Contribution submission to the conference SMuK 2021

Two-particle correlations with high-p_T Λ baryons and K^0_S mesons in pp collisions at ALICE — •Lucia Anna Husová — IKP, WWU Münster, Germany

Complementary to jet reconstruction, two-particle correlations in $\Delta\eta$ and $\Delta\varphi$ are used to study jets, in particular, their particle composition. While in Pb–Pb collisions, this is done to characterize the Quark-Gluon Plasma, pp and p-Pb collisions serve as a reference and are of interest on their own for their input into the understanding of particle production mechanisms. Recent ALICE results on the production of strange particles in small systems (pp and p–Pb collisions) reveal the possibility of having similar strange hadron production mechanisms in all collision systems. We study two-particle correlations triggered with strange hadrons ($\mathrm{K^0_S}, \Lambda, \bar{\Lambda}$) in pp collisions at 13 TeV.

In this talk, the dependence of the per-trigger yields of primary charged hadrons on the wide range of the transverse momenta of the trigger and associated particles, as well as on the event multiplicity, will be presented on both the near-side and away-side. Moreover, the ratios of these yields to the yields extracted from the h-h correlation function will be shown. The presented results will be compared among the three hadron species. In addition, a comparison to different MC generators will be presented, which will allow us to better understand the strangeness production in jets.

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