



Long exercise: inclusive jets

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Summary of the exercise plans at the DAS school

Plans for inclusive-jet exercise

- Introduction: Approved analysis at 13 TeV (presentation given by us)
- GOAL: reproduce the analysis with the new data + b-jet measurement.

Students will learn:

- Measure double-differential jet distributions at detector level
- Build response matrix and study detector effects
- Work in the unfolding procedure and optimize the results
- Obtain final distributions and compare them to predictions (provided by us)
- Think about conclusion and outlook
- How to conduct an analysis from the beginning to the end
- How to work with jets, understand corrections and resolution
- What is unfolding and how to perform it
- How to draw conclusions from data-theory comparisons
- How to generate different processes in selected phase space
- Twiki page from two years ago:
<https://twiki.cern.ch/twiki/bin/view/CMS/CMSDASSchoolIDESY2016InclusiveJetExercise>
- Code to be adapted for the school (b-jet analysis not present)
- A bit more work to be done (depending on manpower)