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The Search For Nucleon-Nucleon Correlations and the EMC Effect DOUGLAS HIGINBOTHAM, Jefferson Lab — Many experiments, using different reaction channels as well as different beams, have shown evidence for two-nucleon tensor and short-range correlations in nuclei. Far more elusive has been isolating three-nucleon correlations. The current discrepancy between the xB_i 2 inclusive experiments that are searching for three-nucleon correlations will be discussed and a possible solution to the discrepancy presented. It will also be shown how the kinematic reach of an electron ion collider (EIC) may be required to finally isolate the signature of three-nucleon correlations as well as how an EIC would be used to further study how short-range initial-state correlations effect deep inelastic scattering results.

> Douglas Higinbotham Jefferson Lab

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