Abstract Submitted
for the APR15 Meeting of
The American Physical Society

Data Acquisition and Environmental Monitoring of the MAJORANA DEMONSTRATOR[1] SAMUEL MEIJER, University of North Carolina, Chapel Hill, MAJORANA COLLABORATION — Low-background non-accelerator experiments have unique requirements for their data acquisition and environmental monitoring. Background signals can easily overwhelm the signals of interest, so events which could contribute to the background must be identified. There is a need to correlate events between detectors and environmental conditions, and data integrity must be maintained. Here, we describe several of the software and hardware techniques achieved by the MAJORANA Collaboration for the MAJORANA DEMONSTRATOR, such as using the Object-oriented Realtime Control and Acquisition (ORCA) software package.

[1]This material is based upon work supported by the U.S. Department of Energy, Office of Science, Office of Nuclear Physics, the Particle Astrophysics Program of the National Science Foundation, and the Sanford Underground Research Facility.

Samuel Meijer
University of North Carolina, Chapel Hill

Date submitted: 09 Jan 2015 Electronic form version 1.4