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Current Status of the Large Underground Xenon (LUX) Experiment NICOLE LARSEN, Yale University, LUX COLLABORATION — The LUX (Large Underground Xenon) experiment is a dark matter direct detection experiment currently deployed at the 4850' level of the Sanford Underground Research Facility located in Lead, SD. It consists of a 350-kg dual-phase (liquid/gas) xenon-based time projection chamber with a 100-kg fiducial mass. LUX is designed to use both scintillation and charge signals to detect elastic scatters between WIMPs and nuclei, with a projected sensitivity of 7×10^{-46} cm^2 for a WIMP mass of 100 GeV for 300 days of acquisition. In February 2013, LUX began its first underground science run with the goal of collecting 60+ days of preliminary WIMP search data. This talk will provide an overview of LUX and report on the detector's performance during its first underground run.

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