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Two-particle correlations with high- p_T Λ baryons and K_S^0 mesons in pp collisions at ALICE

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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 as means for the characterization of the Quark-Gluon Plasma, pp collisions serve as reference and also allow for a deeper study of particle production mechanisms. Recent ALICE results on the production of strange particles in small systems (pp and p-Pb collisions) reveal the possibility that similar strange quark production mechanisms could be present in all collision systems. Thus in this work, two-particle correlations between a high-momentum K_S^0 meson, Λ ($\bar{\Lambda}$) baryon and charged hadrons are used to study strange particle production in jets. The pp collisions at $\sqrt{s} = 13$ TeV collected with the ALICE experiment at the LHC are analyzed.

The per-trigger yields of the associated hadrons are studied on both the near-side and away-side of the V^0 -h correlation functions as a function of the transverse momenta of the trigger and associated particles as well as the event multiplicity. The ratios of yields from V^0 -h correlations to the yields from h-h correlations will be compared.

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