

Abstract Submitted
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Using constant fraction discrimination techniques to improve time resolution in CUORE THOMAS BLOXHAM, LBNL, CUORE COLLABORATION — The CUORE experiment is a bolometric search for neutrinoless double beta decay to be based at LNGS in Italy. Both it, and the prototype Cuoricino whose operation has just been concluded, use Tellurium Oxide bolometer crystals as their active detectors. These bolometers are characterized by a slow pulse shape, across almost 4 seconds, and thus a poor reconstruction of initial event times. Using constant fraction discrimination techniques, it is possible to vastly improve the time resolution, and to reconstruct events or background occurring across multiple bolometers in a useful way.

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