



Contribution ID: 36

Type: **not specified**

## Studies of SM Monte Carlo and particle-level measurements in constraining new physics

*Friday, 25 January 2019 12:00 (20 minutes)*

As a joint task between MCnet and ATLAS, I will present the results of vector boson production in association with jets in the Herwig7 event generator, with multi-jet merging at next-to-leading order (NLO) accuracy. Next I introduce the idea of unfolding a detector level measurement and the ATLAS 4-lepton analysis. Finally, I will discuss how precision Monte Carlo predictions can be used alongside detector-corrected experimental data to set limits on new physics models in tools such as CONTUR.

### Summary

**Primary author:** HUANG, Danping Joanna

**Presenter:** HUANG, Danping Joanna

**Session Classification:** Network meeting