TRIUMF Advanced Rare Isotope Laboratory (ARIEL)

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The Superconducting Array for Low Energy Radiation (SALER) at ARIEL

Tuesday, 21 April 2026 13:50 (20 minutes)

SALER (Superconducting Array for Low-Energy Radiation) is a new experimental platform that uses superconducting sensors to study radioactive decay through direct detection of eV-scale nuclear recoil and other low-energy observables. The approach has already been developed and tested in the rare-isotope environment at FRIB, establishing its promise as a powerful new tool for precision decay studies. ARIEL offers an exciting opportunity to extend this capability to a broad and complementary range of isotopes and science cases, including weak-interaction studies, tests of fundamental symmetries, and questions in nuclear structure and astrophysics. In this talk, I will discuss the SALER concept, its demonstrated progress to date, and the prospects for a future program at ARIEL.

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Session Classification: Experimental horizons for BSM and electroweak interactions using AMO techniques and rare isotope beams