

Subcategories	Selection
<u>Global selection</u>	
—	$p_{\mathrm{T}1} > 25 \text{ GeV}$, $p_{\mathrm{T}2} > 15 \text{ GeV}$, $p_{\mathrm{T}3} > 10 \text{ GeV}$, $p_{\mathrm{T}4} > 10 \text{ GeV}$ $Q_{4\ell} = 0$, $\min(m_{\ell\ell}) > 12 \text{ GeV}$, $ m_{\ell\ell} - m_Z < 15 \text{ GeV}$ No b-tagged jet with $p_{\mathrm{T}} > 20 \text{ GeV}$
<u>Signal region</u>	
XSF	Same-flavor X pair, $m_{4\ell} > 140 \text{ GeV}$ $10 < m_{\ell\ell}^X < 60 \text{ GeV}$, $p_{\mathrm{T}}^{\mathrm{miss}} > 35 \text{ GeV}$
XDF	Different-flavor X pair, $10 < m_{\ell\ell}^X < 70 \text{ GeV}$ $p_{\mathrm{T}}^{\mathrm{miss}} > 20 \text{ GeV}$
<u>Control region</u>	
ZZ	$75 < m_{\ell\ell}^X < 105 \text{ GeV}$, $p_{\mathrm{T}}^{\mathrm{miss}} < 35 \text{ GeV}$