

Flow measurements via long-range two-particle correlations in small systems with ALICE

Tuesday, April 25, 2023 5:00 PM (20 minutes)

In relativistic heavy-ion collisions, a hot and dense medium called QGP is created. Intriguingly, the collective motion of produced particles, which is thought to be evidence of the formation of strongly interacting QGP, has also been observed in high-multiplicity events of small systems like pp and p -Pb collisions. In addition, studying the flow of identified particles with different masses and quark contents may reveal whether collectivity is built on a partonic level. In the ALICE experiment with an excellent capability of particle identification, the study of collectivity in small systems has been conducted via long-range two-particle correlations, and a detailed study of non-flow subtraction has been performed.

In this talk, we will present the recent measurements of anisotropic flow of unidentified and identified hadrons in pp collisions at 13 TeV and p -Pb collisions at 5.02 TeV with ALICE Run 2 data, and comparison with PYTHIA8 and AMPT models for further discussion.

Theory / experiment

Experiment

Group or collaboration name

ALICE

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