

Mixed EW-QCD corrections to the higgs decay into bottom quarks

Tuesday, September 10, 2019 11:00 AM (25 minutes)

After the discovery of the Higgs boson the precise determination of its properties has become a priority. These precision studies often involve the decay of the Higgs boson to bottom quarks, since it is the predominately decay channel. In this talk I will present the calculation of the exact mixed EW-QCD corrections to this decay, which improves upon the existing approximate calculation. In particular I will elaborate on the treatment of γ_5 , the calculation of the exact master integrals and the renormalization procedure. I will conclude by presenting how this inclusive calculation could be extended to differential observables.

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