Abstract Submitted
for the HAW05 Meeting of
The American Physical Society

Background Mitigation in a Highly-Segmented HPGe Detector[1]
M. PERRY, A.W. POON, R. HENNING, Lawrence Berkeley National Laboratory, K. VETTER, D. CAMPBELL, Lawrence Livermore National Laboratory — We present the first study of a highly-segmented HPGe detector with pulse shape discrimination in a low background environment. The detector consists of a 8x5 highly-segmented HPGe crystal, shielded with 5 cm of normal lead. Data was collected at the Oroville low-background facility to study backgrounds applicable to the proposed Majorana neutrinoless double-beta decay experiment. An analysis of the efficiency of highly-segmented detectors to eliminate these backgrounds will be presented.

[1]This work was supported in part by the U.S. Department of Energy under contract no. DE-AC03-765F00098

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Date submitted: 30 Jun 2005 Electronic form version 1.4