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SURF invites public to "Deep Talks: CAT MineStarTM for Underground"

The event will take place on March 9, from 5 to 7 p.m. at the Sanford Lab Homestake Visitor Center in Lead, SD

LEAD, SD— Sanford Underground Research Facility (SURF) invites the public to attend "Deep Talks: CAT MineStarTM for Underground" on Thursday, March 9, from 5 to 7 p.m. MT.

"Industry-leading technologies are being developed right here in South Dakota, and we're excited to invite our audiences learn more about those technologies at this month's Deep Talks," said Erin Woodward, coordinator of SURF's Deep Talks series.

GPS has transformed the way humans navigate our world. But deep underground, GPS signals go quiet. This can make it difficult for people who work underground—in caves, mines, and science labs—to find their way.

In an effort to replicate GPS deep underground, Caterpillar (CAT) built a testbed on the 1550 and 1700 Levels of SURF. CAT's technology, CAT MineStarTM for Underground, leverages Wi-Fi to coordinate safe movements through underground drifts and ramps.

"This technology is helping us livestream communications and actively track people, vehicles and production," said Dan Pierce, CAT field operations manager.

At Deep Talks, Pierce and Chris Gehner, CAT business development manager, will discuss this evolving technology and what engineers have learned since deploying it at SURF. During the Deep Talks social hour, Pierce and Gehner will give a live demonstration of the CAT MineStarTM for Underground technology.

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

How to attend:

Deep Talks is held at the Sanford Lab Homestake Visitor Center, 160 W. Main Street, in Lead, South Dakota. The event begins at 5 p.m. MT with a social hour that includes a Crow Peak Brewing Company beer tasting (must be 21 and older to drink) and light refreshments. The presentation will begin in the Visitor Center classroom at 6 p.m. MT.

Want to attend virtually? The presentation will be livestreamed on this webpage starting at 6 p.m. MT: <u>https://sanfordlab.org/event/deep-talks-cat-minestar-underground</u>

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 <u>www.sanfordlab.org</u>.