

Abstract Submitted  
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**$R_{dA}$  measurement with muons from light and heavy flavor decay in  $\sqrt{s_{NN}} = 200\text{GeV}/c^2$  p-p and d-Au collisions in PHENIX experiment at RHIC** XIAORONG WANG, New Mexico State University, PHENIX COLLABORATION — The particle production in d-Au collisions at RHIC in the forward and backward directions is sensitive to various nuclear effects. A study of light meson and heavy flavor production in d-Au collisions in various kinematics regions presents an opportunity to probe cold nuclear medium effects - from parton shadowing, Color Glass Condensate to initial state energy loss. The PHENIX muon arms cover both forward and backward directions in the rapidity range of  $1.2 < |\eta| < 2.4$ , and are in a good position to make such measurements. We investigate nuclear medium effects on light meson and heavy flavor hadron via decay muons in the p-p and d-Au collisions. The current status of this analysis will be presented.

Xiaorong Wang  
New Mexico State University

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