The Flexible Spectator Model of Spin Dependent Quark and Gluon GPDs: Implications for Deeply Virtual Lepton Scattering

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The "flexible" parametrization of quark and gluon Generalized Parton Distributions (GPDs), based on spectator models and Regge behavior, will be presented. The Chiral Even GPDs, constrained by nucleon form factors and PDFs, determine deeply virtual Compton scattering amplitudes and are compared with cross section and polarization data. The Chiral Odd GPDs, including "transversity", contribute to pseudoscalar leptoproduction and are compared to recent experimental data. The spectator scheme is extended to new quark-sea and gluon GPDs. Predictions for an array of spin-dependent angular distributions and asymmetries in Deeply Virtual Scattering processes related to these distributions is explored.