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Searching for Dark Matter with the LZ experiment

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LUX-ZEPLIN (LZ) is a next-generation direct detection dark matter detector. The experiment is currently under construction and located underground at the 4850-foot level of the Sanford Underground Research Facility (SURF) in Lead, South Dakota. LZ is aimed to search for weakly interacting massive particles (WIMPs) using a two-phase time projection chamber (TPC) containing 7 tonnes of purified liquid Xe. The projected spin-independent cross section sensitivity for a $40 \text{ GeV}/c^2$ WIMP mass is $1.6 \cdot 10^{-48} \text{ cm}^2$ for 1000 days livetime. The experiment is in the construction phase from 2018 and expected to start data taking in 2020. In this talk, I will present an experimental overview and the current detector status.