

Abstract Submitted
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Angular correlations between forward-rapidity muons and mid-rapidity charged particles in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV SAE-HANSEUL OH, Yale University, ALICE COLLABORATION — Two particle angular correlations have been used as a powerful tool in exploring particle production mechanism in relativistic heavy ion physics. Angular correlations between forward-rapidity muons ($-4.0 < \eta_{lab} < -2.5$) and mid-rapidity charged particles ($-0.9 < \eta_{lab} < 0.9$) are measured by the ALICE detector in p-Pb collisions at a nucleon-nucleon center-of-mass energy of 5.02 TeV in 2013. These unique kinematics allow us to access the small-x region of the Pb nucleus, where high gluon densities are expected. Muon-hadron correlations, expected to have features that exhibit gluon saturation, are compared to calculations using a Color Glass Condensate (CGC) model, as well as mid-rapidity di-hadron correlations by the ALICE collaboration. Previous forward-rapidity two particle correlations in d-Au collisions at RHIC will also be compared.

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