

# 9th SYMPOSIUM ON LARGE TPCs FOR LOW-ENERGY RARE EVENT DETECTION



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## Status of the LZ experiment

LUX-ZEPLIN (LZ) is a next generation direct dark matter detection experiment located at Sanford Underground Research Facility in Lead, SD. The detector consists of a dual-phase xenon Time Projection Chamber with an active volume of 7 tonnes (5.6 tonne fiducial), shielded by an instrumented liquid xenon skin region, a Gd-loaded liquid scintillator veto, and an ultrapure water veto. LZ is expected to start data taking in April 2020 and is projected to achieve a sensitivity for the spin independent WIMP-nucleon cross section of  $1.6 \times 10^{-48} \text{ cm}^2$  at 40 GeV after 1000 live-days of exposure. An overview and the current status of the LZ experiment will be presented.

**Primary author:** FAN, Alden (SLAC/Stanford)

**Presenter:** FAN, Alden (SLAC/Stanford)