Abstract Submitted
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Improving the energy calibration of CUORE-0 and CUORE JEREMY S. CUSHMAN, Yale University, CUORE COLLABORATION — The Cryogenic Underground Observatory for Rare Events (CUORE) is a ton-scale cryogenic experiment designed to search for neutrinoless double-beta ($0\nu\beta\beta$) decay of ^{130}Te. The experiment consists of 988 ultracold TeO_2 bolometric crystals arranged into 19 towers, which act as both the $0\nu\beta\beta$ decay sources and detectors. CUORE-0, an experiment using a single CUORE-like tower, completed physics data-taking in 2015 and set a new limit on the $0\nu\beta\beta$ decay half-life of ^{130}Te. CUORE installation is scheduled to be completed this year with commissioning and data taking to begin soon thereafter. I will discuss the analysis and results from CUORE-0, focusing on energy calibration, and the analysis techniques and calibration hardware that will allow us to improve our understanding of the detector energy scale in CUORE.

Jeremy Cushman
Yale University

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