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Comparing CUORE Calibration Data to Simulations KATHERINE MELBOURNE, Yale University, CUORE COLLABORATION — The Cryogenic Underground Observatory for Rare Events (CUORE) is a ton-scale experiment located at the Laboratori Nazionali del Gran Sasso searching for the neutrinoless double-beta ($0\nu\beta\beta$) decay of ^{130}Te. Operating at $\sim$15 mK, CUORE is arranged into 19 towers with 988 TeO_2 crystals in total that serve as both the sources and detectors of the ^{130}Te decay. The energy response of each individual crystal is calibrated at various energies using ^{232}Th source strings placed within the array of detectors. Analyzing the differences between calibration and simulated calibration data provides valuable information on the performance of our Monte Carlo simulations, which are important for understanding our physics energy spectrum and background sources. In this poster, I will discuss a comparison of recent CUORE calibration data to Monte Carlo simulations of the data for the strongest lines in the ^{232}Th decay chain that are used to calibrate the experiment.

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