

0 τ_h

Fit Discriminant: N_{jets}

1 τ_h

Fit Discriminant: DNN_{tt}

2 τ_h

Fit Discriminant: DNN_{tt}

CR1:

$DNN_{\text{QCD}} > 0.6$
 $p_{\text{T}}^{\text{miss}} < 160 \text{ GeV}$

SR:

$DNN_{\text{QCD}} > 0.6$
 $p_{\text{T}}^{\text{miss}} > 160 \text{ GeV}$

CR2:

$DNN_{\text{QCD}} < 0.6$
 $p_{\text{T}}^{\text{miss}} < 160 \text{ GeV}$

CR3:

$DNN_{\text{QCD}} < 0.6$
 $p_{\text{T}}^{\text{miss}} > 160 \text{ GeV}$

CR :

Loose τ_h WP

SR :

Tight τ_h WP

CR :

Loose τ_h WP

SR :

Medium τ_h WP

CR :

1 tight muon
Loose τ_h WP

SR :

1 tight muon
Tight τ_h WP

$t\bar{t}$ enhanced

CR :

$p_{\text{miss}}^{\text{T}} < 40 \text{ GeV}$
Loose τ_h WP

SR :

$p_{\text{miss}}^{\text{T}} < 40 \text{ GeV}$
Tight τ_h WP

QCD enhanced

CR :

1 tight muon
Loose τ_h WP

SR :

1 tight muon
Medium τ_h WP

$t\bar{t}$ enhanced

CR :

$p_{\text{miss}}^{\text{T}} < 40 \text{ GeV}$
Loose τ_h WP

SR :

$p_{\text{miss}}^{\text{T}} < 40 \text{ GeV}$
Medium τ_h WP

QCD enhanced

analysis regions

Primary

regions

Determination