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Yukawa- and Higgs self-coupling corrections to di-Higgs production

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The upcoming HL-LHC phase gives hope to tighten the experimental constraints on one of the core parameters of the SM: the Higgs self-coupling. The most prolific process to consider in this context is double Higgs boson production. Theoretical higher order calculations, both QCD and electro-weak, are required to match the experimental precision. In this talk we present our calculation of electro-weak NLO contributions comprising Yukawa-type and Higgs self-coupling corrections at two-loop level.

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