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Physics reach of the LUX-Zeplin Dark Matter Experiment

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The nature and origin of Dark Matter are among the most compelling mysteries of contemporary science. For over three decades, physicists have been trying to detect Dark Matter particles via collisions on target nuclei, with little success.
The LZ collaboration is building a massive Dark Matter detector, which is currently being installed at the 4850 level of the Sanford Underground Research Facility in Lead, South Dakota. This detector features 7 active tons of target nuclei and uses the established liquid xenon TPC technology to achieve unprecedented sensitivity to a wide range of Dark Matter candidates. In this talk I will review the physics reach of the LZ experiment.

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