



Contribution ID: 152

Type: oral

## Latest Results from the LZ Dark Matter Experiment

*Tuesday, 24 September 2024 14:00 (17 minutes)*

LUX-ZEPLIN(LZ) is a direct detection dark matter experiment located nearly a mile underground at the Sanford Underground Research Facility (SURF) in Lead, South Dakota, USA. Employing a dual-phase Time Projection Chamber (TPC) containing 7 tonnes of active xenon surrounded by veto systems, LZ offers world-leading sensitivity in detecting Weakly Interacting Massive Particles (WIMPs), a highly motivated dark matter candidate. Beyond the quest for WIMPs, the LZ experiment explores diverse new physics phenomena. This presentation will provide an overview of the LZ experiment and report on the most recent status in its operation and searches.

**Primary author:** XIA, Qing (Lawrence Berkeley National Laboratory)

**Presenter:** XIA, Qing (Lawrence Berkeley National Laboratory)

**Session Classification:** Direct Dark Matter detection