



Contribution ID: 79

Type: Oral

The five sigma measurements in ultra-high energy cosmic rays and more

Tuesday, 18 June 2024 15:00 (30 minutes)

The two observatories with largest effective areas in the world, Pierre Auger and Telescope Array have been continuously operating for more than 20 years gathering an impressive statistics on cosmic rays with energies up to above 10^{20} eV. I will review the major achievements from these two Observatoires, with a focus on the similitude between their measurements, in the same time highlighting the diversity of the science cases of ultra-high energy cosmic rays. While several measurements, like the suppression of the cosmic rays flux at the highest energies or the anisotropic dipolar pattern in the arrival direction, have reached more than five sigma evidence, a few of the measurements are expected to reach a similar level in next years.

Presenter: Prof. MARIS, Ioana (Universite Libre de Bruxelles)

Session Classification: Ultra-High Energy Cosmic Rays

Track Classification: Ultra-High Energy Cosmic Rays