“Probing the Three-Dimensional Structure of the Nucleon in Momentum Space using SoLID”

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The exploration of the internal structure of the nucleon in terms of quarks and gluons, the fundamental degrees of freedom of Quantum Chromodynamics (QCD), has in recent years moved beyond the one-dimensional space. In this presentation, I will discuss plans to probe the three-dimensional structure of the nucleon in momentum space through semi-inclusive deep-inelastic scattering in Hall A using SoLID at 12 GeV. This work is supported in part by the U. S. Department of Energy under Contract No. DE-FG02-03ER41231.