

# Higher-order soft and virtual corrections to $H^+ H^-$ production

*Wednesday, November 6, 2024 12:10 PM (20 minutes)*

We present calculations of higher-order corrections for the production of a heavy charged-Higgs pair ( $H^+ H^-$ ) in the two-Higgs-doublet model at LHC energies. We calculate the NNLO soft-plus-virtual QCD corrections and the N<sup>3</sup>LO soft-gluon corrections to the total cross section and the charged-Higgs rapidity distribution.

## Primary track

Precision Higgs measurements and calculations

## Is the speaker a PhD student or post-doc?

No

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