

Charged Higgses production via vector-boson fusion at NNLO in QCD

We present the total cross sections at next-to-next-to-leading order (NNLO) in the strong coupling for single and double charged Higgs production via weak boson fusion. Results are obtained via the structure function approach, which builds upon the approximate, though very accurate, factorization of the QCD corrections between the two quark lines. We also provide an estimate for the theoretical uncertainty on the total cross sections at the LHC from higher order corrections and the parton distribution uncertainties.

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