Contribution ID: **204**   Type: **oral**

Design and Construction of the Short-Baseline Near Detector (SBND) at Fermilab

Monday, May 22, 2017 2:18 PM (18 minutes)

The Short-Baseline Near Detector (SBND) is one of the three detectors in Fermilab's short-baseline neutrino physics program which is projected to start collecting data in 2019. SBND is to measure the un-oscillated beam flavor composition to enable precision searches for neutrino oscillations via both electron neutrino appearance and muon neutrino disappearance in the far detectors. The core component of SBND detector is based on the Liquid Argon TPC (LArTPC) technology. The design and construction of SBND serves also an important role in the on-going R&D efforts within neutrino physics to develop the LArTPC technology toward many-kiloton-scale detectors for next generation long-baseline neutrino oscillation experiments. In this talk, we will present SBND design and construction progress and challenges together with the project schedule.

Primary author: Dr MIAO, Ting (Fermilab)

Presenter: Dr MIAO, Ting (Fermilab)

Session Classification: R2-Neutrino Detectors(1)

Track Classification: Neutrino Detectors