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Deployed calibration sources in SNO+

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SNO+ is a multipurpose neutrino experiment located 2km underground in Sudbury, Canada, which will begin operation this year. The detector consists of 8 kilotonnes of ultra-pure water shielding, with an array of ~9500 PMTs, surrounding a central O(1 kTonne) interaction volume. SNO+ will operate in three distinct phases, with a different material in the interaction volume during each phase: water, scintillator and scintillator with double beta-decay isotope. The calibration of the detector will involve both in-situ optical calibrations and the deployment of optical and radioactive sources. While the use of such deployed calibration sources are essential to the physics programme of SNO+, they also pose the risk of introducing backgrounds into the detector. This talk will give an overview of the various deployed sources that will be used by SNO+, in the context of the physics goals of the experiment. Source container designs and deployment methods will also be discussed.

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