

MC Model	Tune	$f_{\text{DPS}} \pm (\text{stat}) \pm (\text{syst}) (\%)$		
		Full tune	Hard MPI removed	Inherent DPS
PYTHIA8	CP5	$3.77 \pm 0.08$	$6.34 \pm 0.07$	$2.57 \pm 0.11$
		$^{+0.45}_{-0.68}$	$^{+0.32}_{-0.57}$	$^{+0.36}_{-0.62}$
PYTHIA8+VINCIA	Standard	$2.40 \pm 0.07$	$3.84 \pm 0.07$	$1.44 \pm 0.10$
		$^{+0.41}_{-0.68}$	$^{+0.34}_{-0.63}$	$^{+0.37}_{-0.65}$
	PYTHIA8.3			
PYTHIA8	CDPSTP8S1-4j	$-1.30 \pm 0.08$	$3.06 \pm 0.07$	$4.36 \pm 0.11$
		$^{+0.39}_{-0.69}$	$^{+0.28}_{-0.62}$	$^{+0.34}_{-0.66}$
HERWIG7	CH3	$3.72 \pm 0.07$	$6.28 \pm 0.08$	$2.56 \pm 0.11$
		$^{+0.38}_{-0.68}$	$^{+0.29}_{-0.58}$	$^{+0.33}_{-0.63}$
HERWIG7	SoftTune	$2.67 \pm 0.07$	$4.85 \pm 0.08$	$2.18 \pm 0.11$
		$^{+0.42}_{-0.71}$	$^{+0.31}_{-0.52}$	$^{+0.36}_{-0.61}$
MADGRAPH5_aMC@NLO	CP5	$2.50 \pm 0.08$	$5.14 \pm 0.08$	$2.64 \pm 0.11$
		$^{+0.38}_{-0.69}$	$^{+0.30}_{-0.56}$	$^{+0.35}_{-0.62}$
LO 2 $\rightarrow$ 2,3,4, PYTHIA8				
MADGRAPH5_aMC@NLO	Standard	$2.55 \pm 0.09$	$5.23 \pm 0.08$	$2.68 \pm 0.12$
		$^{+0.38}_{-0.66}$	$^{+0.27}_{-0.53}$	$^{+0.33}_{-0.60}$
LO 2 $\rightarrow$ 2,3,4, PYTHIA8.3				
PYTHIA8+VINCIA				
MADGRAPH5_aMC@NLO	CP5	$7.13 \pm 0.08$	$11.45 \pm 0.08$	$4.32 \pm 0.11$
		$^{+0.28}_{-0.42}$	$^{+0.22}_{-0.27}$	$^{+0.25}_{-0.36}$
NLO 2 $\rightarrow$ 2, PYTHIA8				
POWHEG NLO 2 $\rightarrow$ 2, PYTHIA8	CP5	$4.77 \pm 0.08$	$10.89 \pm 0.08$	$6.12 \pm 0.11$
		$^{+0.32}_{-0.64}$	$^{+0.24}_{-0.48}$	$^{+0.28}_{-0.53}$
POWHEG NLO 2 $\rightarrow$ 3, PYTHIA8	CP5	$5.40 \pm 0.07$	$6.51 \pm 0.07$	$1.11 \pm 0.10$
		$^{+0.36}_{-0.67}$	$^{+0.29}_{-0.51}$	$^{+0.33}_{-0.59}$