Abstract Submitted
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Threshold Resummation and Global Fits for Parton Distribution Functions[1] DAVID WESTMARK, Florida State University — QCD calculations for hard scattering hadronic processes involve convolutions of partonic cross sections with parton distribution functions (PDFs). In regions of phase space near partonic thresholds it is known that there are large threshold logarithms that can be resummed using soft-gluon resummation techniques. Deep inelastic scattering (DIS) and lepton pair production (LPP) are primary sources of information on PDFs. Due to the differing kinematics for DIS and LPP, the threshold resummation effects contribute differently to the two processes. Recent global fits for PDFs have used DIS data from the large Bjorken x, moderate Q^2 region where threshold effects are known to be large. It is the purpose of the present project to explore the effects of simultaneously incorporating threshold resummation in both DIS and LPP and to evaluate the effects of such additions on global fits. The status of the progress to date will be reviewed.

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