

Matrix element generator	Simulated diagrams	PDF set	Tune
PYTHIA 8.219 [10]	2 \rightarrow 2 (LO)	NNPDF2.3LO [15, 16]	CUETP8M1 [14]
HERWIG++ 2.7.1 [11]	2 \rightarrow 2 (LO)	CTEQ6L1 [17]	CUETHppS1 [14]
MADGRAPH [18, 19]+ PYTHIA 8.219 [10]	2 \rightarrow 2, 2 \rightarrow 3, 2 \rightarrow 4 (LO)	NNPDF2.3LO [15, 16]	CUETP8M1 [14]
PH-2J [20–22] + PYTHIA 8.219 [10]	2 \rightarrow 2 (NLO)	NNPDF3.0NLO [23]	CUETP8M1 [14]
PH-2J [20–22] + HERWIG++ 2.7.1 [11]	2 \rightarrow 2 (NLO)	NNPDF3.0NLO [23]	CUETHppS1 [14]
PH-3J [20–22] + PYTHIA 8.219 [10]	2 \rightarrow 3 (NLO)	NNPDF3.0NLO [23]	CUETP8M1 [14]