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## Higgs Pair Production in gluon fusion at NLO with full top mass dependence

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## **Summary**

The calculation of Higgs boson pair production in gluon fusion at next-to-leading order in the strong coupling constant with full top-quark mass dependence is presented. The usage of the programs GoSam, Reduze and SecDec for the computation and numerical evaluation of the most complicated piece, the virtual two-loop amplitude, is

explained. The cross section and invariant mass distribution are shown, in addition to a comparison with various approximations proposed in the literature.

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