





## Short exercise: RIVET

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**DESY-DAS** meeting

Summary of the exercise plans at the DAS school

DAS Team DAS@DESY September 2018

## Plans for RIVET exercise

- Introduction: what is RIVET and usage examples
- Three hands-on exercises: generation of events at 13 TeV

## • MB events for charged-particle mult.

- QCD events for jet p<sub>T</sub> spectrum
- heavy-flavour  $(b\bar{b})$  and Drell-Yan production for muon  $p_T$  spectrum
- Effect of parton-shower and MPI
- Comparison of Pythia8 predictions for different tunes

## We will learn:

- How to code in RIVET
- How to run predictions at particle level
- How to switch on/off parts of the simulation
- How to generate different processes in selected phase space
- Extra: Smearing gen-level quantities, extraction of limits in searches (new)
- Extra: Tuning with Professor, RIVET with lhe files (from two years ago)

Twiki page already in place,  $\sim$  3 weeks to add the new part

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