

Top-Bottom Interference Contribution to Fully-Inclusive Higgs Production

Friday, 19 July 2024 12:10 (17 minutes)

The impact of finite bottom-quark mass effects at next-to-next-to-leading order constitutes one of the leading theory uncertainties of the Higgs production cross section.

In this talk, I will present our evaluation of this contribution. We computed the relevant two-loop master integrals that enter the real-virtual contribution numerically using the method of differential equations. In addition, the Higgs-gluon form factor at three loops in QCD with two different massive quark flavours has been included. Furthermore, I will discuss the impact of the choice of renormalisation scheme.

Alternate track

I read the instructions above

Yes

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