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Cryogenic Underground TEst facility at SNOLAB: Infrastructure and Latest Results

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Cryogenic technologies are used for a variety of applications in particle, nuclear and quantum physics. The Cryogenic Underground TEst facility (CUTE) at SNOLAB provides a low background, vibration-isolated environment for testing and operating these devices. The experimental stage of CUTE can reach a base temperature of 12 milliKelvin, and can hold a payload up to 20 kg. Over the past years the facility has successfully operated a SuperCDMS High Voltage detector tower, a few sub-eV resolution SuperCDMS HVeV (High-Voltage with eV resolution) detectors, with an ongoing project aiming to probe the impact of cosmic rays on qubit coherence times. This talk will present the CUTE facility as well as the recent results from the above-mentioned projects.

Collaboration you are representing

CUTE, SuperCDMS

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