

13000 GeV pp

Z (Drell-Yan)

 $p_T^{\parallel}$  (CMS Z production)

- CMS
- - □ Herwig 7.2.1 default
- ○ MadGraph5 2.7.2.atlas3 lo
- ▲ Pythia 8.212 default
- ♦ Sherpa 2.2.9 default

Rivet 3.1.10, ≥ 400k events

mcplots.cern.ch [arXiv:1306.3436]

CMS\_2019\_0453680

Ratio to CMS

2

1

0.5

 $p_T^Z$  [GeV]

1

10

 $10^2$  $10^3$ 