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The LUX-ZEPLIN (LZ) Experiment: Searching for direct evidence of dark matter

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Astronomical observations have indicated a considerable amount of dark matter in our universe, but nobody has been able to directly observe any dark matter yet. LZ is an experiment looking for dark matter particles, in particular Weakly Interacting Massive Particles (WIMPs) among other candidates. LZ is located at the Sanford Underground Research Facility in Lead, South Dakota, and it uses a dual-phase time projection chamber containing 7 tonnes of liquid xenon and 5.6-tonne fiducial mass, aided by an LXe “skin” detector and liquid scintillator-based outer detector to veto events inconsistent with dark matter. In this poster, we will give an overview of the LZ experiment.

In-person or Virtual?

In-person

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