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Analytic electroweak corrections to gg -> HH

Monday 15 April 2024 14:30 (30 minutes)

We consider next-to-leading order electroweak corrections to Higgs boson pair production. This requires the computation of two-loop four-point amplitudes with massive internal particles such as top quarks, Higgs and gauge bosons. We perform analytic calculations in various kinematical limits and show that their combination covers the whole phase space, thus circumventing time-consuming numerical approaches.

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