



Uncertainty on ttV Predictions

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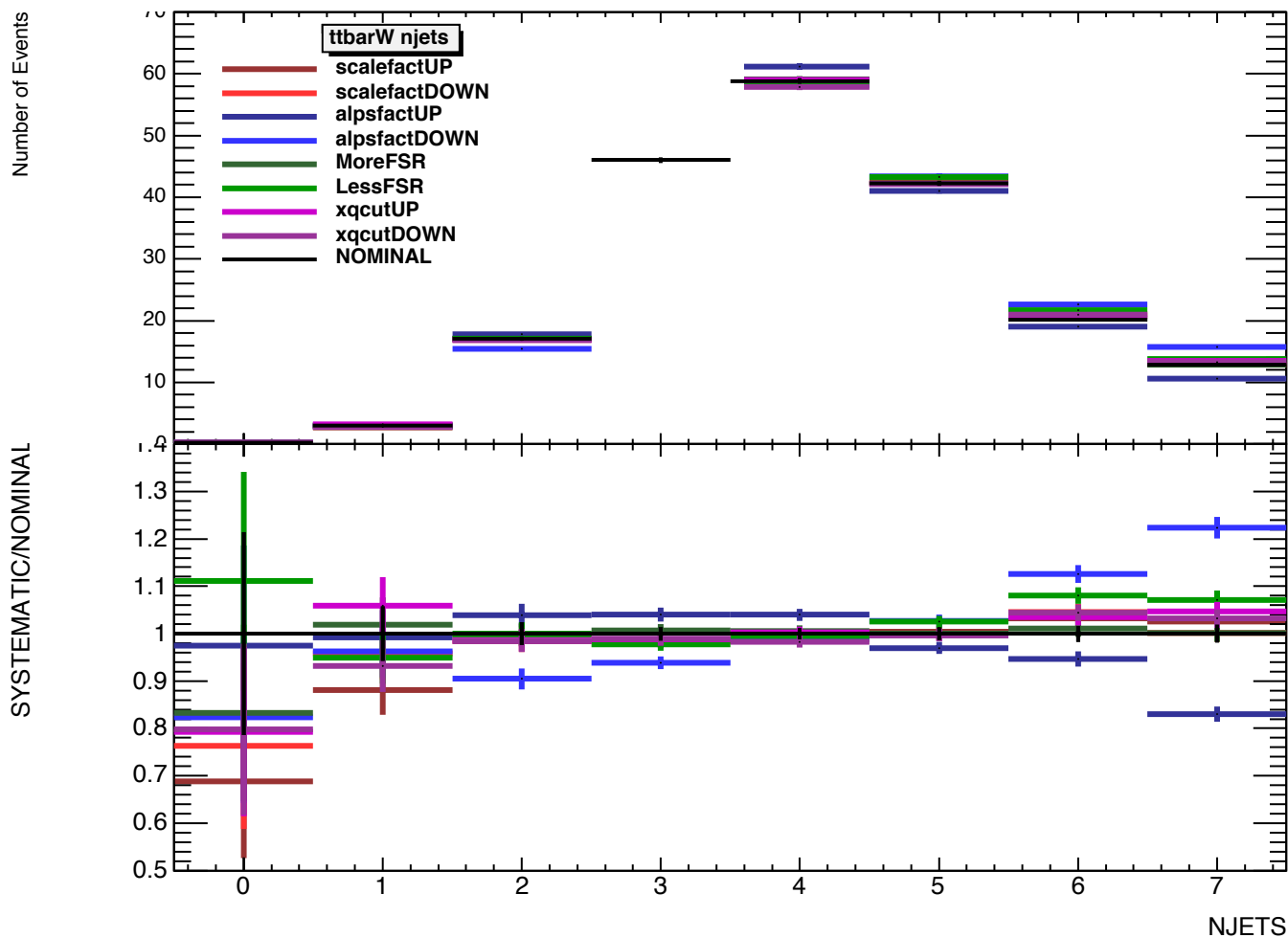


The University of Oklahoma

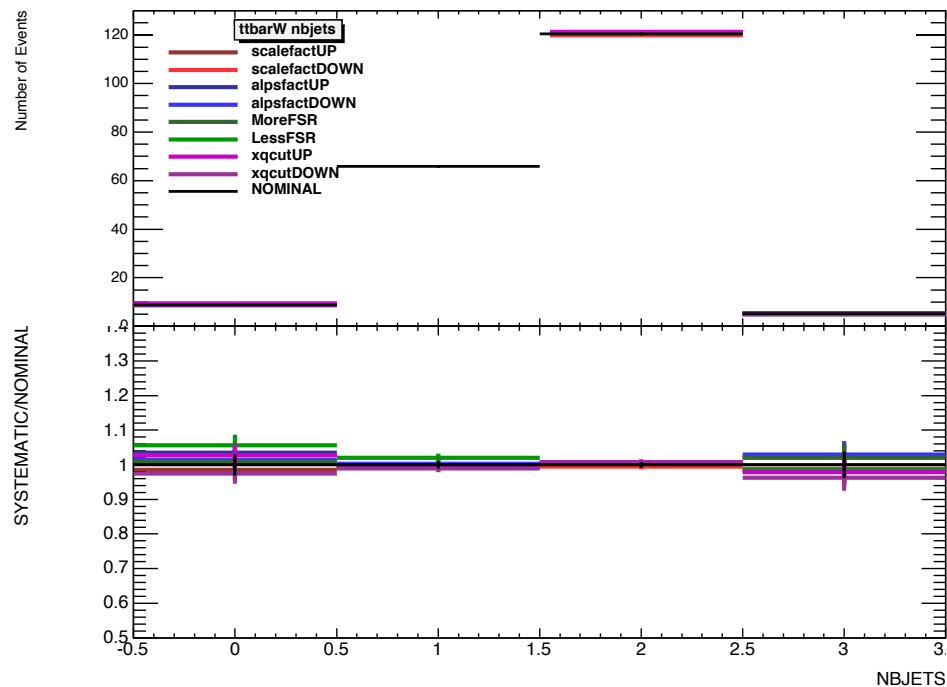
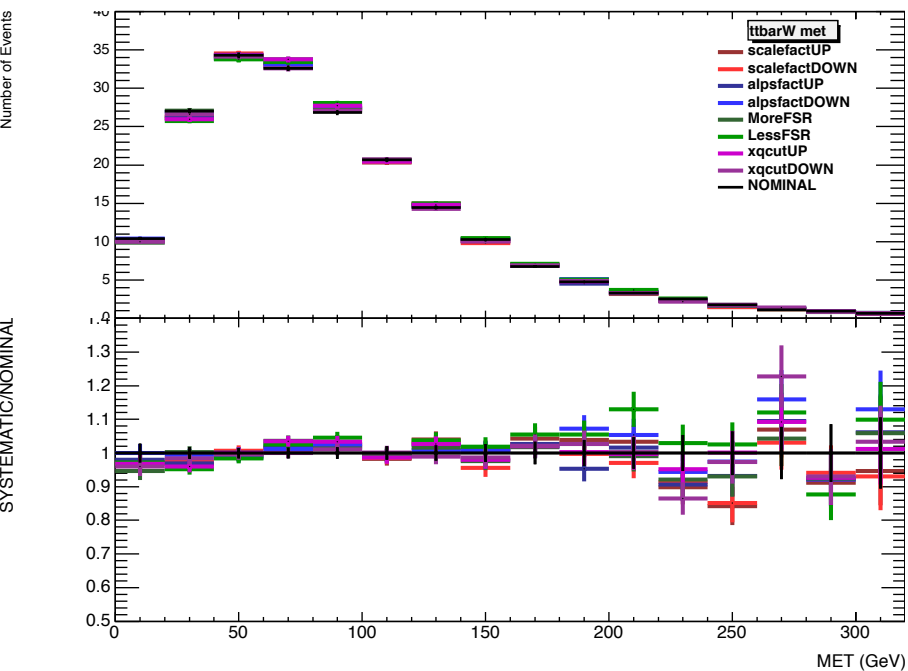
Motivation

