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Nuclear Modification Factors for Hadrons At Forward and Backward Rapidities in Deuteron-Gold Collisions at $\sqrt{s_{NN}} = 200\text{GeV}$ CHUN ZHANG, Oak Ridge National Lab., PHENIX COLLABORATION — We report on charged hadron production in deuteron-gold reactions at $\sqrt{s_{NN}} = 200\text{ GeV}$. Our measurements in the deuteron-direction cover $1.4 < \eta < 2.2$, referred to as forward rapidity, and in the gold-direction $-2.0 < \eta < -1.4$, referred to as backward rapidity, and a transverse momentum range $p_T = 0.5 - 4.0\text{ GeV}/c$. We compare the relative yields for different deuteron-gold collision centrality classes. We observe a suppression relative to binary collision scaling at forward rapidity, where the measurement is sensitive to low momentum fraction (x) partons in the gold nucleus, and an enhancement at backward rapidity, sensitive to high momentum fraction partons in the gold nucleus.

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