

Abstract Submitted
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Measurement of π^0 -hadron Azimuthal Correlations in $\sqrt{s_{NN}} = 200$ GeV d +Au Collisions with PHENIX¹ SHUHANG LI, Augustana University, PHENIX COLLABORATION — The Color Glass Condensate (CGC) explains both single particle and particle pair yield reductions at forward rapidity in d +Au collisions relative to p + p collisions at the Relativistic Heavy Ion Collider (RHIC). The CGC also predicts the away-side width in two-particle azimuthal correlations will be broadened. In 2016, PHENIX collected d +Au data at $\sqrt{s_{NN}} = 200$ GeV. In this data, we can measure the π^0 s in $|\eta| < 0.35$ and $3 < |\eta| < 3.8$ and charge hadrons in $|\eta| < 0.35$ and $1.4 < |\eta| < 2.2$. We measured π^0 -hadron azimuthal correlations with different pair η ranges. By varying the p_T of the particles and the $\Delta\eta$ of the particle pairs, we can vary the Q^2 and x of the target nucleus. The current status of the measurement will be shown.

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