Quark Matter 2023



Contribution ID: 150

Type: Poster

Strange hadron production in pp collisions with Run 3 data

Tuesday 5 September 2023 17:30 (2h 10m)

The ratio between (multi-)strange and non-strange hadron yields increases with the multiplicity of charged particles produced in hadronic collisions, revealing a smooth transition from low multiplicity pp collisions to central Pb-Pb collisions. The microscopic origin of this behaviour, known as strangeness enhancement, has yet to be understood. The data collected by the ALICE experiment during Run 3 provide a unique opportunity to further investigate this phenomenon in high-multiplicity pp collisions, thanks to the unprecedented number of recorded events and to dedicated software filters developed for selecting and storing pp collisions containing strange hadron candidates. This poster presents the first measurement of strange hadron production in pp collisions at $\sqrt{s} = 13.6$ TeV collected by the ALICE experiment in 2022.

Category

Experiment

Collaboration (if applicable)

ALICE

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Track Classification: Light and strange flavor