

Abstract Submitted
for the APR13 Meeting of
The American Physical Society

MicroBooNE Electronics DAVID KALEKO, Columbia University, MICROBOONE COLLABORATION — MicroBooNE is a neutrino experiment under construction at Fermi National Lab. It employs a $10\text{m}\times 2.6\text{m}\times (2.5\text{m drift length})$ 86 ton liquid argon time projection chamber (TPC) active volume to record ionization signals from particles produced in neutrino interactions, and uses scintillation light detected by a PMT array to provide precise interaction timing information. The MicroBooNE readout electronics system includes both TPC and PMT readout electronics which digitize neutrino interaction signals at 2MHz and 64MHz, respectively. The TPC electronics readout system processes ionization signals from the three wire planes to two readout streams: one for triggered neutrino events, and a second one for continuous readout. The PMT readout system generates the trigger. This talk will describe the MicroBooNE readout system, its physics requirements, and specifications. Various tests which have been performed to exercise the data flow and integration with DAQ system, including data volume and integrity tests, will be described.

David Kaleko
Columbia University

Date submitted: 11 Jan 2013

Electronic form version 1.4