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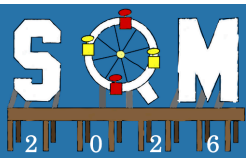

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Measurement of the transverse-momentum fraction of (multi-)strange particles in mini-jets and its multiplicity dependence in pp collisions at $\sqrt{s}$=13 TeV with ALICE

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The enhancement of the strange baryon-to-meson yield ratio at intermediate transverse momentum (p_{T}) observed by ALICE across small to large collision systems is usually attributed to collective radial flow and quark recombination effects. Nevertheless, it remains under discussion whether jet fragmentation also contributes to the observed enhancement, as strange particles in the enhanced p_{T} range may also come from low-energy partons. ALICE has previously measured the production rates of (multi-)strange particles in high-energy jets in pp and p–Pb collisions to probe the hadronization mechanism in small systems. Recently, ALICE investigated the momentum fraction carried by the (multi-)strange particles with respect to their originating partons using a novel angular correlation method. This method allows access to a significantly lower-p_{T} region and provides further insights into the hadronization process.

In this contribution, the average transverse-momentum fractions ($\langle z \rangle$) of the strange particles in mini-jets in pp collisions at $\sqrt{s} = 13$ TeV are reported as a function of the strange particles' p_{T}. The observed $\langle z \rangle$ values suggest that (multi-)strange particles are predominantly produced via fragmentation of low-energy partons. Furthermore, the charged-particle multiplicity dependence of $\langle z \rangle$ is presented. No significant multiplicity dependence is observed for $\Lambda(\bar{\Lambda})$ and $\Xi^{+}(\Xi^{-})$, challenging the picture in which quark recombination is considered the dominant production mechanism in high-multiplicity hadronic collisions.

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