Seminar, Department of Physical Sciences, Bose Institute, Kolkata

Recent results on heavy flavours and quarkonia from ALICE focusing on Run-3 data

Dr. Shreyasi Acharya (Postdoc, CERN)

Abstract: For Run-3 data taking (2022-2025 tentative), the ALICE system has undergone major upgrades facilitating largely improved tracking and read-out rate capabilities, to provide an enhanced performance for detecting heavy-flavour hadrons at both mid- and forward-rapidities. One of the key features of the ALICE Run-3 upgrade is the "continuous data taking" at higher collision rates in contrast to the "triggered data taking" in Run 1&2. For context, ALICE has recorded 40 times greater heavy-ion run data in 2023 than the total recorded data from 2010 to 2018. In this presentation, a brief introduction of the ALICE-Run3 data-taking system will be discussed. Recent results on heavy flavours and quarkonia from ALICE will be presented, including, studies of charm-baryon reconstruction, strange and non-strange D mesons, and angular correlations between D mesons and charged particles, with the pp data at √s = 13.6 TeV from Run 3.

Date/time: August 19, 2024 (Monday) at 11:00 AM

Venue: Physics Seminar Room (204, second floor, UAC, BI)