

7000 GeV pp

Soft QCD

 $pT(Ds^+) (y-3.0-3.5)$

- LHCB
- △ Pythia 6.428 370
- -▲ Pythia 6.428 371
- ·▼ Pythia 6.428 372
- ·● Pythia 6.428 376

Rivet 4.1.0, ≥ 100k events

mcplots.cern.ch [arXiv:1306.3436]

(LHCb_2013_I1218996)

Ratio to LHCB

10²

10

1

10⁻¹

2

1

0.5

2

0 2 4 6 8

$pT(Ds^+)$ (GeV)	LHCB Cross-section (nb)	Pythia 6.428 370 Cross-section (nb)	Pythia 6.428 371 Cross-section (nb)	Pythia 6.428 372 Cross-section (nb)	Pythia 6.428 376 Cross-section (nb)	LHCB Ratio	Pythia 6.428 370 Ratio	Pythia 6.428 371 Ratio	Pythia 6.428 372 Ratio	Pythia 6.428 376 Ratio
0.5	12	18	25	11	22	1.5	1.2	2.1	1.0	1.8
1.5	12	22	30	18	28	2.0	2.0	2.0	1.5	2.0
2.5	10	10	18	10	15	0.9	0.8	1.7	0.8	1.5
3.5	5	12	6	5	5	1.4	2.5	1.4	0.9	1.2
4.5	1.5	4	6	2.5	1.1	1.5	1.5	1.5	0.7	0.7
5.5	1.0	2.5	2.5	2.5	1.8	2.0	2.0	2.0	2.0	2.0
6.5	0.6	0.7	2.0	1.5	0.7	1.2	1.2	2.5	1.2	1.2
7.5	0.25	0.7	0.4	0.4	0.8	1.6	0.7	1.6	0.4	0.8