

Search for Anisotropies in the measured Arrival Directions of Ultra-High Energy Cosmic Rays at the Pierre Auger Observatory

Wednesday, 12 October 2016 14:25 (20 minutes)

The study of anisotropies in the arrival directions of ultra-high energy cosmic rays can give vital clues to understand their origin.

Here we report the recent results related to the search of anisotropies in the arrival directions of ultra-high energy cosmic rays measured at the Pierre Auger Observatory.

We focus on the search for large scale patterns.

Prominent is a search within events with energies above 4 EeV using showers with a maximum zenith angle of 80 degrees.

Among the results, we report on the hint of a dipolar pattern for energies above 8 EeV.

Finally, we present an update on the search for correlations between events and nearby extragalactic objects.

Presentation type

oral

Primary author: LAUSCHER, Markus (RWTH Aachen University)

Presenter: LAUSCHER, Markus (RWTH Aachen University)

Session Classification: Oct.12PM1