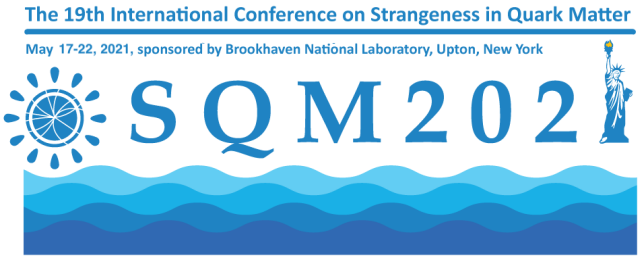

Contribution ID: **81** Type: **Experimental talk**

Event-shape studies of strangeness production in $\sqrt{s}$ = 13 TeV pp collisions with ALICE

Wednesday 19 May 2021 09:30 (20 minutes)

Significant strangeness enhancement and radial flow have been observed in high-multiplicity pp collisions at LHC. The origin of these effects is still under debate. In this contribution, new and more differential measurements are presented, making use of event-shape techniques to study final-state topologies: (i) the transverse spherocity, which aims to classify events into jetty (back-to-back) and isotropic to isolate hard and soft effects, respectively; (ii) the self-normalized Underlying Event (UE) activity, RT, which allows the UE to be significantly suppressed or enhanced. Using observables that control the hard-to-soft ratio and the UE, one gains novel insights into the mechanism responsible for the QGP-like effects in small systems. The results will be presented for a large variety of strange and non-strange hadrons and resonances (π, K, K^{*0}, p, φ, and Ξ) and will be compared to calculations using both PYTHIA 8 and EPOS LHC event generators.

Collaboration

ALICE

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Session Classification: Open and New (Charge and Flavor)

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