

Process	Monte Carlo generator	Perturbative order in QCD
Z+jets	MADGRAPH5_aMC@NLO 2.2.3	LO
γ +jets	MADGRAPH5_aMC@NLO 2.2.3	LO
W+jets	MADGRAPH5_aMC@NLO 2.2.3	NLO
QCD multijet	MADGRAPH5_aMC@NLO 2.2.3	LO
$t\bar{t}$	POWHEG 2.0	NLO
Single top quark	POWHEG 2.0	NLO
Diboson (ZZ, WZ, WW)	PYTHIA 8.205	LO
Monojet signal (spin-1 mediator)	POWHEG 2.0	NLO
Monojet signal (spin-0 mediator)	POWHEG 2.0	LO
Mono-V signal (spin-1 mediator)	MADGRAPH5_aMC@NLO 2.2.3	LO
Mono-V signal (scalar mediator)	JHUGEN 5.2.5	LO
$H \rightarrow \text{inv}$ (gluon fusion)	POWHEG 2.0	NLO
$H \rightarrow \text{inv}$ (vector boson fusion)	POWHEG 2.0	NLO
$H \rightarrow \text{inv}$ (associated production with W or Z)	JHUGEN 5.2.5	LO