## XVIII International Conference on Topics in Astroparticle and Underground Physics (TAUP 2023)



Contribution ID: 419 Type: Parallel talk

## **SBND Hardware Trigger System**

Tuesday 29 August 2023 15:00 (15 minutes)

The SBND experiment is a liquid argon time projection chamber (LArTPC), which serves as the near detector to the Short Baseline Neutrino (SBN) program at Fermilab. With only 110 m between the detector volume and the beam target, SBND will record over a million of neutrino interactions per year, more than any LAr experiment to date. Furthermore, the detector is located on the surface and exposed to cosmic rays. As a result, a sophisticated and reliable trigger system is needed to ensure high efficiency of neutrino data while maintaining data rates which are manageable in downstream analysis. This talk will detail how the SBND trigger system achieves both of these goals.

## Submitted on behalf of a Collaboration?

Yes

Primary author: KROUPOVA, Tereza (University of Pennsylvania)

Presenter: KROUPOVA, Tereza (University of Pennsylvania)Session Classification: Neutrino physics and astrophysics

Track Classification: Neutrino physics and astrophysics