

# Recent developments in $q_T$ subtraction: EW corrections and power suppressed contributions

*Tuesday, September 10, 2019 2:30 PM (25 minutes)*

$q_T$  subtraction represents a well established and successful formalism to deal with the computation of QCD radiative corrections up to NNLO (and beyond) for a large class of processes relevant at the LHC. We have explored the possibility to extend  $q_T$  subtraction to the computation of EW corrections with the (final) aim to develop a subtraction formalism suitable for the computation of mixed QCDXEW corrections. We present numerical results for the complete NLO EW corrections to the Drell-Yan production of a massive lepton pair. Furthermore, we have investigated the structure of the power suppressed contributions at small- $q_T$  in this process and present new analytical results on the effects of the soft radiation emitted off a charged massive final state.

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