4CS21-2021-000101 E

> Abstract for an Invited Paper for the 4CS21 Meeting of the American Physical Society

Recent Work on Detector RD and Neutrino Cross Sections at MicroBooNE ROB FINE, Los Alamos National Laboratory, MICROBOONE COLLABORATION

MicroBooNE is an accelerator-based short-baseline neutrino experiment located in the Booster Neutrino Beamline at Fermilab. It is the most thoroughly studied Liquid Argon Time Projection Chamber, and has accumulated the largest statistics of neutrino interactions on argon to date. While the primary analysis goal of MicroBooNE is to address the anomalous electromagnetic excess observed by the MiniBooNE and LSND experiments, robust RD and cross section programs provide important contributions to the international neutrino community. I will discuss recent developments and future plans of both the RD and neutrino cross section programs, and explain their importance to LBNF/DUNE, the flagship domestic project of the US High Energy Physics program, which will come online later this decade.