

ArgoNeuT: A Liquid Argon Time Projection Chamber Test in the NuMI Beamline

Thursday, 30 July 2009 17:05 (25 minutes)

Liquid Argon Time Projection Chamber (LAr TPC) detectors are ideally suited for studying neutrino interactions and probing the parameters that characterize neutrino oscillations. The ability to drift ionization particles over long distances in purified argon and to trigger on abundant scintillation light allows for excellent particle identification and triggering capability. In this talk the details of the ArgoNeuT (Argon Neutrino Test) test-beam project will be presented. ArgoNeuT is a 175 liter LAr TPC exposed to Fermilab's NuMI neutrino beamline. The first neutrino interactions observed in ArgoNeuT will be presented, along with discussion of the various physics analyses to be performed on this data sample.

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Session Classification: Detectors I

Track Classification: Detector Technology and R&D