

The Sanford Underground Research Facility

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The Sanford Underground Research Facility (SURF) has been operating for 15 years as an international facility dedicated to advancing compelling multidisciplinary underground scientific research, including physics, biology, geology, and engineering. Seven primary underground levels at SURF offer a unique environment that allows researchers the opportunity to explore an array of important questions regarding the origin of life and its diversity, mechanisms associated with geologic processes as well as engineering topics such as mining innovations and technology developments. Laboratories have been developed on the surface as well as at the 4850-foot level (1500 m, 4300 m.w.e.), where several experiments are well established. SURF is also home to the Long-Baseline Neutrino Facility (LBNF) that will host the international Deep Underground Neutrino Experiment (DUNE). SURF offers an ultra-low background environment, low-background assay capabilities, and electroformed copper is produced at the facility. SURF is proposing additional underground space on the 4850L as well as a deeper site on the 7400L (2300 m, 6500 m.w.e.), and initial engineering designs for both areas have been completed. SURF has an active User Association that is leading engagement efforts with the global underground science community. SURF is a dedicated research facility with significant expansion capability, and applications from new experiments are welcome.

Primary author: HEISE, Jaret (Sanford Underground Research Facility)

Presenter: HEISE, Jaret (Sanford Underground Research Facility)

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