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## Searches for anisotropy in arrival directions of UHECRs with the Pierre Auger Observatory: updates and prospects

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The origin of cosmic rays has been one of the motivating questions of the astrophysics field for over a century, an open and exciting topic since then. To help answer this question, the Pierre Auger Observatory investigates the anisotropies of the ultra-high-energy cosmic rays (UHECRs) —with energies above  $\sim 32$  PeV —at small, intermediate, and large angular scales. The Observatory has been collecting data for over 19 years, reaching more than  $135\,000\text{ km}^2\text{ yr sr}$  of accumulated exposure, with the surface detectors spread over  $3000\text{ km}^2$ . So far, the most significant discovery is a large-scale dipole structure with a total amplitude of approximately 7%. This results from the observed modulation in right ascension in the inclusive energy bin above 8 EeV, where the computed dipole equatorial component has a statistical significance of over  $5\sigma$ . In this contribution, we present the latest updates on anisotropy searches. In addition to the limits on modulation in right ascension constrained from  $\sim 32$  PeV to  $\geq 32$  EeV, the results outlined in this presentation include catalog-based and overdensity searches, with a reported excess around the Centaurus region. Finally, we discuss the prospects of anisotropy searches in light of mass-composition information of Phase II of the Pierre Auger Observatory, AugerPrime.

**Primary author:** MARTINS, Edyvania Emily (on behalf of the Pierre Auger Collaboration)

**Presenter:** MARTINS, Edyvania Emily (on behalf of the Pierre Auger Collaboration)

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