

Kenneth Wraight

MCnet meeting 12-14th January 2010



About me

- Final year Ph.D. student at University of Glasgow
 - Supervisor: Craig Buttar
- Research on data analysis for ATLAS experiment at LHC
 - I am an experimentalist ;)
- Main research has been on top pair production
 - 1st&2nd years spent investigating semi-leptonic channel
 - 3rd&4th years spent studying fully leptonic channel
- Some experience using (old) Pythia, Alpgen and Sherpa MCs
 - I confess to using event record as truth
- Attended some Monte Carlo orientated schools
 - Durham (YETI), Debrecen (CTEQ&MCnet), Lund (MCnet)

About my studentship

- Based at CERN for 4 months (from 11/01/10)
- Working with Peter Skands looking at Underlying Event models
 - Broadly investigating contributions to systematic uncertainties in $t\bar{t}$ cross-section measurement.
- Hope to study:
 - Current UE event models in event generators
 - learn how to manipulate appropriate parameters
 - Understand how UE models can be compared to data
 - which observables are extractable from data
 - Effect of UE on specific analyses i.e. $t\bar{t}$ dileptonic cross-section
 - constrain the systematic error from UE contributions
- Afterwards carry out some comparisons to early data with min. bias.