

Variable	Selection	Reject
N_ℓ	$= 2$	WZ, VVV
p_T^ℓ	$> 25/20$ GeV (electrons) > 20 GeV (muons)	QCD QCD
Z boson mass requirement	$ m_{\ell\ell} - m_Z < 15$ GeV	WW, top quark
Jet counting	≤ 1 jet with $p_T^j > 30$ GeV	$Z/\gamma^* \rightarrow \ell\ell$, top quark, VVV
$p_T^{\ell\ell}$	> 60 GeV	$Z/\gamma^* \rightarrow \ell\ell$
b tagging veto	CSVv2 < 0.8484	Top quark, VVV
τ lepton veto	0 τ_h candidates with $p_T^\tau > 18$ GeV	WZ
E_T^{miss}	> 100 GeV	$Z/\gamma^* \rightarrow \ell\ell$, WW, top quark
$\Delta\phi(\vec{p}_T^{\ell\ell}, \vec{p}_T^{\text{miss}})$	> 2.6	$Z/\gamma^* \rightarrow \ell\ell$
$ E_T^{\text{miss}} - p_T^{\ell\ell} /p_T^{\ell\ell}$	< 0.4	$Z/\gamma^* \rightarrow \ell\ell$
$\Delta\phi(\vec{p}_T^j, \vec{p}_T^{\text{miss}})$	> 0.5 rad	$Z/\gamma^* \rightarrow \ell\ell$, WZ
$\Delta R_{\ell\ell}$	< 1.8	WW, top quark