

The LArIAT Experiment

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Liquid Argon Time Projection Chambers are quickly becoming one of the main detector technologies in neutrino physics. They offer very good 3D and calorimetric resolution and allow relatively easy construction of large mass detectors making them a prime candidate for future precision neutrino measurements. Surprisingly, there has been relatively little effort in calibrating these detectors. The LArIAT (Liquid Argon In A Testbeam) experiment aims to fill that gap. Running in the Fermilab testbeam facility on a beam of charged particles of known momentum it will seek to measure and refine the LArTPC's Particle Identification capabilities, including the e/gamma separation, electron recombination parameters and non magnetic muon sign determination amongst others. The status of the construction of the first phase of the experiment, which will reuse the ArgoNeuT TPC, will be presented as well as plans for the second phase which will examine containment of EM and hadronic showers.

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