

Background process	Final state signature	Estimation method			
		τ -emb.	F_F	Sim.	SS
Z	$\tau\tau$	✓	—	—	—
	Jet $\rightarrow \tau_h$	—	✓	—	—
	$l\bar{l}$	—	—	✓	—
$t\bar{t}$	$\tau\tau$	✓	—	—	—
	Jet $\rightarrow \tau_h$	—	✓	—	—
	$l + X$	—	—	✓	—
Diboson+single t	$\tau\tau$	✓	—	—	—
	Jet $\rightarrow \tau_h$	—	✓	—	—
	$l + X$	—	—	✓	—
W+jets	Jet $\rightarrow \tau_h$	—	✓	—	—
	Jet $\rightarrow l$	—	—	✓	—
QCD multijet	Jet $\rightarrow \tau_h$	—	✓	—	—
	Dijet $\rightarrow e\mu$	—	—	—	✓
h	$\tau\tau$	—	—	✓	—

$l = e, \mu$