

Abstract Submitted
for the SES10 Meeting of
The American Physical Society

Recent Status of the T2K Experiment THOMAS KUTTER, LSU,
T2K COLLABORATION — The T2K (Tokai to Kamioka) long baseline neutrino oscillation experiment has been constructed to search for the appearance of electron neutrinos in a pure beam of muon neutrinos, thereby measuring theta-13, the last unknown mixing angle in the lepton sector. T2K physics goals also include precision measurements of muon neutrino disappearance and the measurements of neutrino interactions at neutrino energies of $\sim 1\text{GeV}$. The first physics data were collected from January to June 2010 and data analysis is in progress. I will review the physics reach of T2K, provide an overview of the experimental setup and present the performance of the accelerator produced neutrino beam as well as the near and far detectors. The presentation will conclude with a description of the analysis strategy and recent progress.

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Date submitted: 12 Aug 2010

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