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NLO QCD corrections to the electroweak top-pair production beyond the Standard Model

Friday, 31 July 2020 10:40 (25 minutes)

We extend and improve a previous calculation of electroweak top-pair production at the LHC via Z' bosons to NLO QCD in POWHEG. In particular, we add the effects of t-channel W and W' exchange and allow for flavour—non-diagonal Z' and W' couplings. The calculation is matched to parton showers in the POWHEG BOX framework. As an application, we present numerical results for a model with flavor—non-diagonal couplings which has been proposed to explain the anomalies in B decays.

Secondary track (number)

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