- Some modifications to the selections in the generated particles study ‘truth’: low statistics for ttZ
- Use ttW weights for both ttW and ttZ
- Ntuples do not have decay information of the generated tau: if $\Delta R\{\text{generated tau, reco lep}\} < 0.1$, tau decayed leptonically, replace tau with reco lepton in the list of generated leptons
- NJETS distribution has the largest variation: Applied to the event based on the number of generated jets (before detector simulation).

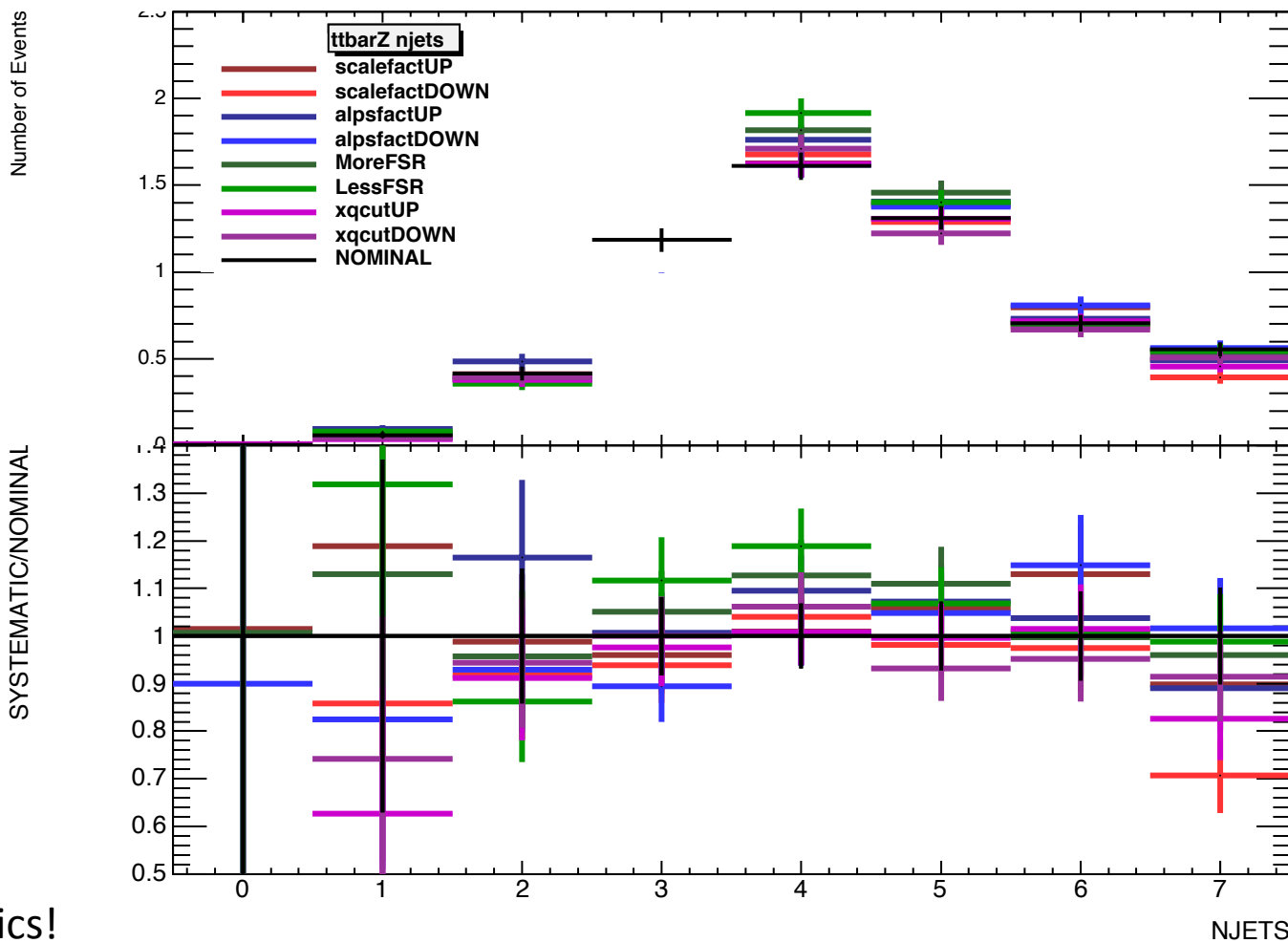
Weights for ttW



Weights for ttW

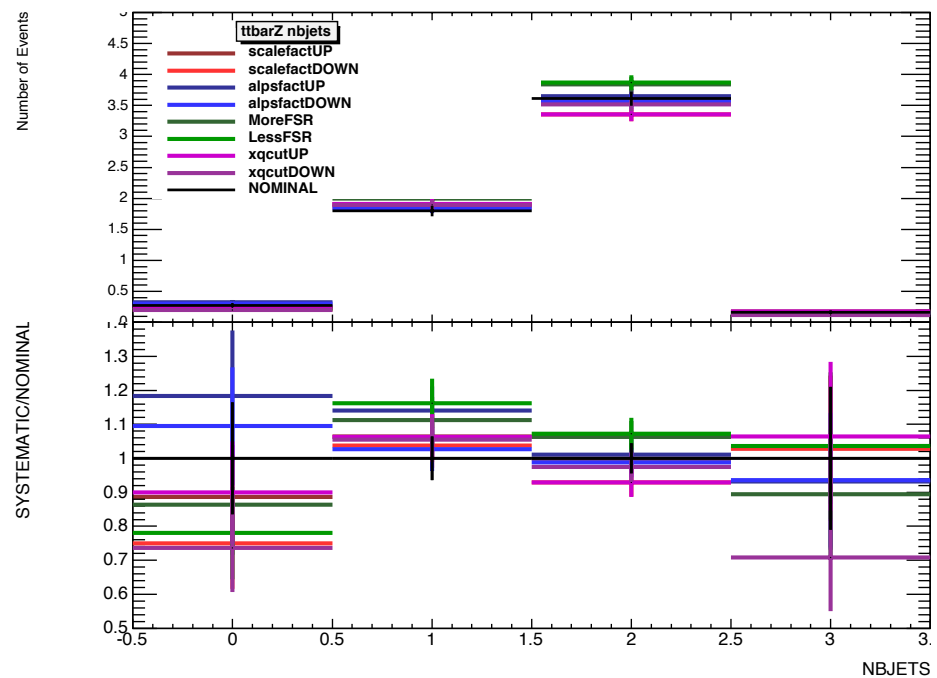
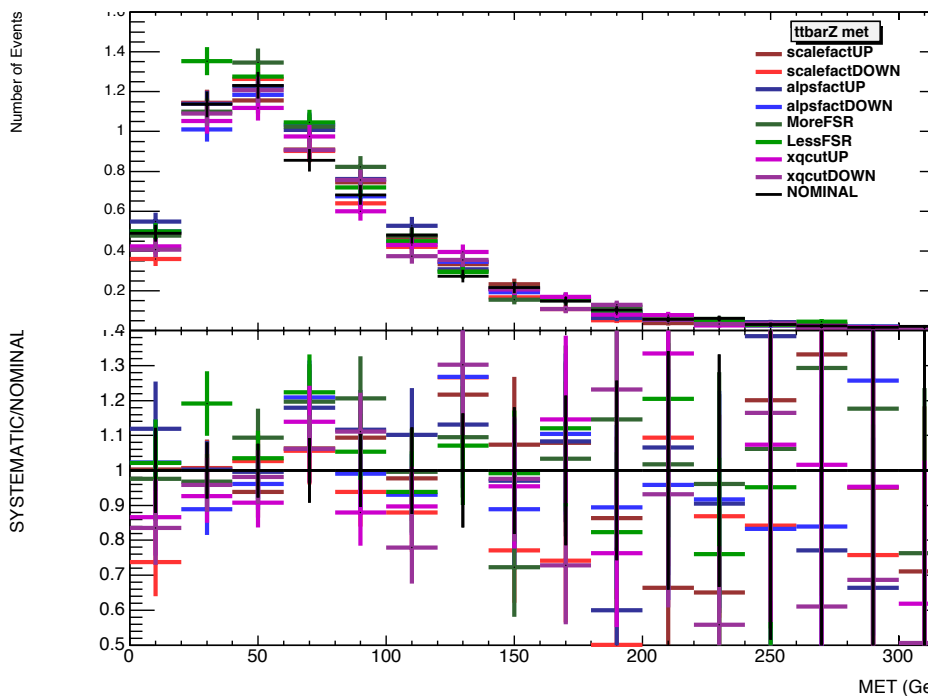


Weights for ttZ



Low statistics!

