

Opportunities at the Sanford Underground Research Facility

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The Sanford Underground Research Facility (SURF) has been operating for 17 years as an international facility dedicated to advancing compelling multidisciplinary underground scientific research in rare-process physics, as well as offering research opportunities in other disciplines. SURF laboratory facilities include a Surface Campus as well as campuses at the 4850-foot level (1490 m, 4300 m.w.e.) that host a range of significant physics experiments, including the LUX-ZEPLIN (LZ) dark matter experiment and the MAJORANA DEMONSTRATOR rare-decay experiment. As some experiment activities are completing, a call has been issued for letters of interest for Davis Campus space. The CASPAR nuclear astrophysics accelerator completed the first phase of operation at the Ross Campus and is planning for the second phase beginning in 2024. SURF is also home to the Long-Baseline Neutrino Facility (LBNF) that will host the international Deep Underground Neutrino Experiment (DUNE). SURF offers world-class service, including an ultra-low background environment, low-background assay capabilities, and electroformed copper is produced at the facility. SURF is preparing to increase underground laboratory space. The initial phase of construction is underway for new large caverns (nominally 100m L x 20m W x 24m H) on the 4850L (1485 m, 4100 m.w.e.) on the timeframe of next-generation dark matter and neutrino experiments (~2030).

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