

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

Thursday 12 September 2019 16:00 (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.

Primary author: BANERJEE, Pulak (Paul Scherrer Institut)

Co-authors: BOROWKA, Sophia (CERN); DHANI, Prasanna K. (INFN, Florence); GEHRMANN, Thomas (Physik-Institut, Universität Zürich); RAVINDRAN, V (The Institute of Mathematical Sciences)

Presenter: BANERJEE, Pulak (Paul Scherrer Institut)

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