

WGI Meeting

Topic	Volunteers	Availability
Systematic comparisons of MC generators to all available unfolded experimental data (using Rivet)	Andy Buckley Marat Freytsis	Oct Oct
Analytical calculations vs MC vs data? New measurements?	James Ferrando	
Systematic study of taggers/observables (correlations etc)	Nhan Viet Tran Andreas Hinzmann Pekka Sinervo Gregor Kasieczka Jesse Thaler Emanuele Usai	later

- Review Measurements
 - What observables have been measured?
 - Are there significant deviations from Monte Carlo or between experiments?
 - Are there any measurements that ATLAS and CMS can compare (semi-)directly?
 - Are there measurements of new observables that might be sensitive to differences?
 - e.g., can ROC curves be measured in data?
 - To what extent are jet observables used in tuning Monte Carlo?
 - Put jet measurements in Rivet

- What robust analytic predictions can be made in data?
 - What observables should be measured because of theory arguments?
 - Sensitivity to new/higher order physics, precise predictions, etc
- Studying correlations between observables
 - How can we quantitatively define correlations relevant for discrimination?
 - Improvement of ROC curve? Significance improvement?
 - Should analyses focus on a subset of relatively uncorrelated observables?
 - Are all observables equally sensible from a theory/ experiment point of view?
 - What can theory tell us about correlations?

- Any other issues for WGI?
- Immediate tasks:
 - Take stock of current jet measurements and put into Rivet
 - Agree on observables and processes to consider
 - Only study correlations in quark vs. gluon tagging? W vs. QCD tagging?
 - Probably prefer to be narrow in scope for correlation study, but thorough
 - Determine what new Monte Carlo needs to be generated
- **Volunteers for these tasks!**