Abstract Submitted
for the APR13 Meeting of
The American Physical Society

Results from a direct dark matter search with the MAJORANA low-background broad energy germanium detector[1] PADRAIC FINNERTY, University of North Carolina at Chapel Hill, MAJORANA COLLABORATION — As a part of the research and development efforts for the MAJORANA experiment, we have deployed a customized Canberra broad energy germanium (BEGe) detector at the Kimballton Underground Research Facility (KURF). We have performed a direct search for low-mass particle dark matter using a 221.49 live day (89.53 kg-d) exposure. We discuss the backgrounds and report on results from this search, and their compatibility with other experiments that probe the low WIMP-mass (<10 GeV) parameter space.

[1]This work is supported by DOE Grants # DE-FG02-97ER41041 and DE-FG02-97ER41033.

Padraic Finnerty
University of North Carolina at Chapel Hill

Date submitted: 08 Jan 2013 Electronic form version 1.4