

Abstract Submitted  
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**Access quark information through SIDIS measurements at JLab-12 GeV**<sup>1</sup> XIAODONG JIANG, Los Alamos National Laboratory — At JLab-12 GeV, one hopes to access quark information such as helicity and transverse spin distributions, Sivers functions and momentum distributions through semi-inclusive deep-inelastic scattering experiments (SIDIS). But, how can we know that the hard probe really hit a quark? How can we know that the quark information is still preserved through the fragmentation process? What will be the experimental evidences? A plan of measurements of SIDIS cross section ratios will be outlined, the goal of these measurements is to to firmly establish the kinematic region over which SIDIS reactions can be reliably interpreted to the next-to-leading-order QCD in terms of parton distributions and fragmentation functions.

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