Type: Parallel session talk

## **Triggering First SBND Events**

Friday 19 July 2024 17:30 (15 minutes)

The SBND experiment, a 112-ton liquid argon time projection chamber (LArTPC), functions as the near detector for the Short Baseline Neutrino (SBN) program at Fermilab. Positioned only 110 metres from the beam target, SBND anticipates capturing over a million neutrino interactions annually, surpassing the dataset sizes of other LAr experiments by more than an order of magnitude. Due to its location on the surface, the detector is also exposed to high rates of cosmic rays, and therefore the experiment necessitates a sophisticated and dependable trigger system to allow for effective downstream analysis. This talk will detail the SBND hardware trigger system and its performance with first data.

## Alternate track

1. Operation, Performance and Upgrade (incl. HL-LHC) of Present Detectors

## I read the instructions above

Yes

Author: KROUPOVA, Tereza (University of Pennsylvania)

**Presenter:** KROUPOVA, Tereza (University of Pennsylvania)

Session Classification: Neutrino Physics

Track Classification: 02. Neutrino Physics