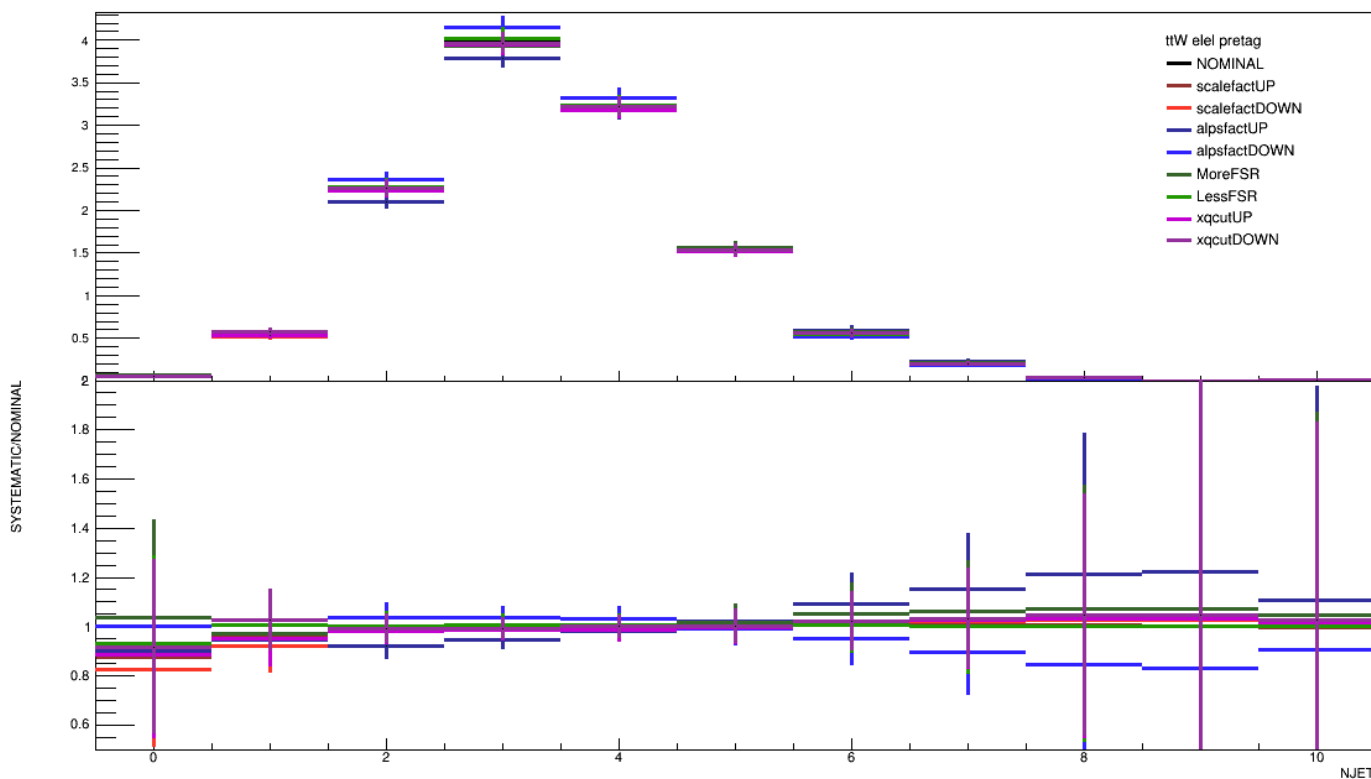
Weights for ttZ



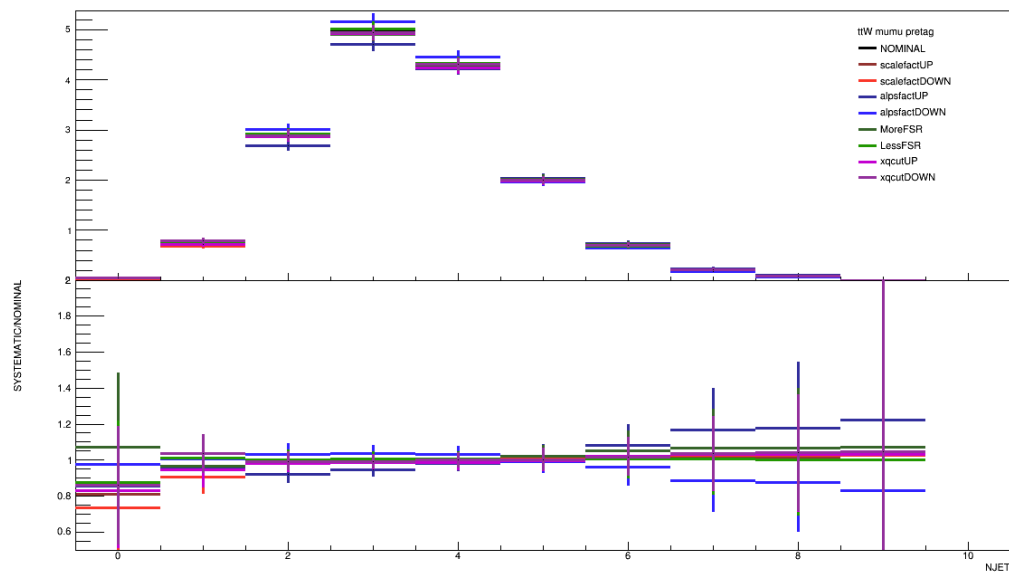
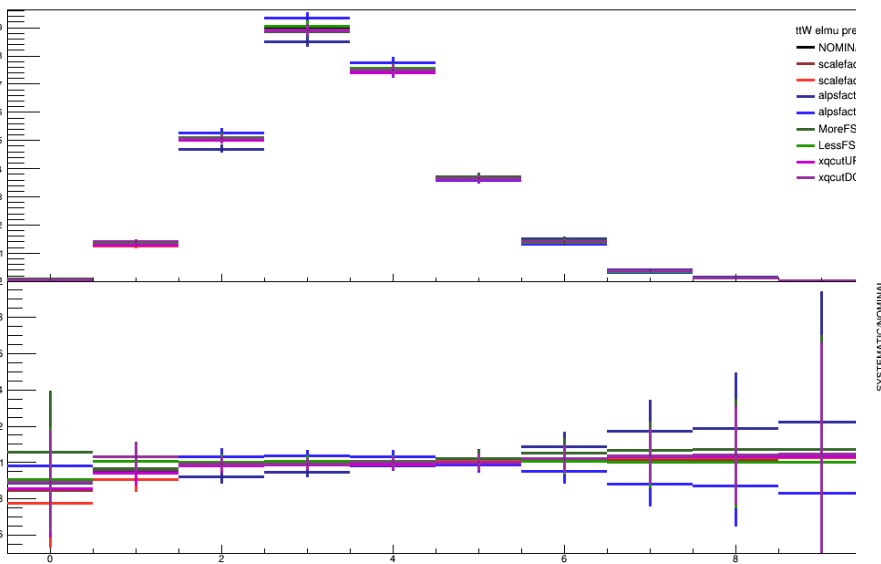
Low statistics!

