PERTURBATIVE QCD PHENOMENOLOGY OF ELASTIC ed SCATTERING

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Electron-deuteron elastic scattering data $(A(Q^2) \text{ and } B(Q^2) \text{ structure functions and polarization}$ observables t_{20} , t_{21} and t_{22}) are fit with a model that respects asymptotic properties of perturbative QCD (pQCD) at high momentum transfer. The data analysis shows that pQCD starts from $Q^2 = 3,5(GeV/c)^2$. Predictions for the magnetic structure function $B(Q^2)$ and the polarization observables at high momentum transfer are given.