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Testing the EMC-SRC Hypothesis with the LAD Experiment
SARA RATLIFF, George Washington University — The EMC effect, the observation that Deep Inelastic Scattering (DIS) from nuclei differs significantly from that on free nucleons, has puzzled nuclear physicists for nearly forty years. A potential cause for this phenomenon is short-range correlations between nucleons within a nucleus, which can be directly tested using the technique of recoil tagging. The upcoming LAD experiment in Jefferson Lab Hall C will measure backwards recoiling spectator protons in coincidence with DIS electrons from a deuterium target, and will serve as a complement to the BAND experiment. The eponymous Large Acceptance Detector consists of three walls of plastic scintillator, which will determine proton momenta through a combination of timing and energy loss measurements. High-resolution GEM detectors will help provide crucial background suppression.I will present the current status of the preparations for LAD and showcase how BAND and LAD can definitively test the SRC-EMC hypothesis.

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