



Contribution ID: 303

Type: **Presentation**

## The LArIAT Experiment

*Wednesday, 2 August 2017 14:24 (18 minutes)*

The Liquid Argon Time Projection Chamber in a Test Beam (LArIAT) experiment at the Fermilab's Test Beam Facility exposes a liquid argon time projection chamber (LArTPC) to a test beam to study LArTPC responses to a variety of charged particles. Event identification and reconstruction techniques as well as cross section measurements from LArIAT will provide critical input to existing liquid argon neutrino experiments such as MicroBooNE, SBND, and ICARUS as well as help to improve future precision neutrino measurements in the Deep Underground Neutrino Experiment (DUNE). The work presented here includes an overview of the physics program of the LArIAT experiment as well as a new result on the inclusive pion-argon cross-section measurement recently completed.

**Primary author:** Mr PULLIAM, Gregory (Syracuse University)

**Presenter:** Mr PULLIAM, Gregory (Syracuse University)

**Session Classification:** Neutrino Physics

**Track Classification:** Neutrino Physics