

Mixed QCD-QED corrections to the AP splitting functions

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In this talk, we review recent results on the computation of electroweak (EW) corrections to the Altarelli-Parisi (AP) kernels. In particular, we consider QED effects, and we obtain the $O(\alpha \alpha_S)$ and $O(\alpha^2)$ corrections to the double collinear splitting functions. For this purpose, we analyse mixed QCD-QED effects in the DGLAP evolution equations and their implications in the evolution of PDFs. The results presented here are a crucial ingredient to perform a full NLO QCD-QED analysis of PDF, as well as to compute hadronic cross-sections with a full NNLO QCD-QED precision.

Summary

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