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## Impact of low- $x$ resummation on QCD analysis of HERA data

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Fits to the final combined HERA deep-inelastic scattering cross-section data within the conventional DGLAP framework of QCD have shown some tension at low  $x$  and low  $Q^2$ . A resolution of this tension incorporating  $\ln(1/x)$ -resummation terms into the HERAPDF fits is investigated using the xFitter program. The kinematic region where this resummation is important is delineated. Such high-energy resummation not only gives a better description of the data, particularly of the longitudinal structure function FL, it also results in a gluon PDF which is steeply rising at low  $x$  for low scales,  $Q^2 \lesssim 2.5 \text{ GeV}^2$ , contrary to the fixed-order NLO and NNLO gluon PDF.

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