

Second order QCD corrections to the $g + g \rightarrow H + H$ four-point amplitude

Thursday, September 12, 2019 4:00 PM (25 minutes)

In this talk, I present the computation of the two loop massless QCD corrections to the four-point amplitude $g + g \rightarrow H + H$ (arXiv:1809.05388) resulting from effective operator insertions that describe the interaction of a Higgs boson with gluons in the infinite top quark mass limit. This amplitude is an essential ingredient to the third-order QCD corrections to Higgs boson pair production. Our results are implemented in a numerical code that can be used for further phenomenological studies.

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