

LArIAT in 10 minutes

Monday, 10 June 2019 16:30 (15 minutes)

Liquid Argon Time Projection Chambers (LArTPCs) are currently being used extensively for neutrino physics due to their excellent capabilities in performing particle identification, and precise 3D and calorimetric energy reconstruction. The Liquid Argon In A Test Beam (LArIAT) experiment was located at the Test Beam Facility where it was exposed to a known charged particle beam. The capability of understanding and knowing the charged particle beam is a crucial aspect of LArIAT that allows it to improve on LArTPCs advantages to perform state of the art analyses. This made LArIAT an excellent test-bed to perform cross-section measurements with different charged particles as well as performing R&D studies for future large LArTPCs such as the Short-Baseline Near Detector (SBND) and the Deep Underground Neutrino Experiment (DUNE). This talk will give an overview of the LArIAT detector as well as provide a highlight of recent results from on-going analyses.

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