



Canadian Association  
of Physicists

Association canadienne  
des physiciens et physiciennes

Contribution ID: 4536

Type: Oral (Non-Student) / Orale (non-étudiant(e))

## The Cryogenic Underground TEST (CUTE) facility at SNOLAB

*Tuesday 28 May 2024 15:00 (15 minutes)*

Cryogenic (O(mK)) technologies are used for a variety of applications in astroparticle, nuclear, and quantum physics. The Cryogenic Underground TEST facility (CUTE) at SNOLAB, provides a low-background and vibrationally isolated environment for testing and operating these future devices. The experimental stage of CUTE can reach a base temperature of ~12mK and can hold a payload of up to 20 kg. The facility has been used to test detectors for SuperCDMS and is transitioning to become a SNOLAB user facility. The main design features and operating parameters of CUTE will be discussed in this talk as well as the current and future status and availability of the facility.

### Keyword-1

Dark matter

### Keyword-2

Underground laboratory

### Keyword-3

CRyogenics

**Author:** Dr STUKEL, Matthew (SNOLAB)

**Presenter:** Dr STUKEL, Matthew (SNOLAB)

**Session Classification:** (PPD) T2-1 Neutrinos and Dark Matter II | Neutrinos et matière noire II (PPD)

**Track Classification:** Technical Sessions / Sessions techniques: Particle Physics / Physique des particules (PPD)