

Energy	Generator setup	Tune result $\pm$ MC stat $\pm$ data $\pm$ range $\pm$ int
38.8 GeV	PYTHIA 8 CP5	$0.988 \pm 0.0008 \pm 0.029 \pm 0.022 \pm 0.015$
	PYTHIA 8 CP4	$0.993 \pm 0.0008 \pm 0.029 \pm 0.017 \pm 0.009$
	PYTHIA 8 CP3	$0.990 \pm 0.004 \pm 0.03 \pm 0.017 \pm 0.020$
	HERWIG 7 CH2	$0.829 \pm 0.0005 \pm 0.017 \pm 0.010 \pm 0.06$
	HERWIG 7 CH3	$0.830 \pm 0.0005 \pm 0.017 \pm 0.010 \pm 0.026$
62 GeV	PYTHIA 8 CP5	$1.24 \pm 0.0008 \pm 0.07 \pm 0.0015 \pm 0.06$
	PYTHIA 8 CP4	$1.24 \pm 4 \times 10^{-8} \pm 0.06 \pm 0.0012 \pm 0.006$
	PYTHIA 8 CP3	$1.23 \pm 0.0009 \pm 0.06 \pm 0.0010 \pm 0.012$
	HERWIG 7 CH2	$0.94 \pm 0.0006 \pm 0.05 \pm 0.0012 \pm 0.024$
	HERWIG 7 CH3	$0.93 \pm 0.0006 \pm 0.04 \pm 0.0014 \pm 0.019$
200 GeV	PYTHIA 8 CP5	$1.47 \pm 0.0022 \pm 0.08 \pm 0.005 \pm 0.06$
	PYTHIA 8 CP4	$1.54 \pm 0.0024 \pm 0.09 \pm 0.003 \pm 0.004$
	PYTHIA 8 CP3	$1.54 \pm 0.0024 \pm 0.09 \pm 0.003 \pm 0.022$
	HERWIG 7 CH2	$1.14 \pm 0.0014 \pm 0.06 \pm 0.003 \pm 0.018$
	HERWIG 7 CH3	$1.15 \pm 0.0015 \pm 0.06 \pm 0.005 \pm 0.004$
1.8 TeV	PYTHIA 8 CP5	$1.93 \pm 0.012 \pm 0.11 \pm 0.02 \pm 0.015$
	PYTHIA 8 CP4	$1.94 \pm 0.013 \pm 0.12 \pm 0.04 \pm 0.0005$
	PYTHIA 8 CP3	$2.09 \pm 0.013 \pm 0.12 \pm 0.03 \pm 0.007$
	HERWIG 7 CH2	$1.52 \pm 0.014 \pm 0.12 \pm 0.03 \pm 0.0024$
	HERWIG 7 CH3	$1.52 \pm 0.014 \pm 0.13 \pm 0.03 \pm 0.010$
1.96 TeV	PYTHIA 8 CP5	$1.88 \pm 0.017 \pm 0.08 \pm 0.10 \pm 0.009$
	PYTHIA 8 CP4	$1.93 \pm 0.018 \pm 0.08 \pm 0.03 \pm 0.009$
	PYTHIA 8 CP3	$2.03 \pm 0.019 \pm 0.08 \pm 0.03 \pm 0.008$
	HERWIG 7 CH2	$1.41 \pm 0.023 \pm 0.10 \pm 0.08 \pm 0.0019$
	HERWIG 7 CH3	$1.42 \pm 0.021 \pm 0.09 \pm 0.024 \pm 0.021$
2.76 TeV	PYTHIA 8 CP5	$2.36 \pm 0.022 \pm 0.3 \pm 0.005 \pm 0.005$
	PYTHIA 8 CP4	$2.39 \pm 0.020 \pm 0.3 \pm 0.024 \pm 0.013$
	PYTHIA 8 CP3	$2.35 \pm 0.023 \pm 0.3 \pm 0.004 \pm 0.007$
	HERWIG 7 CH2	$1.87 \pm 0.03 \pm 0.5 \pm 0.06 \pm 0.003$
	HERWIG 7 CH3	$1.9 \pm 0.03 \pm 0.4 \pm 0.18 \pm 0.018$
8 TeV	PYTHIA 8 CP5	$2.64 \pm 0.006 \pm 0.0251 \pm 0.06 \pm 0.0016$
	PYTHIA 8 CP4	$2.62 \pm 0.008 \pm 0.022 \pm 0.04 \pm 0.006$
	PYTHIA 8 CP3	$2.50 \pm 0.008 \pm 0.012 \pm 0.03 \pm 0.026$
	HERWIG 7 CH2	$1.89 \pm 0.008 \pm 0.015 \pm 0.05 \pm 0.007$
	HERWIG 7 CH3	$1.89 \pm 0.007 \pm 0.009 \pm 0.05 \pm 0.007$
8.16 TeV	PYTHIA 8 CP5	$2.66 \pm 0.029 \pm 0.14 \pm 0.02 \pm 0.015$
	PYTHIA 8 CP4	$2.63 \pm 0.029 \pm 0.16 \pm 0.023 \pm 0.013$
	PYTHIA 8 CP3	$2.62 \pm 0.029 \pm 0.13 \pm 0.015 \pm 0.007$
	HERWIG 7 CH2	$1.96 \pm 0.03 \pm 0.19 \pm 0.06 \pm 0.027$
	HERWIG 7 CH3	$1.96 \pm 0.03 \pm 0.17 \pm 0.09 \pm 0.02$
13 TeV (CMS)	PYTHIA 8 CP5	$2.648 \pm 0.006 \pm 0.027 \pm 0.028 \pm 0.04$
	PYTHIA 8 CP4	$2.654 \pm 0.006 \pm 0.027 \pm 0.08 \pm 0.004$
	PYTHIA 8 CP3	$2.619 \pm 0.006 \pm 0.028 \pm 0.05 \pm 0.009$
	HERWIG 7 CH2	$2.05 \pm 0.03 \pm 0.04 \pm 0.03 \pm 0.035$
	HERWIG 7 CH3	$2.03 \pm 0.03 \pm 0.04 \pm 0.021 \pm 0.010$
13 TeV (LHCb)	PYTHIA 8 CP5	$2.66 \pm 0.009 \pm 0.06 \pm 0.13 \pm 0.0007$
	PYTHIA 8 CP4	$2.67 \pm 0.009 \pm 0.06 \pm 0.10 \pm 0.003$
	PYTHIA 8 CP3	$2.62 \pm 0.009 \pm 0.06 \pm 0.11 \pm 0.00007$
	HERWIG 7 CH2	$1.99 \pm 0.04 \pm 0.06 \pm 0.05 \pm 0.04$
	HERWIG 7 CH3	$1.99 \pm 0.06 \pm 0.14 \pm 0.16 \pm 0.06$