Abstract Submitted for the APR16 Meeting of The American Physical Society

Commissioning the Majorana Demonstrator WENQIN XU, University of North Carolina, Chapel Hill, MAJORANA COLLABORATION — The MAJORANA DEMONSTRATOR deploys high purity germanium (HPGe) detector modules to search for neutrinoless double beta $(0\nu\beta\beta)$ decay in 76 Ge. The experiment is aimed at demonstrating the technical feasibility and low backgrounds for a next generation Ge-based experiment. The program of testing and commissioning the DEMONSTRATOR modules is a critical step to debug and improve the experimental apparatus, to establish and refine operational procedures, and to develop data analysis tools. In this talk, we will discuss our experience commissioning the DEMONSTRATOR modules and show how this program leads to successful data-taking. This material is based upon work supported by the U.S. Department of Energy, Office of Science, Office of Nuclear Physics, the Particle Astrophysics and Nuclear Physics Programs of the National Science Foundation, and the Sanford Underground Research Facility.

Wenqin Xu University of North Carolina, Chapel Hill

Date submitted: 07 Jan 2016 Electronic form version 1.4