

XVth Quark Confinement and the Hadron Spectrum



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Precision Studies of the Neutron Spin Structure using a Polarized Helium-3 Target at Jefferson Lab

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Recently, two experiments in Hall C at Jefferson Lab finished data taking. One experiment focused on a precision measurement of the virtual photon asymmetry A_1^n at large values of Bjorken- x ($0.61 < x < 0.77$) at various values of Q^2 , and the other experiment measured the spin structure function g_2^n over a large range of Bjorken- x ($0.20 < x < 0.95$) to extract the Q^2 evolutions of the twist-3 matrix element, $d_2^n(Q^2)$, at three different values of Q^2 ($3.0 \text{ GeV}^2 < Q^2 < 5.60 \text{ GeV}^2$). Details of the experiments and an update of the data analyses will be presented.

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