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(G*) CUTE: an underground test facility for cryogenic detectors

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The Cryogenic Underground TEst facility (CUTE), located approximately 2 kilometers underground at SNO-LAB, has been operational since 2019. It provides a well-shielded, low-background environment, ideal for testing cryogenic detectors for rare event searches. The primary focus of CUTE is to test detectors in preparation for their use in the Super Cryogenic Dark Matter Search (SuperCDMS) experiment. Due to the facility's low background, early dark matter searches with SuperCDMS detectors or other small scale rare event searches may also be performed. So far, the CUTE facility has tested a variety of devices, including a prototype SuperCDMS high-voltage germanium detector and a 10 gram silicon detector optimized for low-energy nuclear recoils. This presentation will describe the main features and the performance of the CUTE facility and discuss some of the measurements performed to date, including the experimental validation of the vibration isolating system.

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