

## Latest results from the LUX-ZEPLIN (LZ) dark matter experiment

*Sunday, 19 April 2026 17:45 (20 minutes)*

LUX-ZEPLIN (LZ) is a dark matter direct detection experiment, operating deep underground at the Sanford Underground Research Facility (SURF), USA. Utilizing a 7-tonne dual-phase xenon time projection chamber in conjunction with a robust veto system, LZ aims to primarily detect Weakly Interacting Massive Particles (WIMPs), one of the most promising dark matter candidates. Currently, LZ provides the most stringent constraints on WIMPs heavier than  $5 \text{ GeV}/c^2$ . In this talk, I will review the current status of LZ and highlight our recent efforts in search for WIMPs, alongside explorations of other beyond the Standard Model phenomena.

**Primary author:** XU, YONGHENG

**Presenter:** XU, YONGHENG

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