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## **Sensitivity Study of IceCube-Gen2 Surface Array for Cosmic-Ray Anisotropy**

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One of the major unresolved issues in cosmic-ray physics is the transition from galactic to extra-galactic cosmic rays. However, constraints can be obtained by studying the cosmic ray anisotropy in the energy range from PeV to EeV where the transition is expected to occur. The sensitivity to cosmic-ray anisotropy is in particular a matter of statistics. With the upcoming IceCube-Gen2 surface array, which will cover 8 times more area than the existing IceTop surface array, there will be an increase in statistics and capability to investigate cosmic ray anisotropy with higher sensitivity. We will present a simulation study of the sensitivity to the cosmic-ray anisotropy signal expected with the IceCube-Gen2 surface array.

### **Submitted on behalf of a Collaboration?**

Yes

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