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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.

Authors: ASADUZZAMAN, Asad (TRIUMF/U.Vic); THOENG, Edward (TRIUMF); LAXDAL, Robert Edward; MC-FADDEN, Ryan (TRIUMF/U.Vic); JUNGINGER, Tobias (University of Victoria)

Presenter: THOENG, Edward (TRIUMF)

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