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20 years of Arrival Direction Studies at the Pierre Auger Observatory

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The Pierre Auger Observatory is the largest detector for ultrahigh-energy astroparticles in the world. Located in the Argentinean pampa, it observes cosmic rays from approximately 80% of the sky, including the Galactic Center. The Observatory is sensitive to cosmic rays at energies of approximately 10 PeV up to 100 EeV, and has made significant discoveries in cosmic-ray research; for example, the discovery of a modulation in right ascension above 8 EeV with a current significance of 6.9σ confidence level, suggesting an extragalactic origin of ultrahigh-energy cosmic rays. Furthermore, searches for localized and intermediate-scale excesses are ongoing.

We present latest results of searches for anisotropy in the Auger data, and we outline future prospects utilizing novel analysis methods and Phase2 of the Observatory.

Primary author: STADELMAIER, Maximilian (Istituto Nazionale di Fisica Nucleare)

Presenter: STADELMAIER, Maximilian (Istituto Nazionale di Fisica Nucleare)

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