## The 7th international conference on particle physics and astrophysics



Contribution ID: 78 Type: Oral talk

## Performance of the Fast Interaction Trigger(FIT) detector system for global observables at ALICE in Run-3

Friday, 25 October 2024 13:15 (15)

The primary purpose of the ALICE experiment at the Large Hadron Collider (LHC) is to study the properties of nuclear matter at extremely high temperatures and energy density produced by relativistic nucleus-nucleus collisions. During the Long Shutdown 2 (2019-2022), new detectors were incorporated into the ALICE setup, including a Fast Interaction Trigger (FIT). The FIT detector system consists of three sub-detectors based on different technologies: FDD, FT0 and FV0. In addition to online functionality, the FIT data are used offline for multiplicity, centrality, collision time, event-plane determination, vertex position, and veto for diffractive and ultra-peripheral heavy-ion collisions. These global observables are essential for event characterization and the study of nuclear matter properties. This presentation will give a preliminary overview of FIT's performance in the extraction of global observables from pp and A-A collisions during the LHC Run 3.

**Primary author(s):** FURS, Arthur (INR RAS); FINOGEEV, Dmitry; KARAVICHEVA, Tatiana (Institute for nuclear research of RAS, Leading research scientist); SEREBRYAKOV, Dmitry (INR RAS); SUKHANOV, Mikhail (INR RAS); VOZNIUK, Nikita (MEPHI, INR RAS)

Presenter(s): FURS, Arthur (INR RAS)
Session Classification: HEP Experiment

Track Classification: High energy physics: experiment