

The LUX Dark Matter Experiment

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The LUX dark matter experiment is a 350 kg two-phase xenon time projection chamber. There are several advantages of liquid xenon for WIMP detection: high scintillation yield, high ionization yield, low intrinsic radioactivity, easy purification, effective gamma-ray self-shielding, and significant A^2 enhancement of the spin-independent WIMP cross-section. LUX is currently under construction and will be installed in Fall 2009 at the SUSEL lab in South Dakota. I will review the design features of LUX, give an update on its current status, and describe our conception of the future LUX-ZEPLIN dark matter program.

Primary author: MCKINSEY, Daniel

Presenter: MCKINSEY, Daniel

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