

Abstract Submitted  
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**Calibrations of the SNO+ PMTs** FREIJA DESCAMPS, Lawrence Berkeley National Lab, SNO+ COLLABORATION — SNO+, the successor to the Sudbury Neutrino Observatory (SNO), is currently in the final phase of the hardware upgrade and commissioning. It is located at about 6000 m.w.e. in SNOLab, the world's deepest operating underground laboratory. By replacing SNO's heavy water with a liquid scintillator target (LAB), a much lower energy threshold can be achieved. This creates a new multipurpose neutrino detector with the potential to address a diverse set of physics goals. In a pure-scintillator phase, SNO+ will study low energy solar neutrinos, including those from the pep and CNO cycles. Loading the liquid scintillator with a double beta decay isotope, like neodymium, will then enable the search for neutrinoless double beta decay. SNO+ also aims at detecting reactor, geo- and supernova neutrinos. For all physics goals, an accurate understanding and calibration of the PMT response is essential. After a review of the general SNO+ setup and physics goals, the SNO+ PMT calibration will be presented in detail.

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