

Abstract for an Invited Paper
for the DNP11 Meeting of
The American Physical Society

Impact of low-energy data on global fits of PDFs

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Traditional global fits for parton distribution functions (PDFs) use cuts on Q and W in deeply inelastic lepton-nucleon scattering (DIS) to eliminate regions where target mass corrections and higher twist contributions are important. Such cuts typically limit the coverage in x to $x < 0.7$, which is also the range covered by most high energy DIS experiments. In order to constrain the PDFs at larger values of x , one can relax the cuts imposed on Q and W and make use of lower energy data. This necessitates treating the target mass corrections and higher twist contributions in the fits. Furthermore, the separation of the u and d PDFs requires the use of nuclear targets - typically deuterium - which requires the inclusion of corrections for nuclear effects. This is particularly important in the large- x region. In this talk I will review some recent efforts to include low-energy data in global fits and discuss the resulting PDFs.