Contribution ID: **126** Type: **not specified**

MicroBooNE in 10 minutes

Monday, 8 July 2024 17:00 (15 minutes)

MicroBooNE is an 85-tonne liquid argon time projection chamber (LArTPC) experiment at Fermilab, situated on-axis relative to the Booster Neutrino Beam (BNB) with a baseline of 470 m, and off-axis from the Neutrinos at the Main Injector (NuMI) beam. The experiment collected data from 2015 to 2021 and currently has the largest set of neutrino-argon interaction data in the world. LArTPCs have excellent capabilities in calorimetric energy reconstruction and particle identification, which allow MicroBooNE to conduct fundamental physics searches. One of MicroBooNE's driving physics goals is to explore the source of the low-energy excess of electromagnetic events reported by MiniBooNE. Additionally, MicroBooNE's physics program includes measurements of neutrino-argon cross sections and a variety of other beyond the standard model physics searches. Detector simulation and event reconstruction advancements developed through these physics searches are useful for the broader short- and long-baseline oscillation programs. This talk will give a brief overview of the MicroBooNE experiment, highlighting the latest major results

Primary author: PLETCHER, Kate (Michigan State University)

Presenter: PLETCHER, Kate (Michigan State University)

Session Classification: MiniBooNE & MicroBooNE