

Abstract Submitted
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Probing Short-Range Correlations via the (e,e'pN) Reaction

DOUGLAS HIGINBOTHAM, Jefferson Lab, HALL A COLLABORATION — The nucleons in the nucleus can form strongly correlated pairs. A recent $^{12}\text{C}(e,e'pN)$ experiment with high-momentum transfer and high missing momentum has shown that neutron-proton pairs are nearly 20 times as prevalent as proton-proton and, by inference, neutron-neutron pairs. This result, which is due to tensor correlations, has implications for our understanding of nuclear systems from nuclei to neutron stars. The details of this experiment will be discussed along with the upcoming $^4\text{He}(e,e'pN)$ experiment which will have higher missing momentum, and thus, shorter distance correlations.

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