

Running Coupling Corrections to Nonlinear Evolution for Diffractive Dissociation

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Summary

We present a new derivation of the non-linear evolution equation for the cross section of single diffractive dissociation in high energy DIS on a nucleus or a proton, resumming all multiple rescatterings and all leading logarithms of energy. We then determine running coupling corrections to the kernel of this non-linear evolution equation. The running coupling kernel for diffractive evolution is found to be exactly the same as the kernel of the rcBK evolution equation.

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