

8000 GeV pp

Jets

Jet Charge Q_T ($\kappa=0.6$, $400 < p_T < 700$, $|\eta| < 1.5$)

- CMS
- - □ Herwig 7.2.0 default
- - ◆ Sherpa 2.2.4 default

 $1/N \frac{dN}{dQ_T^{0.6}} [1/e]$

10

8

6

4

2

0

2

1

0.5

Rivet 3.1.0, ≥ 5.5 M events

mcplots.cern.ch [arXiv:1306.3436]

2

1

0.5

Ratio to CMS

$Q_{T,1}^{\kappa=0.6} [e]$

The figure displays the distribution of the first jet charge $Q_{T,1}$ for jets with $400 < p_T < 700$ GeV and $|\eta| < 1.5$ in 8000 GeV pp collisions. The top panel shows the distribution $1/N \frac{dN}{dQ_T^{0.6}} [1/e]$ versus $Q_{T,1}^{\kappa=0.6} [e]$. The data points (black squares) are compared against Herwig 7.2.0 (green dashed line with squares) and Sherpa 2.2.4 (red dotted line with diamonds) models. The bottom panel shows the ratio of the distribution to the CMS data, with a horizontal line at 1.0 and shaded regions in green and yellow representing uncertainty bands.