

Advances towards the IceCube-Gen2 Neutrino Observatory

martedì 18 giugno 2024 17:30 (2 ore)

IceCube-Gen2 is a planned extension of the IceCube Neutrino Observatory at the geographic South Pole. The array is optimized to search for sources of astrophysical neutrinos from TeV to EeV energies. IceCube-Gen2 builds on more than a decade of successful scientific observations with IceCube. The observatory will utilize optical sensor modules integrated into the deep ultra-clear Antarctic ice for the detection of Cherenkov light from neutrino interactions, surface detectors on the ice for the detection of cosmic-ray air showers, and an extended radio array for sensing of ultra-high-energy neutrinos. This presentation will review the array. Technologies for the construction and operations of the Gen2 detector will be described, with a particular emphasis on sustainability, environmental impact, and resource optimization.

Poster prize

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