

Top cross section in a nutshell:status

- Concentrate on $t\bar{t}b\bar{b}$ semileptonic events (early measurement)
- Selection
 - Commissioning cuts - no b-tag
 - adding b-tag?
- Reconstruction-Cleaning in hadronic system
- Measurement extraction: 3 methods
 - likelihood fit, cut and count, jet multiplicity bins

Most updated summary is T6 note + some standalone communication

Selection: issues

- Sensitivity of cut-based analysis to hadronic calibration
- Impact of jet energy scale, linearity and resolution (bjet scale?)
- Missing energy
 - Interplay with QCD background and fake leptons

Reconstruction: issues

- Use of hadronic system to get cleaner sample (cuts on mass, on event position)
- Bkg subtraction: sensitivity to jet scale
 - Combinatorial bkg : connection to jet multiplicity
 - Other Bkgs
- Additional purity cuts: sensitivity to jet scale and angular res

Extracting the values

- Efficiency estimates
- Three methods: sensitivities to jet scale
 - cut and count: at selection level
 - likelihood: selection and shape reconstruction
 - Bins of W +jets (count, fit)