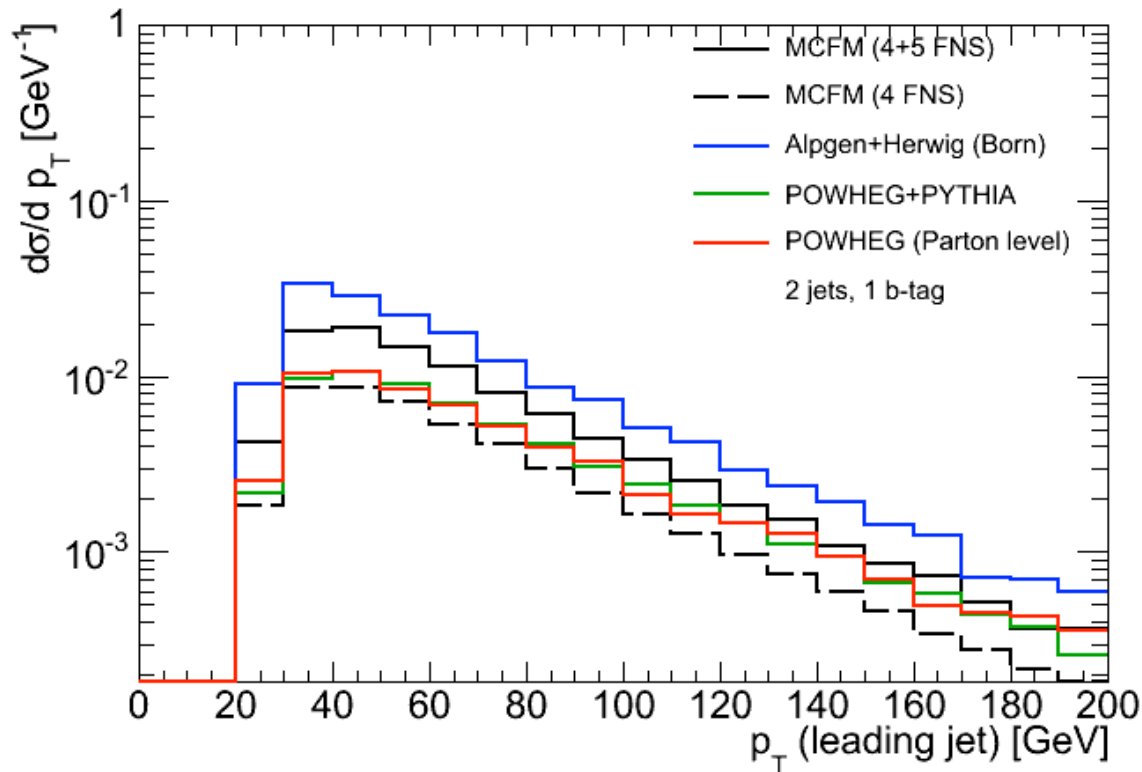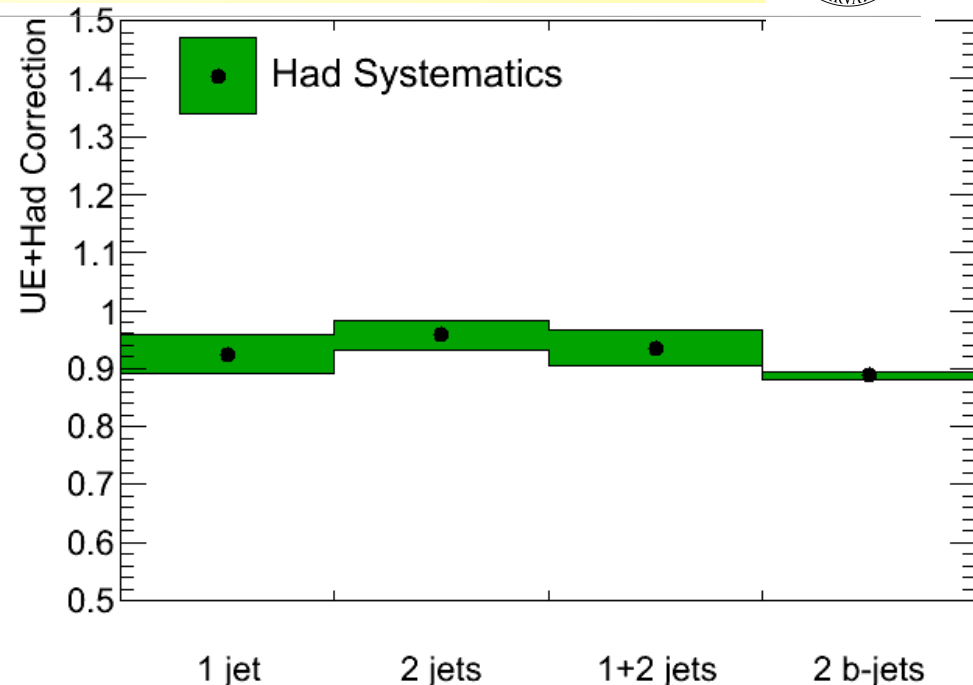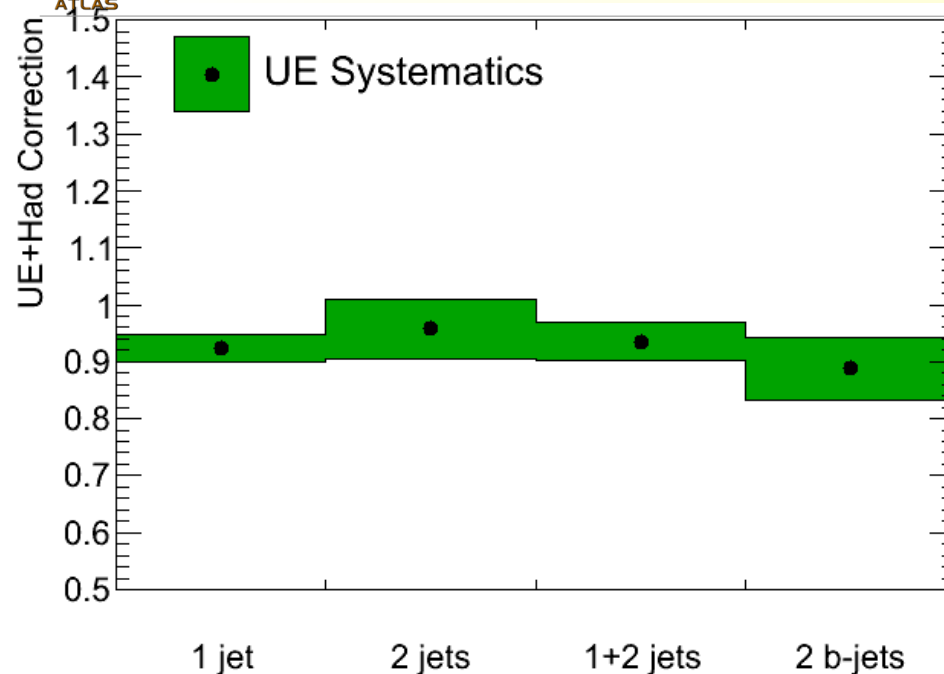# Effect of Parton Shower in NLO Calc.

- 4 FNS calculation gives rather different results at fixed order (MCFM) than when interfaced with the parton shower (POWHEG)

- Do we understand how to set systematic uncertainties from the tuning of the parton shower when interfaced to NLO calculations?

Hadronization/UE Systematics

- Hadronization systematics calculated from differences in the UE+Had correction between Herwig and Pythia, using the Powheg sample

- Underlying event systematics calculated using the difference between Perugia2011 and AUET2B

- Does the pdf used in the PS evolution matter to this effect?

- Do we have a clear prescription on how to evaluate these corrections and uncertainties for NLO calculations?