Contribution ID: 8 Type: not specified

Atmospheric Monitoring at a Cosmic Ray Observatory –a long-lasting endeavour

Tuesday, 25 September 2018 10:00 (22 minutes)

The Pierre Auger Observatory for detecting ultra-high energy cosmic rays has been founded in 1999. After a main planning and construction phase of about five years, the regular data taking started in 2004, but it took another four years until the full surface detector array was deployed. In parallel to the main detectors of the Observatory, a comprehensive set of instruments for monitoring the atmospheric conditions above the array was developed and installed as varying atmospheric conditions influence the development and detection of extensive air showers.

The multitude of atmospheric monitoring installations at the Pierre Auger Observatory will be presented as well as the challenges and efforts to run such instruments for several decades.

Primary author: Dr KEILHAUER, Bianca (Karlsruhe Institute of Technology KIT)

Presenter: Dr KEILHAUER, Bianca (Karlsruhe Institute of Technology KIT)

Session Classification: analysis techniques and instruments