

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