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MicroBooNE and the broader SBN program
WESLEY KETCHUM, Fermi National Accelerator Laboratory

MicroBooNE has begun collecting and analyzing neutrino interaction events in its Liquid Argon Time-Projection Chamber (LArTPC) located on the Booster Neutrino Beamline (BNB) at Fermilab. Over the coming years, MicroBooNE will measure neutrino-Ar interactions, elucidate the origin of the “low-energy excess” observed by the MiniBooNE experiment, and further the development of LArTPC detector technology and event reconstruction. MicroBooNE is also the beginning of Fermilab’s short-baseline neutrino program, which will see two new detectors located on the BNB starting in 2018. Together, these three detectors will perform a search for eV mass-scale sterile neutrinos through measurements of standard neutrino oscillations in both appearance and disappearance channels. I will describe the MicroBooNE LArTPC, highlight the advantages and challenges of LArTPCs as neutrino detectors, show the status of the event reconstruction and analysis, and discuss the future plans for MicroBooNE and the short-baseline neutrino program at Fermilab.