

Abstract Submitted  
for the APR15 Meeting of  
The American Physical Society

**Partons within nuclear short range correlations**<sup>1</sup> ADAM FREESE, MISAK SARGSIAN, Florida International University, MARK STRIKMAN, Penn State University — Partonic distributions of heavy nuclei differ from partonic distributions of nucleons in several key ways. In addition to Fermi smearing of the parton distributions from nucleonic motion under the mean field, the nuclear momentum distribution has a large high-momentum tail owing to the presence of short range multi-nucleon correlations, which results in enhanced parton densities at Bjorken  $x > 1$ . Moreover, the quark-gluon degrees of freedom of nucleons are themselves modified by immersion in the nuclear medium, especially at the large momenta dominated by short range correlations. Accordingly,  $x > 1$  kinematics are well-primed for the study of the partonic degrees of freedom of short range nuclear correlations. We study here the sensitivity to two- and three-nucleon correlations of deeply inelastic lepton scattering from heavy ions at EIC kinematics, and of dijet production from proton-nucleus collisions at LHC kinematics.

<sup>1</sup>This work is supported by US Department of Energy grants under contracts DE-FG02-01ER-41172 and DE-FG02-93ER40771.

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Date submitted: 09 Jan 2015

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