## (Control Region I)

Two OS  $\tau_h \tau_h$  with both legs passing medium isolation. low  $M_{T2}$  or  $\Sigma m_T^{\tau_i}$ 

## (Signal Region)

Two OS  $au_h au_h$  with both legs passing medium isolation. high  $M_{T2}$  or  $\Sigma m_T^{ au_i}$ 

## (Control Region II)

Two SS  $au_h au_h$  with at least one leg passing loose isolation. low  $M_{T2}$  or  $\Sigma m_T^{ au_i}$ 

## (Control Region III)

Two SS  $\tau_h \tau_h$  with at least one leg passing loose isolation. high  $M_{T2}$  or  $\Sigma m_T^{\tau_i}$