

## A multi-cubic-kilometer neutrino telescope in the Western Pacific Ocean

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Neutrino astronomy has entered a new era since IceCube's discovery of a diffuse extragalactic all-flavor neutrino flux and several prominent neutrino source candidates. Next-generation neutrino telescopes with much improved sensitivity to point sources and all neutrino flavors are in high demand in order to resolve the diffuse flux, test for neutrino oscillations and search for new physics over astronomical baselines. Among the group of next-gen neutrino telescopes currently proposed or under construction, a telescope near Earth's equator would add a unique view of the entire neutrino sky. In this talk, we will discuss a successful pathfinder experiment which has identified and characterized a promising site in the Western Pacific Ocean – northeast of the South China Sea. We will also show the conceptual design of the future TRIDENT neutrino telescope, its expected performance and projected timelines.

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\*Speaker