

DNP16-2016-000052

Abstract for an Invited Paper
for the DNP16 Meeting of
the American Physical Society

QCD Factorization Approach to Cold Nuclear Matter Effects

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Cold nuclear matter effects exist in all high energy collisions involving identified nucleus (or nuclei). They have been manifested in very significant ways in e-A and p-A, as well as A-A collisions, where the cold nuclear effect is a part of the initial condition which plays a critical role in determining the outcome of heavy ion collisions. In this talk, I will discuss if it is possible to consistently calculate or extract the cold nuclear effect, the advantage and limitation of QCD factorization approach, and the predictive power or the testability of the QCD calculations.