

# MicroBooNE Electron-Neutrino Cross-Section Results

*Thursday 18 July 2024 16:45 (15 minutes)*

The MicroBooNE experiment is a Liquid Argon Time Projection Chamber (LArTPC) detector located at Fermilab. MicroBooNE is part of the Short Baseline Neutrino (SBN) Program and detects neutrinos coming from the on-axis Fermilab Booster Neutrino (BNB) beam from the off-axis Neutrinos at the Main Injector (NuMI) neutrino beam. Understanding the electron-neutrino cross section with precision is key information for neutrino oscillation measurements. Understanding electron neutrino interactions on argon is crucial for the neutrino oscillation physics measurements of the Short Baseline Neutrino program and DUNE experiment, yet data constraints to date are scarce. This talk will focus on MicroBooNE's electron-neutrino cross section measurements, consisting of 3 published measurements and ongoing analyses using neutrinos from the BNB and NuMI beamlines.

## Alternate track

### I read the instructions above

Yes

**Authors:** GUZZO, Marina; GUZZO, Marina (The University of Edinburgh); REGGIANI GUZZO, Marina

**Presenter:** GUZZO, Marina

**Session Classification:** Neutrino Physics

**Track Classification:** 02. Neutrino Physics