

t \bar{t} (γ) Control Region

double binning

 $p_{\text{T}}^{\text{leading}}$
 $p_{\text{T}}^{\text{trailing}}$
 $p_{\text{T}}^{\text{N}_{\text{Jets}}}$
 H_{T}
 ϕ^{leading}
 ϕ^{trailing}
 $p_{\text{T}}^{\text{miss}}$
 p_{T}^{γ}
 p_{T}
 η^{trailing}
 η^{leading}
 m_{ll}

normal binning

 $p_{\text{T}}^{\text{leading}}$
 $p_{\text{T}}^{\text{trailing}}$
 $p_{\text{T}}^{\text{N}_{\text{Jets}}}$
 H_{T}
 ϕ^{leading}
 ϕ^{trailing}
 $p_{\text{T}}^{\text{miss}}$
 p_{T}^{γ}
 p_{T}
 η^{trailing}
 η^{leading}
 m_{ll}

half binning

 $p_{\text{T}}^{\text{leading}}$
 $p_{\text{T}}^{\text{trailing}}$
 $p_{\text{T}}^{\text{N}_{\text{Jets}}}$
 H_{T}
 ϕ^{leading}
 ϕ^{trailing}
 $p_{\text{T}}^{\text{miss}}$
 p_{T}^{γ}
 p_{T}
 η^{trailing}
 η^{leading}
 m_{ll}

- α (int. method)
- stat. error (int. method)
- α (χ^2 method)
- mean (χ^2 method)

0.7

0.75

0.8

0.85

Scale Factor $\alpha_{t\bar{t}(\gamma)}$