Executive Summary for *Trinity* Sensitivity Findings

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1 Overview

In this proceeding, we present updated diffuse-flux and point-source sensitivity calculations for the proposed ultra-high energy (UHE, $> 10\,\mathrm{PeV}$) neutrino observatory, *Trinity*.

2 Significance

Trinity's ability to detect UHE neutrinos will help shed light onto the unknown origin of IceCube's astrophysical neutrinos and help answer other pressing questions in astroparticle physics.

3 Methods

We simulate ten years of observation for diffuse-flux sensitivities, and observe five selected sources over periods ranging from one hour to one year for point-source sensitivities.

4 Findings

We find that *Trinity* is capable of overlapping and extending IceCube-measured diffuse neutrino flux into higher energies, and is able to detect transient source fluxes as low as $10^{-14}\,\mathrm{cm}^{-2}\mathrm{s}^{-1}$ within one year.

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