

SNO+ experiment

Tuesday, 10 September 2013 14:40 (20 minutes)

SNO+ is a multi-purpose neutrino physics experiment in Sudbury, Canada, and a follow up of the successful Sudbury Neutrino Observatory. The heavy water inside the detector was replaced by liquid scintillator to improve energy resolution and lower energy threshold of the detector. High light yield of the scintillator, the unique location 2 km underground, and the use of ultra-clean materials, allow the detection of low energy pep and CNO solar neutrinos. Other physics goals that can be explored are reactor neutrino oscillations, geo-neutrinos in a geologically-interesting location, and supernova neutrino watch. The talk will give an overview of these physics goals, upgrades to the detector, and current status of the experiment.

Primary author: Mr KASPAR, Jarek (University of Washington)

Presenter: Mr KASPAR, Jarek (University of Washington)

Session Classification: Low Energy Neutrinos II

Track Classification: Low-Energy Neutrinos (solar, reactor, supernova, and geo neutrinos and also nuclear astrophysics associated with these sources)