

Two-loop mixed QCD-EW corrections to neutral current Drell-Yan

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We present the mixed QCD-EW two-loop virtual amplitudes for the neutral current Drell-Yan production, one of the bottlenecks for the complete calculation of the NNLO mixed QCD-EW corrections. We present the computational details and the first steps towards their automation.

We describe the evaluation of all the relevant two-loop Feynman integrals using analytical and semi-analytical methods, the subtraction of the universal infrared singularities and present the numerical evaluation of the finite remainder.

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