

Status of UMN Efforts

J. C. Hiltbrand, N. Strobbe, C. Kapsiak, S. Rao

6 April 2022



Overview

Personpower

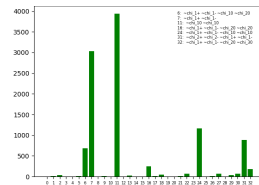
- UMN has one graduate student (C. Kapsiak) and one undergraduate (S. Rao).
- C. Kapsiak will focus on DELPHES output, S. Rao will look at PYTHIA output.

Setup and Offerings

- Successful SHLA \rightarrow PYTHIA + DELPHES workflow for simulating muon collider events.
- Currently have processed `.slha` files at `/eos/uscms/store/user/jennetd/snowmass/spheno-4.05/test_lin_0.05/`
 - ▶ Obtained some processed PYTHIA output for four main muon collider scenarios.
 - ▶ Processed 10k events for each SLHA in DELPHES (10 TeV).
 - ▶ Can put DELPHES output somewhere for others to use.

Going Forward

- Looking for input about what kind of mini analysis to do with DELPHES output.
- Also interesting things to look at from PYTHIA output level across all SLHA points.
- Get ahold of SM background events (they do exist).



Frequency of production mode.