

Supernova Neutrinos with nEXO

Friday 14 June 2019 18:00 (3 hours)

The nEXO experiment is a proposed neutrino-less double beta decay ($0\nu\beta\beta$) search in the isotope Xe-136 anticipated to be located at SNOLAB. nEXO's stringent low-background requirements necessitate a water shield in order to reduce contributions from external radiation. Photomultiplier tubes inside the water will also measure Cherenkov light of passing muons; this active shield is referred to as the Outer Detector. We present the status of Monte Carlo simulations and discuss the Outer Detector's potential as a supernova neutrino observatory with a focus on the inverse beta decay interaction channel on hydrogen in the water.

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Session Classification: Poster session and welcome dinner reception