



Canadian Association
of Physicists

Association canadienne
des physiciens et physiciennes

Contribution ID: 423

(Étudiant(e) du 1er cycle)

Type: **Poster Competition (Undergraduate Student) / Compétition affiches**

(U*) POS-J107 - Radioactive Background Characterization of the Cryogenic Underground TEst Facility (CUTE)

Wednesday, 9 June 2021 14:39 (2 minutes)

The Cryogenic Underground TEst Facility (CUTE) is fully operational underground at SNOLAB. The facility can host up to six of the next generation SuperCDMS cryogenic detectors, and allows for the opportunity to search for low-mass dark matter while testing the new detectors. The SNOLAB cleanroom laboratory provides a low-background and low-cosmogenic-activation environment for CUTE operations. Estimating the background from radioactive processes with Geant4 simulations becomes a crucial task in informing the background budget for the experiment. This presentation will describe the radioactive background characterization of the CUTE facility, and discuss its validation through comparison with acquired data.

Primary author: BAIOCCHI, Melissa (SNOLAB)

Presenter: BAIOCCHI, Melissa (SNOLAB)

Session Classification: W-POS-J #80-107 Poster session (PPD) / Session d'affiches (PPD)

Track Classification: Particle Physics / Physique des particules (PPD)