

7000 GeV pp

W

Asymmetry vs  $N_{\text{jets}}$  (CMS (muon channel))

Charge asymmetry

- CMS
- Herwig++ 2.7.1 default
- Herwig 7.1.6 default

0.6

0.4

0.2

0

-0.2

Rivet 3.1.10,  $\geq 100k$  events

mcplots.cern.ch [arXiv:1306.3436]

(CMS\_EWK\_10\_012)

Ratio to CMS

2

1

0.5

2

0.5

1

2

3

4

Inclusive Jet Multiplicity,  $n$

The figure displays two panels. The top panel shows the charge asymmetry as a function of inclusive jet multiplicity  $n$  (1 to 4). The bottom panel shows the ratio of the charge asymmetry to the CMS result, also as a function of  $n$ . The CMS data points are black squares. The Herwig++ 2.7.1 default model is shown as orange circles with a dashed line. The Herwig 7.1.6 default model is shown as green squares with a dashed line. The shaded regions in the bottom panel represent the uncertainty bands for the Herwig models. The text '(CMS\_EWK\_10\_012)' is present in the middle of the plot.

Inclusive Jet Multiplicity, $n$	CMS Charge Asymmetry	Herwig++ 2.7.1 default Charge Asymmetry	Herwig 7.1.6 default Charge Asymmetry	Ratio to CMS (Herwig++ 2.7.1)	Ratio to CMS (Herwig 7.1.6)
1	0.23	0.09	0.12	0.39	0.52
2	0.18	0.11	0.12	0.61	0.67
3	0.19	0.12	0.16	0.63	0.85
4	0.23	-0.07	0.23	0.30	1.00