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Latest results from LUX-ZEPLIN

The LUX-ZEPLIN experiment is a liquid-gas dual phase time projection chamber that utilizes 7 active tonnes of liquid xenon as a target for dark matter searches and observatory for neutrino-less double beta and other rare nuclear processes. It has been collecting science data near-continuously since 2021. In this time we have published the world leading limits on WIMP dark matter, reported the first statistically significant observation of solar ^8B neutrino coherent nuclear scattering, observed and studied the second rarest decay of a nuclear isotope, ^{124}Xe , and probed non-WIMP dark matter interactions in our electronic recoil data. This talk will focus on the challenges and novel aspects of the WIMP search results with a brief update on LZ's capabilities in neutrino-less double beta decay.

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