Seattle Snowmass Summer Meeting 2022



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The Trinity UHE Neutrino Observatory

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The detection of astrophysical neutrinos with IceCube has renewed the interest in opening the neutrino window at even higher energies. Trinity is a proposed system of air-shower imaging telescopes to detect Earthskimming tau neutrinos. The observatory will have 18 novel wide field-of-view telescopes distributed at three different sites on mountain tops in its final configuration. With its high sensitivity between PeV and 10 EeV, Trinity will fill the gap between IceCube and proposed radio UHE-neutrino instruments. In this poster, I discuss Trinity's concept, design, and sensitivity to diffuse and point sources, highlighting synergies with future radio and in-ice optical observatories. I will close by discussing the Trinity demonstrator we are constructing and planning to deploy in Fall 2022 on Frisco Peak, Utah.

In-person or Virtual?

In-person

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