ttW pretag

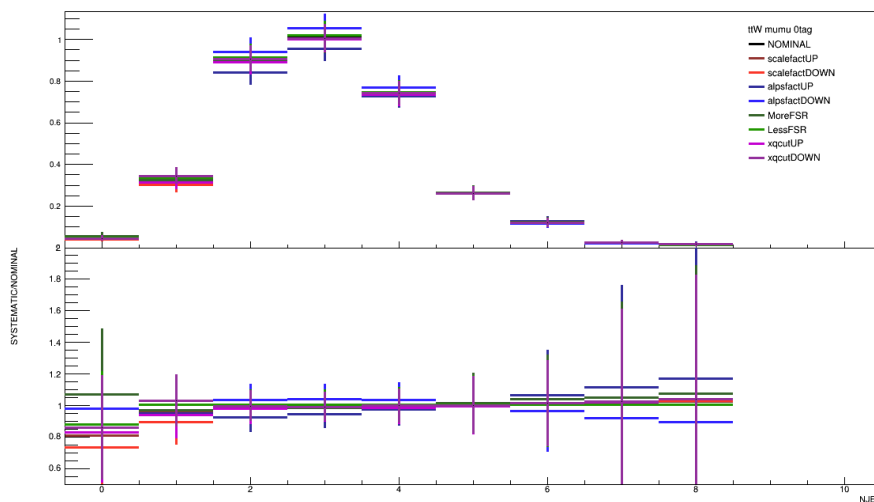
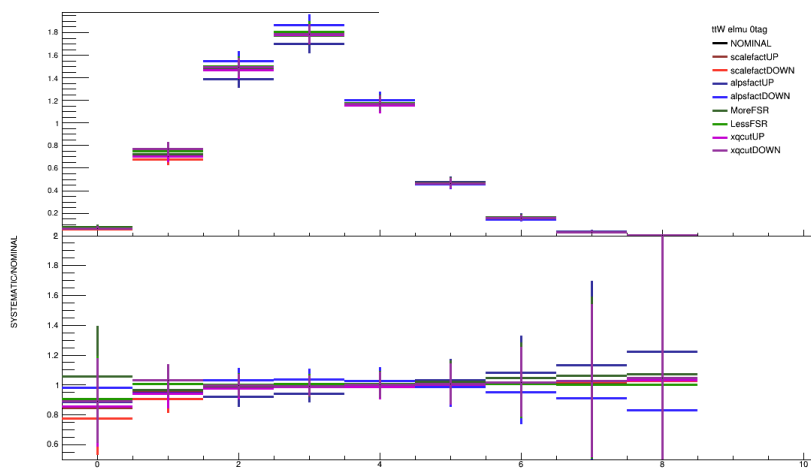
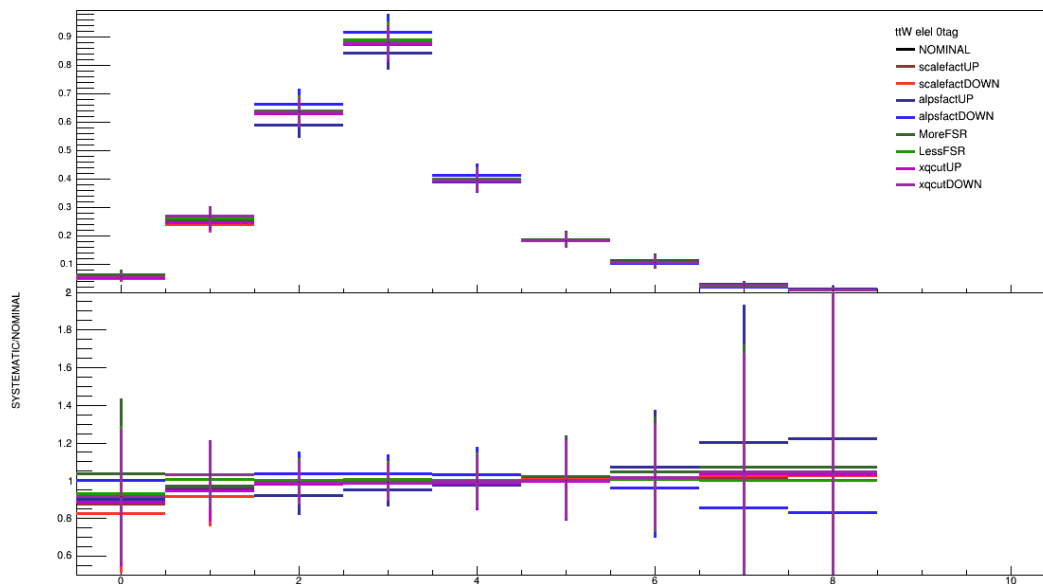
- Reconstructed distributions are weighted using the number of generated jets. Plots show the variation in the distribution of the number of reconstructed jets.



