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Mixed QCD-EW two-loop amplitudes for neutral current Drell-Yan production

Thursday, 2 December 2021 11:00 (20 minutes)

We present the mixed QCD-EW two-loop virtual amplitudes for the neutral current Drell-Yan production. The evaluation of the two-loop amplitudes is one of the bottlenecks for the complete calculation of the NNLO mixed QCD-EW corrections. We present the computational details, especially the evaluation of all the relevant two-loop Feynman integrals using analytical and semi-analytical methods. We perform the subtraction of universal infrared singularities and present the numerical evaluation of the hard function.

Significance

References

Speaker time zone

Compatible with Asia

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