

Light-flavour particle production as a function of transverse sphericity with ALICE

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Well established measurements of high-multiplicity proton-proton (pp) and proton-lead (p-Pb) collisions at the LHC have revealed that small collision systems show the onset of phenomena (e.g. strangeness enhancement, collective flow) typical of heavy-ion collisions, suggesting that light-flavor hadron production arises from a set of complex mechanisms whose relative contributions evolve smoothly from low to high multiplicity collisions. This talk presents multi-differential results from ALICE on light-flavor particle production as a function of the transverse sphericity ($S_{\text{O}}^{p_T=1}$) in pp collisions measured at $\sqrt{s} = 13$ TeV that allows for a topological selection of events that are either “isotropic” (dominated by multiple soft processes) or “jet-like” (dominated by one or few hard scatterings). The experimental results are compared with predictions from various Monte Carlo generators.

Alternate track

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