

Background process	Final-state signature	Estimation method			
		$\tau\text{-emb.}$	F_F	SS	Sim.
Z/γ^*	$\tau\tau$	✓	—	—	—
	Jet $\rightarrow\tau_h$	—	✓	—	—
	$\ell\ell$	—	—	—	✓
$t\bar{t}$	$\tau\tau$	✓	—	—	—
	Jet $\rightarrow\tau_h$	—	✓	—	—
	$\ell + X$	—	—	—	✓
Diboson+single t	$\tau\tau$	✓	—	—	—
	Jet $\rightarrow\tau_h$	—	✓	—	—
	$\ell + X$	—	—	—	✓
W+jets	Jet $\rightarrow\tau_h$	—	✓	—	—
	Jet $\rightarrow\ell$	—	—	—	✓
QCD multijet	Jet $\rightarrow\tau_h$	—	✓	—	—
	QCD(e μ)	—	—	✓	—
H(125)	$\tau\tau$	—	—	—	✓