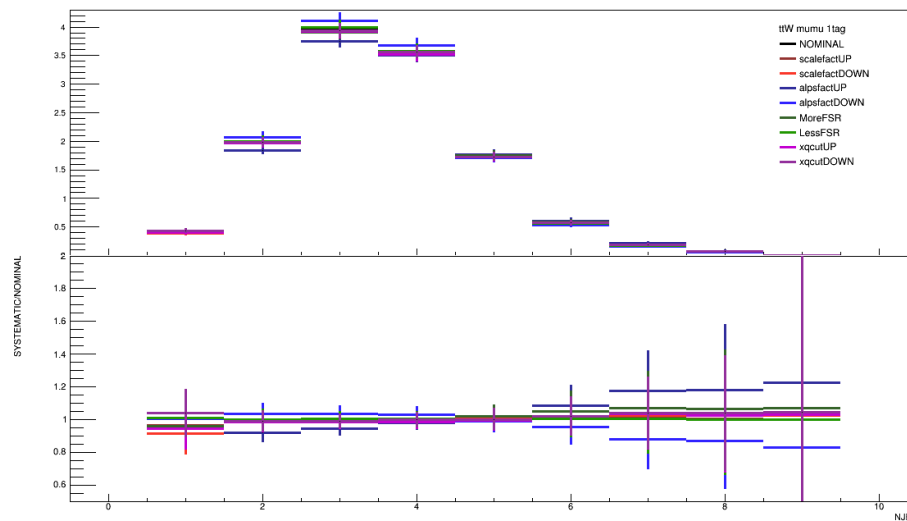
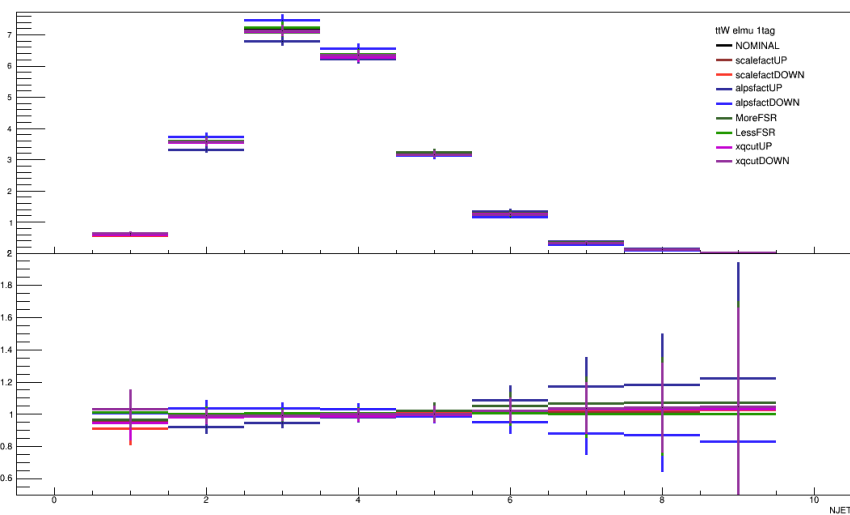
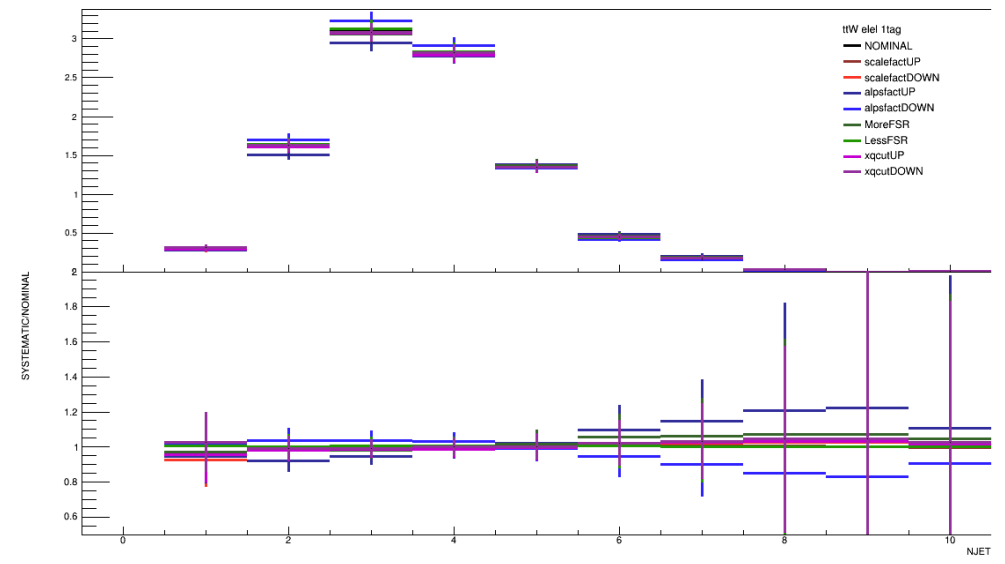
ttW pretag



