

New Perspectives



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MicroBooNE in 10 Minutes

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MicroBooNE is an 85 tonne liquid argon time projection chamber (LArTPC) detector situated at Fermilab which receives both an on-axis beam from the Booster Neutrino Beam and an off-axis beam component from the Neutrinos at the Main Injector (NuMI) beam. It collected data from 2015 until 2021 in order to acquire a high statistics sample of neutrino interactions on which its state of the art abilities of wire readout and particle identification can be utilized for fundamental physics searches. MicroBooNE's signature analysis is to determine the source of the low-energy excess previously reported by MiniBooNE and LSND, and there is also a variety of other excellent physics taking place on topics ranging from low-to-medium-energy neutrino cross sections to detector simulation and physics reconstruction, useful to the broader short- and long-baseline oscillation programs. This talk will give a brief overview of the current status of MicroBooNE's physics program, a summary of the latest major results, and a few future prospects.

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