

Status of the LUX-ZEPLIN Experiment

Greg Rischbieter

LUX-ZEPLIN (LZ) is a direct detection dark matter experiment hosted in the Davis Campus of the Sanford Underground Research Facility in Lead, South Dakota. LZ's central detector is a dual-phase time projection chamber containing 7 tonnes of liquid xenon (LXe), 5.6 tonne fiducial mass, and is aided by a LXe "skin" detector and liquid scintillator-based outer detector to veto events inconsistent with dark matter. LZ aims to collect 1000 live days of data, allowing sensitivity to a WIMP-nucleon spin-independent cross-section of $1.4 \times 10^{-48} \text{ cm}^2$ for a 40 GeV/c² mass. This talk will provide an overview of the experiment and report on its status.