

Beyond dimension 6 in SM Effective Field Theory: a case study in Higgs pair production at NLO QCD

Thursday 28 April 2022 10:00 (30 minutes)

We calculate the two-loop QCD corrections to Higgs boson pair production in gluon fusion within Standard Model Effective Field Theory (SMEFT), including also squared dimension-6 operators and double insertions of operators. The different options to truncate the EFT expansion are contrasted to a non-linear EFT approach (HEFT) and the effects are illustrated with several phenomenological examples.

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