Study of Jet-related Two-Particle Correlations in Highly Asymmetric Collision Systems with PHENIX

The study of asymmetric systems like d+Au is considered useful for distinguishing initial state cold nuclear matter effects from final state QGP effects. Two-particle correlations in highly asymmetric collisions can access jet physics at high p_T , possible collective effects at low p_T , and the interplay of the two. This poster presents the status of the measurement of $\pi^0 - h^{\pm}$ correlations in d+Au and p+p collision datasets at $\sqrt{s_{NN}} = 200$ GeV. We focus on the possible collective effects from hydrodynamical flow and how these impact the extraction of jet properties and modification in the cold nuclear medium.

Preferred Track

Correlations and Fluctuations

Collaboration

PHENIX

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