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## Application of a DD-Neutron Source for Low-Energy Nuclear Recoil Calibrations in the LZ Experiment

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The LUX-ZEPLIN (LZ) experiment is a direct detection dark matter experiment that uses a dual-phase time-projection chamber (TPC) containing 7 tonnes of active xenon with a 5.6 tonne fiducial volume. In LZ, precision nuclear recoil (NR) calibrations are critical to understanding the signal response of dark matter interactions with the liquid xenon inside the detector. Monoenergetic 2.45 MeV neutrons from an Adelphi Technologies, Inc. deuterium-deuterium (DD) neutron generator were used for absolute NR calibrations during LZ's first science run. DD neutrons enable in-situ measurements of the detector's scintillation and electroluminescence response to NRs, and provide a data-driven method for acquiring signal efficiencies of the LZ event trigger and reconstruction. Additionally, calibrations with the DD generator will assist in other rare-event searches, and allow for sub-keV measurements of the charge and light yields of the detector. In this talk, I will present preliminary results of the utilization of DD neutrons, and discuss their application as a key NR calibration source in LZ.

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