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Large-Scale Distribution of Arrival Directions of Cosmic Rays Detected at the Pierre Auger Observatory Above 10 PeV

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Searches for large-scale anisotropies in the distribution of arrival directions of cosmic rays detected above about 10 PeV at the Pierre Auger Observatory are presented. Although no significant deviation from isotropy is revealed at present, some of the measurements suggest that future data will provide hints for large-scale anisotropies over a wide energy range. Those anisotropies would have amplitudes which are too small to be significantly observed within the current statistics. Assuming that the cosmic ray anisotropy is dominated by dipole and quadrupole moments in the EeV-energy range, some consequences of the present upper limits on their amplitudes are presented.

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