

Abstract Submitted  
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**Phenomenological Hints To The Cause Of The EMC Effect** DOUGLAS HIGINBOTHAM, Jefferson Lab — Deep-inelastic scattering cross section ratios plotted as a function of  $x_B$  show that quark structure in nuclei is different than free nucleons. Recent Hall C data showed that the slope in the  $0.3 < x_B < 0.7$  region of the EMC effect scales as the local nuclear density and not the average nuclear density. This result lead to the comparison of  $x_B > 1$  short-range correlation plateaus to the magnitude of the EMC effect slope and a clear linear relation between the two effects has now been shown. In this talk, I will discuss the EMC effect and the short-range correlation plateaus and what the phenomenological relationship between the two implies about the cause of the EMC effect.

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