New Trends in Nuclear Physics Detectors (NTNPD-2021)



Contribution ID: 32 Type: Oral

Trigger system of the NA61/SHINE experiment

Wednesday, 27 October 2021 12:20 (20 minutes)

NA61/SHINE is a fixed target experiment operating at the CERN Super-Proton-Synchrotron (SPS). The NA61/SHINE Collaboration aims to study the properties of strongly interacting matter on the onset of deconfinement. The SPS beam energy range allows creating nuclear matter around the critical point. Beam momentum in the range 13A-150A GeV/c and a wide selection of the system size (p+p, Be+Be, Ar+Sc, Xe+La; Pb+Pb was measured previously by NA49) create a two-dimensional scan enabling systematically significant studies.

In this contribution I will provide brief description of the NA61/SHINE facility. The main part of my talk will be devoted to the new trigger system of the NA61/SHINE, which was recently developed. The system allows for flexible choice of trigger conditions derived from signals provided by the beam detectors. Construction of the new trigger system is part of the major hardware upgrade of the NA61/SHINE detectors performed during CERN Long Shutdown 2 (2018-2021).

Primary author: PODLASKI, Piotr (Faculty of Physics, University of Warsaw)

Presenter: PODLASKI, Piotr (Faculty of Physics, University of Warsaw)

Session Classification: Online session