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Shower Reconstruction in TRIDENT

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TRopIcal DEep-sea Neutrino Telescope (TRIDENT) is a next-generation neutrino observatory to be located in the South China Sea. With its large instrumented volume, unique position near the equator and use of advanced hybrid digital optical modules (hDOMs), TRIDENT aims to discover multiple astrophysical neutrino sources and probe all-flavor neutrino physics. In contrast to track-like events, shower-like neutrino events have a low rate of background atmospheric muon events. Neutrino telescopes with degree-level angular resolution for shower-type neutrino events would boost source-searching sensitivity and probe neutrino oscillation across astronomical baselines. In this contribution, we present TRIDENT's angular resolution in the reconstruction of shower-like neutrino events from 10 TeV to 1 PeV.

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