## POG exercise - Jet

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## **Exercise contents**

- Jet reconstruction
- Jet calibration
- Jet substructure

Material from Andreas and Patrick from past schools.

Old GitHub exercise Old GitLab exercise

Tools: Jupyter notebooks is an option

- Stick to plain ROOT?
- Or use pyROOT?

- Jet reconstruction
  - Either compare gen to rec level jet quantities (pt, eta)
  - Or implement a naive version of anti-kt clustering algorithm

- Jet calibration (option to either focus on JEC and/or JER)
  - Either provide SF, appy them and make a before/after comparison
  - Or calculate the SF, then apply them and make a before/after comparison

## • <u>Jet substructure</u>

- Example of PUPPI in action
- Comparison of substructure variables among different samples (n-subjetiness,  $\rho$ )

Any other ideas?