

Study of Resonance Production using Run 3 pp Collisions with ALICE

Thursday 18 July 2024 20:40 (20 minutes)

Recent measurements in small collision systems at the LHC show striking similarities between high multiplicity pp, p-Pb collisions and Pb-Pb collisions. In particular, study of hadronic resonances provide valuable information about the final state hadronic interaction. Due to the short lifetime, resonances decay inside the hadronic medium after the chemical freezeout and their decay daughters interact elastically with other hadrons. As a consequence, measured resonance yields get modified. The ALICE experiment is suitable for measuring hadronic resonances thanks to its excellent tracking and particle identification capabilities over a broad momentum range. In this contribution, new measurements of $K(892)^*0$, $\phi(1020)$, $\Lambda(1520)$ resonance production using high statistics pp collisions at $\sqrt{s} = 0.9$ and 13.6 TeV collected by the ALICE Collaboration during the Run 3 data taking will be presented.

Alternate track

1. Strong Interactions and Hadron Physics

I read the instructions above

Yes

Primary author: Mr KOLEY, HIRAK KUMAR (Jadavpur University (IN))

Presenter: Mr KOLEY, HIRAK KUMAR (Jadavpur University (IN))

Session Classification: Poster Session 1

Track Classification: 07. Heavy Ions