18th MCnet Meeting and MCnetITN3 Mid-Term Review



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

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