

Analytic NNNLO corrections to the total Higgs production cross section in the qq' -Channel (15+5min)

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The total production cross section from gluon fusion is an important ingredient in further studies of the discovered Higgs boson. I will present the analytic computation of the NNNLO QCD corrections to its total production cross section in the qq' -channel. The computation is performed using differential equations for canonical bases of master integrals, and the results are exact in the Higgs mass and the total center of mass energy.

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