Matching $t\bar{t}W^{\pm}$ to parton showers at NLO QCD MANFRED KRAUS, LAURA REINA, FERNANDO FEBRES CORDERO, Florida State University — We will present our recent calculation of matching NLO QCD corrections to the production of a top-quark pair in association with a W boson using the POWHEG-BOX framework. We compare our results with other Monte Carlo generators for the two same-sign lepton signature commonly used by the experiments. Special focus will be put on the assessment of the importance of subleading electroweak contributions in the modelling of the production process. In addition, We will discuss theoretical uncertainties of our predictions, which are estimated by variations of the renormalization and factorization scales, also matching uncertainties are estimated.

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