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Searching for WIMPs and Other New Physics with LZ

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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 presents a 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 update on the current status of LZ and its latest results.

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