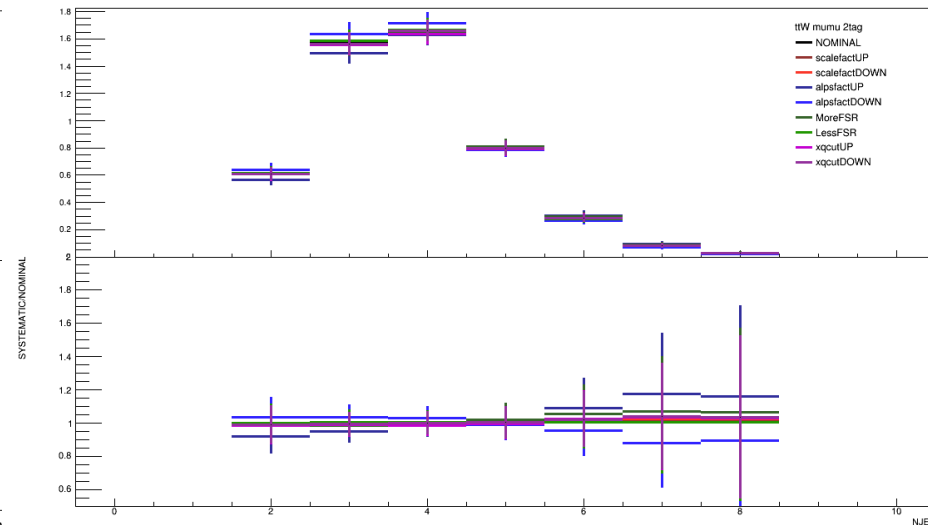
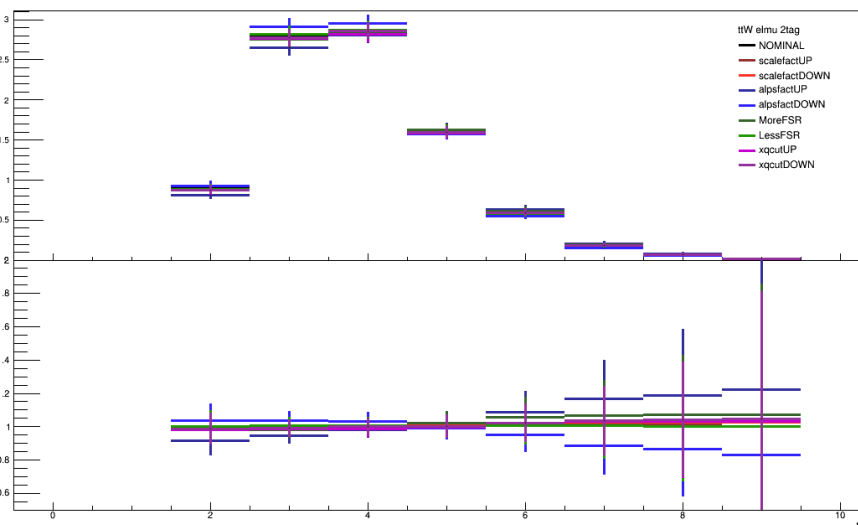
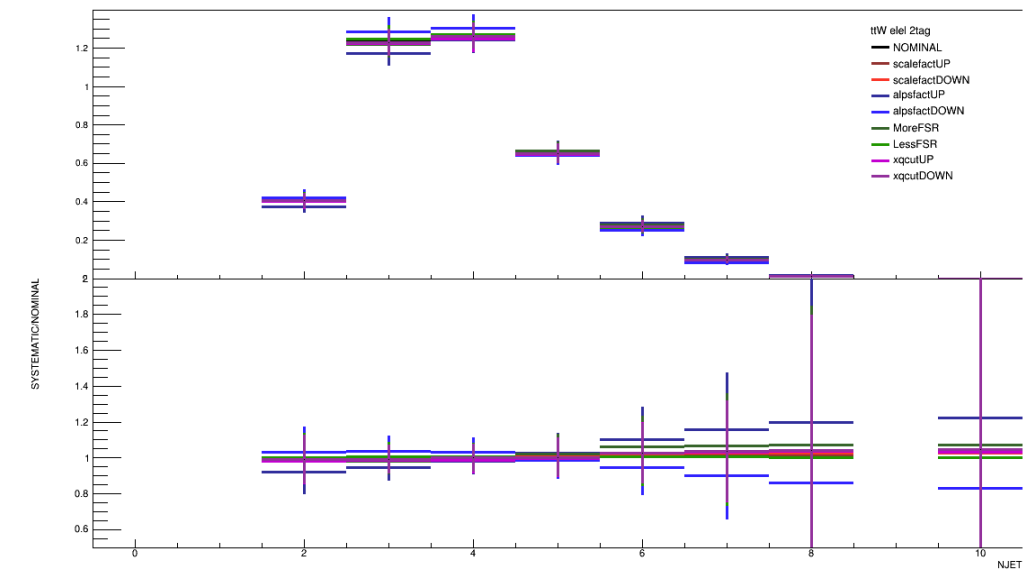
ttW Otag



