

# Accurate predictions for charged Higgs boson production at the LHC

*Wednesday 7 September 2016 15:45 (30 minutes)*

A deep understanding of the Higgs sector is one of the paramount aims of the LHC, and in particular of the Run II. The evidence of extra, possibly charged, Higgs bosons would be a clear sign of physics beyond the Standard Model. In this talk, I will review the recent progresses in simulating charged Higgs boson production at the LHC, focusing on the cases of an intermediate-mass and a heavy charged Higgs boson in the two-Higgs-doublet-model. I will discuss the computation of NLO corrections to the total cross-section for the former, and how to perform a reliable fully-differential simulation for the latter.

## Summary

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