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## Study of strangeness and baryon production through angular correlations between Xi baryons and identified hadrons in pp collisions with ALICE

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Two-particle correlation functions give insight into the microscopic details of the production and transport mechanisms of conserved quantum numbers. In this contribution, new final measurements by the ALICE Collaboration of  $\Xi-\pi$ ,  $\Xi-K$ ,  $\Xi-p$ ,  $\Xi-\Lambda$ , and  $\Xi-\Xi$  correlation functions are presented to study how charge, strangeness, and baryon numbers are balanced in proton-proton collisions at  $\sqrt{s} = 13$  TeV. Furthermore, the multiplicity dependence of the charge balancing is investigated to give insight into the surprising strangeness enhancement observed in small collision systems. The results are compared with Monte Carlo predictions in order to distinguish between different string topologies implemented in PYTHIA 8 (e.g. ropes and junctions), as well as Herwig 7 (a string-based approach with cluster hadronisation), and EPOS-LHC (a core-corona-based model).

### Category

Experiment

### Collaboration (if applicable)

ALICE

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