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Calibration of the CUORE Detector Array[1] KYUNGEUN LIM, ADAM DALLY, LARISSA EJZAK, KARSTEN HEEGER, REINA MARUYAMA, LAUREN WIELGUS, TOM WISE, PINGCHUAN ZHAO, University of Wisonsin-Madison, CUORE COLLABORATION — CUORE is a ton-scale cryogenic detector that will use an array of 988 TeO_2 bolometers to search for neutrinoless double-beta decay of ^{130}Te. Calibration of the detector is essential to determine the energy scale, especially near the Q-value of the nuclear transition where the neutrinoless double-beta decay is expected as a monochromatic peak. The CUORE detector calibration system has been designed and built to uniformly irradiate the entire volume with low-temperature sources. It is necessary to mechnically cool the sources to 4 K to maintain the bolometers at their working points. In this talk I will give an overview of the detector calibration system and present the first results from its commissioning in the cryostat.

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