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Status of the LZ Experiment

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LUX-ZEPLIN (LZ) is a direct detection dark matter experiment located at the Sanford Underground Research Facility in Lead, South Dakota. The experiment consists of three nested detectors; a dual phase xenon TPC, an actively instrumented liquid xenon skin, and an outer detector neutron veto formed by 10 acrylic tanks of gadolinium-loaded liquid scintillator. The active region of the xenon TPC contains 7 tonnes of liquid xenon with a 5.6 tonne fiducial volume, allowing us to reach a WIMP-nucleon spin-independent cross section sensitivity of 1.4×10^{-48} cm² for a 40 GeV/c² mass in 1000 live days. In this talk I will give an overview of the LZ experiment currently being commissioned, and report on its status.

Primary author: MONTE, Alissa (UCSB)

Presenter: MONTE, Alissa (UCSB)

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