Abstract for an Invited Paper
for the DNP10 Meeting of
The American Physical Society

Theoretical overview of cold nuclear matter effects
ANNA STASTO, Penn State University

In this talk I will discuss the physics of hadron and nucleon scattering at high energies from the theoretical perspective. I will focus on the phenomena related to the high patron densities which occur at extremely small values of Bjorken x accessible at these energies. Emphasis will be placed onto the initial stages of the nuclear and hadronic collisions and current physical models will be described (such as Color Glass Condensate). I will also discuss specific measurements involving nuclear targets which provide tests and verification of these ideas.