

Average  $p_T$  vs  $N_{ch}$  ( $p_T^{ch} > 0.25$ ,  $|\eta^{ch}| < 2.4$ , UE charged particles)

- CMS
- △— Pythia 6.428 370
- - □ - - Pythia 6.428 391
- - ■ - - Pythia 6.428 default
- ▲— Pythia 8.308 default

Rivet 3.1.10,  $\geq 2M$  events

mcplots.cern.ch [arXiv:1306.3436]

CMS\_2013\_I1261026

Ratio to CMS

0.5

2

0.5

2

0

50

100

 $N_{ch}$  $\langle p_T \rangle$  [GeV]