

**Same-sign  $ll$  channel ( $\mu\mu/e\mu$ )**

**$lll$  channel**

No loose leptons with  $m_{\ell\ell} < 12$  GeV

One or more b tagged jets

One or more non-tagged jets

Exactly two tight same-sign leptons

$p_T > 25 / 15$  GeV

Exactly three tight leptons

$p_T > 25 / 15 / 15$  GeV

No lepton pair with  $|m_{\ell\ell} - m_Z| < 15$  GeV