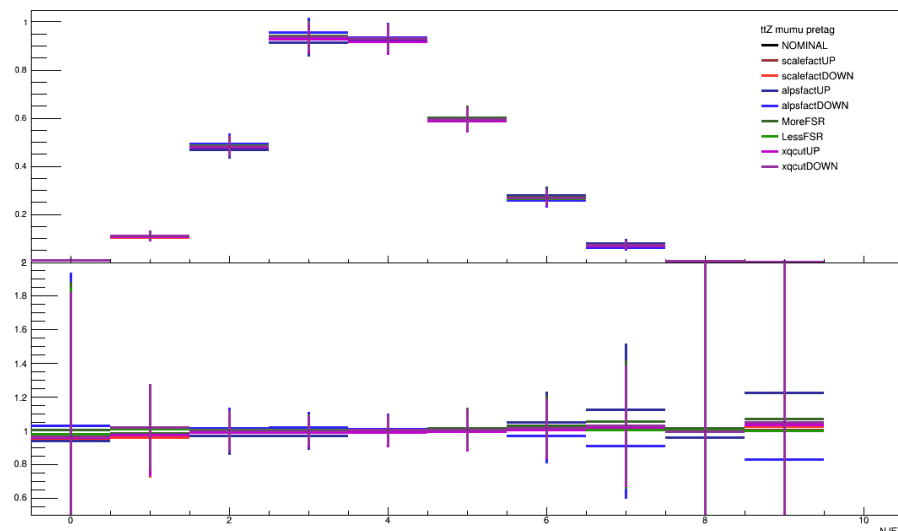
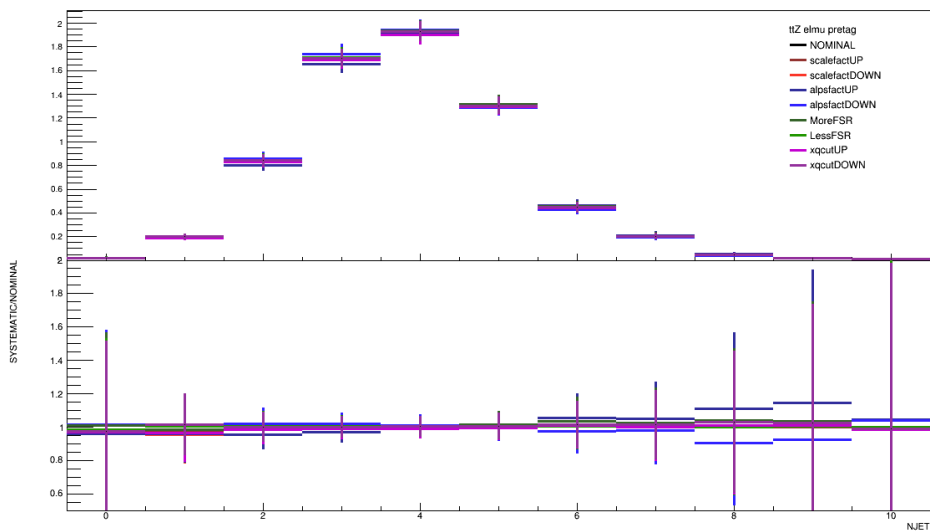
ttW 1tag



