Oral

Recent results from the Pierre Auger Observatory

Wednesday 9 August 2017 16:00 (15 minutes)

The objectives of the Pierre Auger Observatory are to probe the origin and characteristics of cosmic rays above 10^{17} eV and to study the interactions of these, the most energetic particles observed in nature. The Observatory design features an array of water Cherenkov stations deployed over a surface of 3000 km^2 overlooked by fluorescence telescopes. This design and a sophisticated data analysis pipeline provide us with a large set of high quality data, which has led to major breakthroughs in the last decade.

The Observatory has recorded data from an exposure exceeding $60,000 \text{ km}^2 \text{ sr yr}$ since its beginning in 2004. The latest results together with systematic uncertainties are discussed in this talk. A major upgrade, known as AugerPrime, with an emphasis on improved mass composition determination using the surface detector is also presented.

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Session Classification: Cosmic rays

Track Classification: Cosmic rays