

PHENIX results on elliptic and triangular flow at mid-rapidity in d +Au collisions from 19.6 to 200 GeV

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Results on elliptic flow in p+p and p/d³He+A have raised the question of how small a system can be while still exhibiting collective behavior. In 2016, RHIC operations included d +Au collisions at 200, 62.4, 39, and 19.6 GeV. In this talk we present results on elliptic and triangular flow at midrapidity as a function of transverse momentum and event multiplicity in d +Au collisions at various energies. We compare these results with several theoretical predictions in scenarios including pre-equilibrium flow, hydrodynamic flow, partonic scattering, and purely hadronic scattering in order to assess the role of each stage in the system evolution for producing collective effects in small systems.

Preferred Track

Collective Dynamics

Collaboration

PHENIX

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