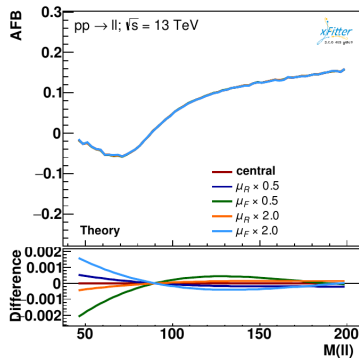
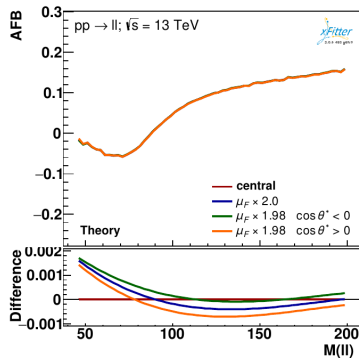


Missing higher order uncertainties

- This sensitivity study is done at LO
- From arXiv:1907.0772 we have NLO grids [MCFM]
- They are affected by limited statistics, however the effect of NLO scale variations is rather smooth (it was further smoothed as function of M for the paper)
- Binning: $0 < y < 2.5$ (5 bins), $45 < M < 145$ GeV (40 bins), but in arXiv:1907.0772 we looked only at M bins

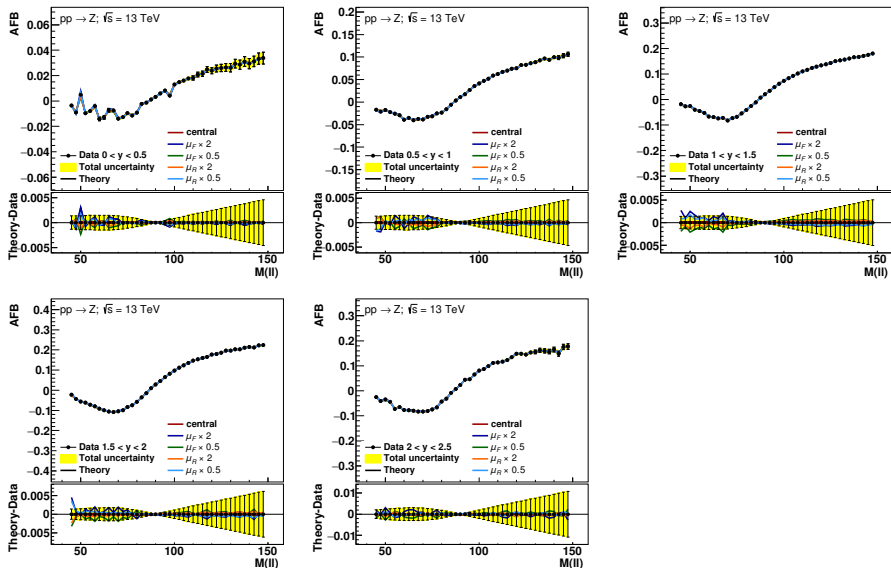


(a)



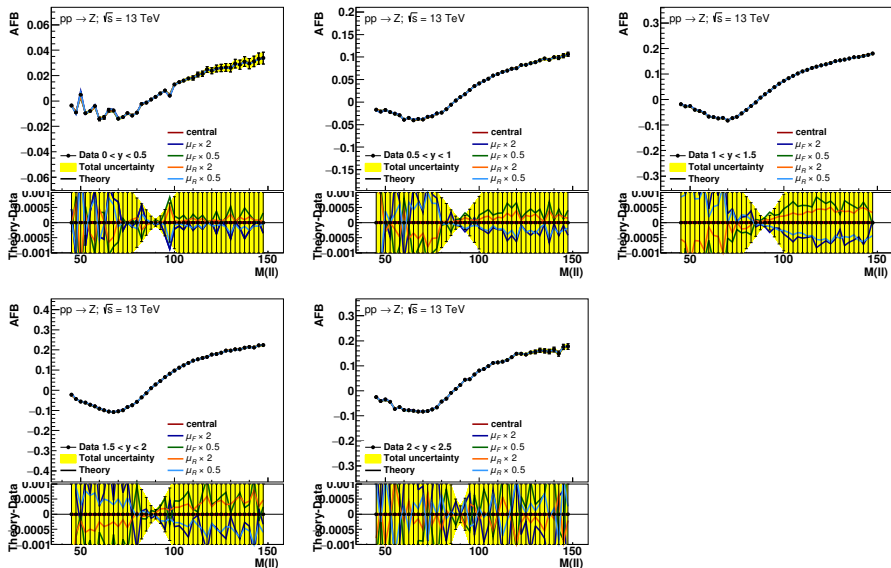
(b)

NLO scale variations



● NLO scale variations are generally smaller than stat. unc. of pseudodata

NLO scale variations



● For the future real analysis at NNLO one expects even smaller effect