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# Studies of Michel Electrons in LArIAT

*Monday, 13 June 2016 17:00 (15 minutes)*

The LArIAT collaboration operates a liquid argon time projection chamber (LArTPC) in a beam of charged particles at the Fermilab Test Beam Facility. Its light collection system uses TPB-coated reflector foils on the field cage to down-shift vacuum-ultraviolet scintillation photons into the visible regime and reflect them back into the volume where they can then be detected by PMTs and SiPMs. A trigger on delayed secondary flashes of light in LArIAT is used to obtain a large sample of stopping cosmic muons that decay to Michel electrons inside the TPC. Current analyses looking at the muon capture lifetime on Ar, the Michel scintillation energy spectrum, and automated identification of stopping muon tracks will be presented.

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