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Neutral pion v_2 at low and high p_T in Central dAu collisions measured with PHENIX at the RHIC top energies

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The observation of multiparticle correlations in heavy ion collisions are usually associated to collective behavior in the formed medium. Recent results at RHIC provide strong arguments for QGP formation in smaller systems.

In this poster, I present the status of the neutral pion second harmonic coefficient v_2 as a function of transverse momentum at low and high p_T for very central d+Au collisions at 200 GeV. At low p_T the v_2 is sensitive to the hydrodynamic flow; while at high p_T , v_2 is sensitive to the in-medium path length dependence thus allowing to constrain what.

The data was recorded during the 2016 operational period in PHENIX. The analysis makes use of the central rapidity electromagnetic calorimeter. These results provides strong insight into the dynamics governing the evolution of the fireball at such scales.

Collaboration (if applicable)

PHENIX

Track

Jets and High Momentum Hadrons

Contribution type

Poster

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