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Calorimetric Energy Measurement for Supernova Neutrinos using the DUNE Photon Detection System

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The photon detection system (PDS) is a subsystem of the Deep Underground Neutrino Experiment (DUNE). It measures the scintillation light signal and allows determination of the time of occurrence of an event of interest with much higher precision than charge collected from ionization in the liquid argon time-projection chambers and provides a complementary measurement of the deposited energy. This talk will report on simulation studies of calorimetric energy measurement of neutrinos from supernova neutrino bursts (SNB) in DUNE using the PDS.

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