

Process name	Event generator (k-factor)	Tune	PDF set
Z+jets	MG5_aMC (NLO) + PYTHIA8 (1.07)	CUETP8M1	NNPDF 3.0 NLO for matrix element NNPDF 2.3 LO for tune
Z+jets	MG5_aMC (LO) + PYTHIA8 (1.24)	CUETP8M1	NNPDF 3.0 LO for matrix element NNPDF 2.3 LO for tune
Z+jets	SHERPA (NLO) (0.97)	—	NNPDF 3.0 NNLO
Z+jets	MG5_aMC (NLO) + PYTHIA8 (1.07)	CP5	NNPDF 3.0 NLO for matrix element NNPDF 3.1 NNLO for tune
Z+jets	MG5_aMC (NLO) + PYTHIA8 MPI-OFF (1.07)	CP5	NNPDF 3.0 NLO for matrix element NNPDF 3.1 NNLO for tune
Z+jets	MG5_aMC (NLO) + PYTHIA8 (1.09)	CDPSTP8S1-Wj	NNPDF 3.0 NLO for matrix element CTEQ6L1 LO for tune
Z+jets	MG5_aMC (NLO) + HERWIG7 (1.02)	CH3	NNPDF 3.0 NLO for matrix element NNPDF 3.1 LO/NNLO for tune
$t\bar{t}$	MG5_aMC (NLO) + PYTHIA8 (—)	CUETP8M2T4	NNPDF 3.0 NLO for matrix element NNPDF30_lo_as_0130 for tune
Diboson	PYTHIA8 (LO) (—)	—	NNPDF 2.3 LO
Single top	POWHEG (NLO) + PYTHIA8 (—)	CUETP8M1	NNPDF 3.0 NLO for matrix element NNPDF 2.3 LO for tune