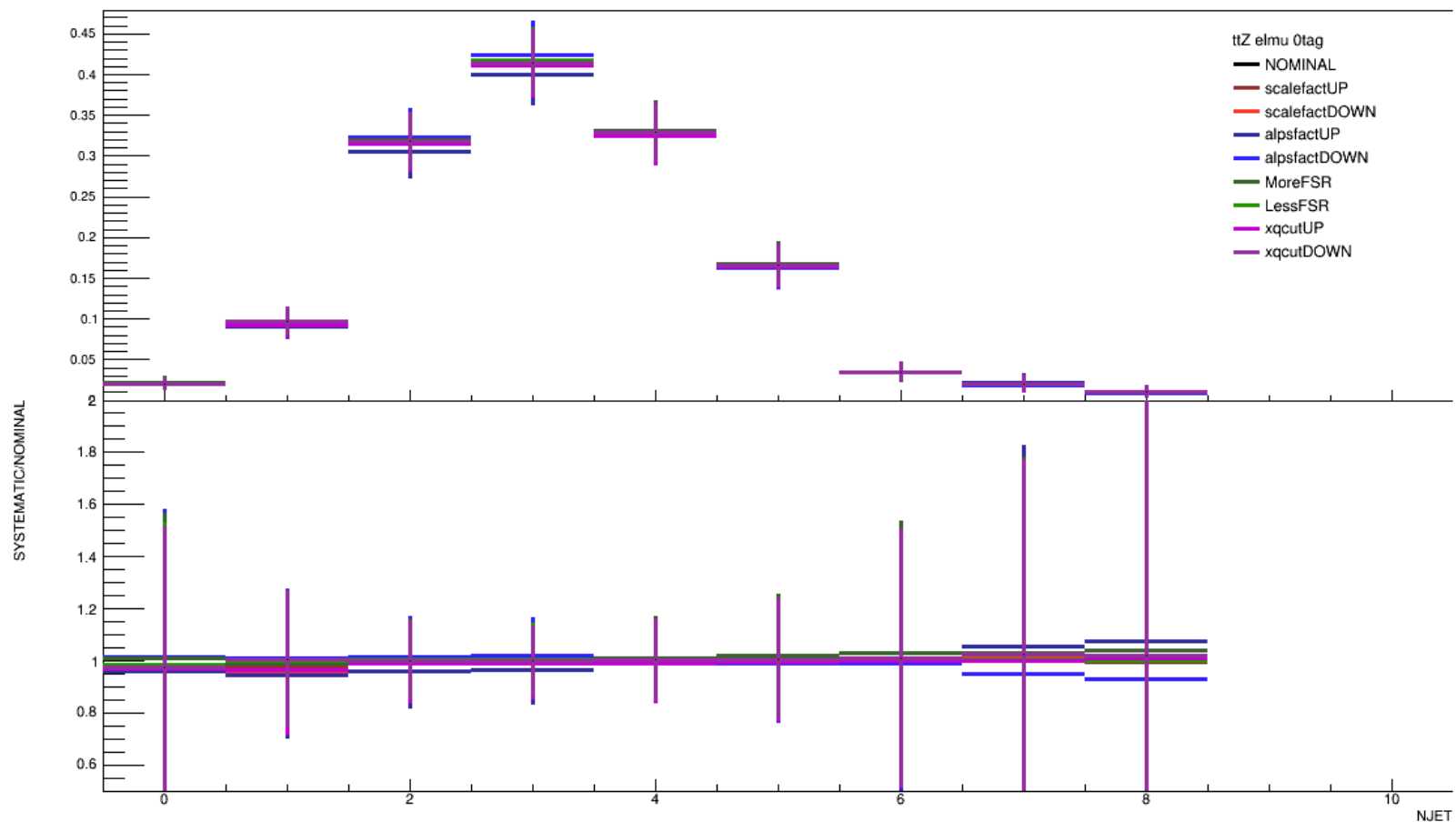
ttW 2tag



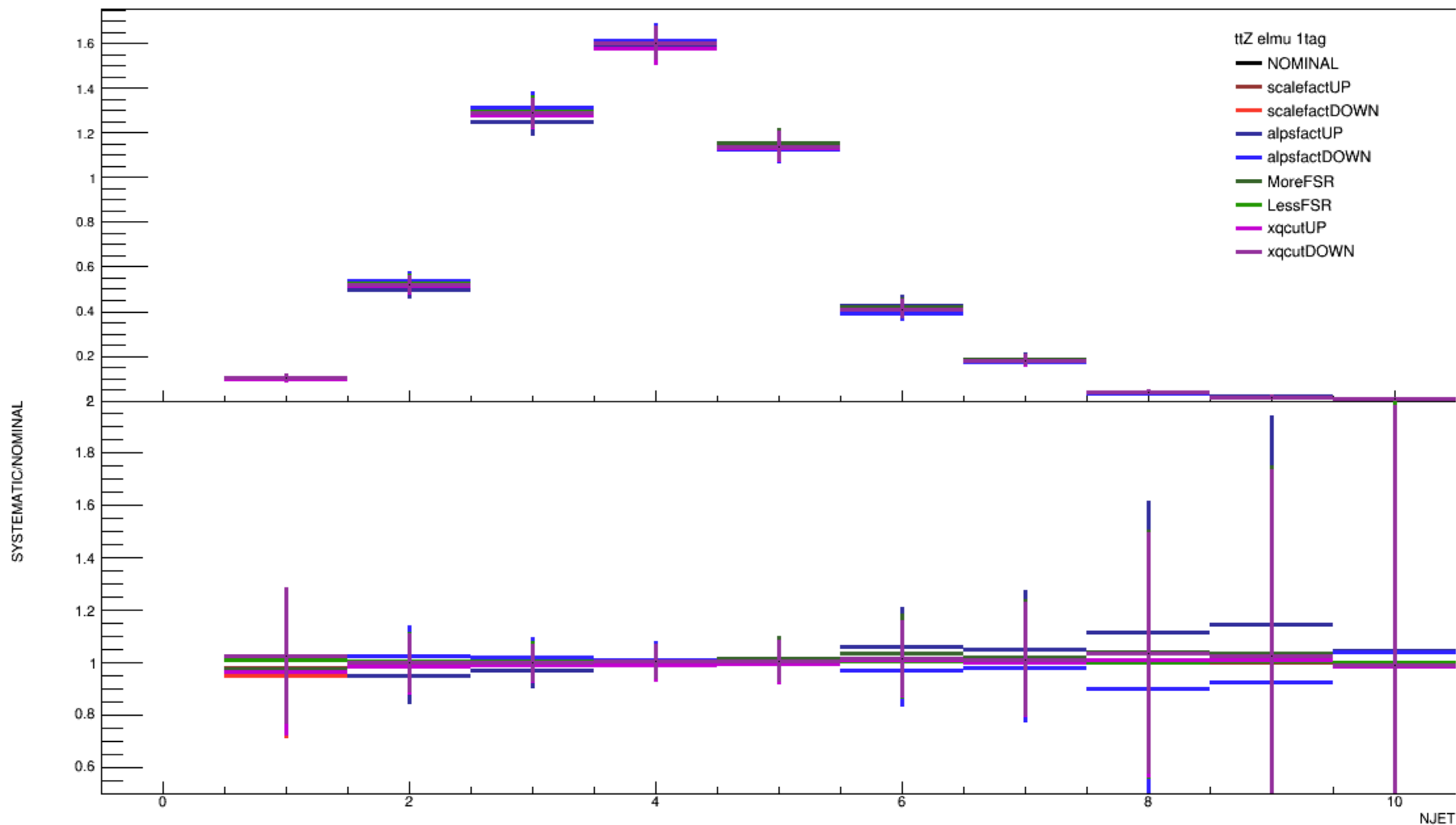
ttZ pretag



ttZ 0tag



ttZ 1tag



ttZ 2tag

