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Neutrino physics with SNO+

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SNO+ is a large, optical neutrino detector with a broad research program. The primary goal of SNO+ is to search for neutrinoless double beta decay using tellurium-loaded liquid scintillator. The experiment first took data while the detector was filled with the water but is now completely filled and collecting data with liquid scintillator. In this talk I will discuss the physics results from the SNO+ water phase, highlighting measurements of the ⁸B solar neutrinos with extremely low backgrounds and the first measurement of reactor neutrinos in a water Cherenkov detector. I will then detail the status and plans for the neutrino measurements during the liquid scintillator phase, focusing on solar and reactor neutrino sensitivities.

Submitted on behalf of a Collaboration?

Yes

Primary author: KAPTANOGLU, Tanner (UC Berkeley)Presenter: KAPTANOGLU, Tanner (UC Berkeley)Session Classification: Neutrino physics and astrophysics

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