

Precise predictions for diboson processes

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I will review recent theory developments for diboson production at the LHC within the publicly available code MATRIX: With the two lepton plus two neutrino channels, which mix ZZ and WW production, NNLO corrections have been completed to all experimentally relevant leptonic final states for diboson processes. NLO corrections to the loop-induced gg channel are formally of N³LO accuracy, but constitute an important contribution to the (fiducial) diboson rates in certain cases. Finally, the inclusion of NNLO accuracy in fully flexible hadron level events (NNLOPS) was recently achieved for a diboson process, namely WW production, which will be discussed in detail.

Primary author: WIESEMANN, Marius (CERN)

Presenter: WIESEMANN, Marius (CERN)

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