



Canadian Association
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Contribution ID: 3391 Type: **Oral not-in-competition (Graduate Student) / Orale non-compétitive (Étudiant(e) du 2e ou 3e cycle)**

Beta-SRF at TRIUMF - A Unique Facility to Characterize SRF Materials Near Fundamental Limits

Thursday, 9 June 2022 11:45 (15 minutes)

Superconducting Radio-frequency (SRF) technology provides the cutting-edge technology that enables high performance acceleration for modern accelerator projects. RF losses are a major cost driver that both limit gradient and increase cryogenic demand. TRIUMF and U. Victoria have an active program in characterizing loss mechanisms in SRF materials using both muSR and beta-NMR. At TRIUMF, a facility, unique in the world, has recently been developed that allows a characterization of the Meissner state of SRF materials at field near the fundamental limits. The new facility and first results will be presented.

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Session Classification: R2-4 Quantum Materials II (DCMMP) | Matériaux quantiques II (DPMCM)

Track Classification: Technical Sessions / Sessions techniques: Condensed Matter and Materials Physics / Physique de la matière condensée et matériaux (DCMMP-DPMCM)