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Recent results on the origin of cosmic neutrinos detected by IceCube

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A decade after IceCube's discovery of astrophysical neutrinos, high-energy neutrino astronomy thrives. The blazar TXS 0506+056 and Seyfert Galaxy NGC 1068 emerged as first source candidates amid an otherwise isotropic extragalactic neutrino flux. Their differing energy spectra hint at multiple source populations, which reveals the complexity of the extragalactic neutrino sky. In addition, IceCube recently detected the long-sought Galactic Plane neutrinos. Despite these advancements, many sources remain unknown. IceCube continues to accumulate data; also, advances in neutrino reconstruction and analysis methodology improve the search for neutrino sources. I will present recent IceCube results on the origin of cosmic neutrinos. While we are preparing further instrumentation with the IceCube-Upgrade and IceCube-Gen2, new neutrino telescopes (e.g. P-ONE and KM3NeT) are also planned or already under construction to increase the sensitivity of future neutrino astronomy.

Alternate track

I read the instructions above

Yes

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