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## High-energy Astrophysical Neutrinos in IceCube.

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The IceCube Neutrino Observatory is a kilometer-scale neutrino telescope located at the South Pole underneath the Antarctic ice. In the last years IceCube has provided evidence of a diffuse flux component of high-energy astrophysical neutrinos at the level of  $10^{-8} \text{ GeV cm}^{-2} \text{ s}^{-1} \text{ sr}^{-1}$  per flavor. The origin of these neutrinos remains, however, unknown. Ongoing analyses are trying to solve this mystery by searching for spatial and timing correlations. I will discuss the latest results of the IceCube experiment and the possible interpretations about the origin of this high energy component. I will conclude with prospects of future upgrades of the IceCube experiment.

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