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Type: **Parallel Talk**

Elliptic flow coefficients of identified hadrons in pp and p-Pb collisions measured with ALICE

Monday 14 May 2018 16:30 (20 minutes)

Recent observations of long-range multi-particle azimuthal correlations in p-Pb and high multiplicity pp collisions provided new insights into collision dynamics and opened a possibility to study collective effects in these small systems.

In this talk, we present new measurements of p_T -differential elliptic flow coefficient v_2 for a variety of identified charged hadrons from pp and p-Pb collisions recorded by ALICE during the LHC Run 2 operation. The results for $v_2(p_T)$ measured for π^\pm , K^\pm , K_S^0 , p/\bar{p} , ϕ and $\Lambda/\bar{\Lambda}$ in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV are shown. Minimum-bias pp collisions are used to estimate and subtract the non-flow contribution in p-Pb measurements. Additionally, we present first measurements of v_2 of identified particles in pp collisions at $\sqrt{s} = 13$ TeV.

The p_T dependence, characteristic mass ordering and number of constituent quark scaling of v_2 allows us to test various theoretical models, constrain the initial conditions, and probe collective effects in small collision systems. Measurements of the v_2 of the ϕ -meson, in particular, given it features a mass close to that of the proton, provide an opportunity to examine the particle production mechanism via quark recombination scenario.

Content type

Experiment

Collaboration

ALICE

Centralised submission by Collaboration

Presenter name already specified

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