



Underground Research Facility

South Dakota Science and Technology Authority

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www.sanfordlab.org

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FOR IMMEDIATE RELEASE

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Learn about ongoing excavation for LBNF/DUNE at upcoming SURF event
SURF invites the public to “Deep Talks: Having a blast!” virtual event on Thursday, Nov. 18, from 6 p.m. MT

LEAD, SD— Excavation is underway at the Sanford Underground Research Facility (SURF) to make space for the largest particle physics experiment hosted on United States soil. Learn all about ongoing excavation at our virtual event, “Deep Talks: Having a blast!” on Thursday, Nov. 18, from 6 to 7 p.m. MT.

To study the properties of neutrinos, the Deep Underground Neutrino Experiment (DUNE) will fire a beam of the particles from the Fermi National Accelerator Laboratory (Fermilab) campus in Batavia, Illinois, about 800 miles straight through the earth to SURF in Lead, South Dakota.

Before the experiment is built, crews need to remove more than 800,000 tons of rock to make space for the massive detectors that will be housed a mile underground at SURF.

At our upcoming Deep Talks event, James Rickard, resident engineer for the Fermilab Research Alliance, will walk our audience through the excavation process—from geotechnic surveys and cavern design to drill and blast cycles to keeping crews safe along the way. Rickard will show video footage from the underground and answer questions from the audience.

“I am really looking forward to giving this talk as it will provide the general public with an insight on what is happening at SURF,” Rickard said. “The Homestake mine was the center of this community for over 100 years. Now, it is a deep underground laboratory, where the international scientific community will be coming to conduct experiments for 100 years to come.”

Attendees can join this free event via Zoom webinar to answer polls and submit questions for speakers or watch live on SURF’s Facebook page. Webinar space is limited; early registration is encouraged.

[View full event information and register for the Zoom webinar on SURF’s website.](#)

This event is part of SURF’s Deep Talks lecture series, a monthly series ushering scientific discussions into the public sphere. In the 2021-2022 season, Deep Talks will bring voices from the international scientific community to your home through our virtual format. The Deep Talks

lecture series is sponsored by Chuck and Jolene Lichtenwalner, Crow Peak Brewing Company, RCS Construction and Northern Hills Federal Credit Union.

Sanford Underground Research Facility is operated by the South Dakota Science and Technology Authority (SDSTA) with funding from the Department of Energy's Office of Science. Our mission is to advance world class science and inspire learning across generations. Visit SURF at www.sanfordlab.org.