

Project Idea for Columnar Analysis Workshop

Develop an analysis which runs on 13 TeV data provided by ATLAS [here](#). Use coffea and DASK to scale up your analysis to a large dataset which includes data and signal/background Monte Carlo samples. You could plot quantities and show data to simulation agreement/disagreement. ATLAS Open Data provides a nice list of possible tasks this data could be useful for.

Key Challenges of this Project:

- 1) Learning how to work with processors in coffea.
- 2) Using DASK to horizontally scale your analysis.
- 3) Dataset bookkeeping.

Homework 2

Homework 2 instructions are found in Day2.ipynb. You can continue working from there or create a new jupyter notebook. Please upload your notebooks into github and send links to Jahred & Rick via git by **Thursday, March 20th** (2 weeks from today).

If you have any questions feel free to contact Frank: fstrug2@uic.edu or Fatima: fatima@niu.edu . We can also be reached via the IrisHEP slack channel (preferred if possible).