



Contribution ID: 95

Type: **Contribution Talk**

## Status of the installation and commissioning of the SBND detector at Fermilab

The Short-Baseline Near Detector (SBND) will be one of three Liquid Argon Time Projection Chamber (LArTPC) neutrino detectors positioned along the axis of the Booster Neutrino Beam (BNB) at Fermilab, as part of the Short-Baseline Neutrino (SBN) Program. The detector has been recently completed and is anticipated to begin operation in 2023. SBND will record over a million neutrino interactions per year. Thanks to its unique combination of measurement resolution and statistics, SBND will carry out a rich program of neutrino interaction measurements and novel searches for physics beyond the Standard Model (BSM). It will enable the potential of the overall SBN sterile neutrino program by performing a precise characterization of the unoscillated event rate, and constraining BNB flux and neutrino-argon cross-section systematic uncertainties. In this talk, the current status and the plan for detector installation and commissioning are discussed.

**Primary authors:** Dr BLAKE, Andrew (University of Lancaster); Dr CASTILLO FERNANDEZ, Raquel (University of Texas at Arlington); Dr JONES, Rhiannon (University of Sheffield); Dr PANDEY, Vishvas (Fermilab)

**Presenters:** Dr BLAKE, Andrew (University of Lancaster); Dr CASTILLO FERNANDEZ, Raquel (University of Texas at Arlington); Dr JONES, Rhiannon (University of Sheffield); Dr PANDEY, Vishvas (Fermilab)

**Session Classification:** WG3: Noble Element Detectors

**Track Classification:** WG3: Noble Element Detectors