

High Purity Liquid Nitrogen Plant U/G at SNOLAB

Wednesday, May 12, 2021 1:10 PM (15 minutes)

Multiple projects at SNOLAB use liquid nitrogen to cool and operate their experiments on a day-to-day basis. High purity Nitrogen is also used for cover gas, purification processes, and operating high purity equipment. Currently, up to 3,000 L per week of Liquid Nitrogen is shipped underground at SNOLAB and consumed.

This project will generate high purity liquid nitrogen (99.999%) underground in the clean lab space. The plant is sized to meet all the labs current and near-term liquid nitrogen requirements. It will serve as a model for future experiments requiring an independent liquid nitrogen system.

A small-scale plant is planned to be operational summer 2021 with the main plant operational by end of year.

Presenter: BACK, Steven (SNOLAB)

Session Classification: SNOLAB Future Capabilities