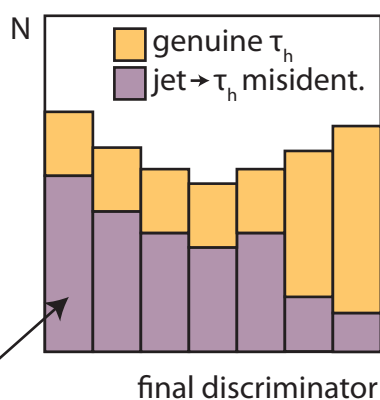


determination regions

more τ_h -like

signal region

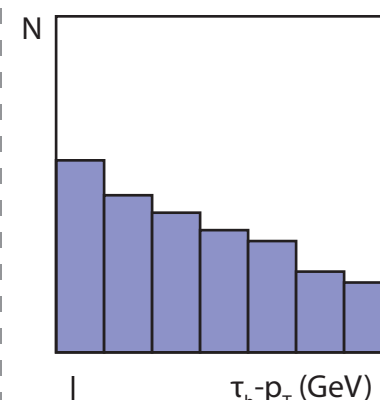
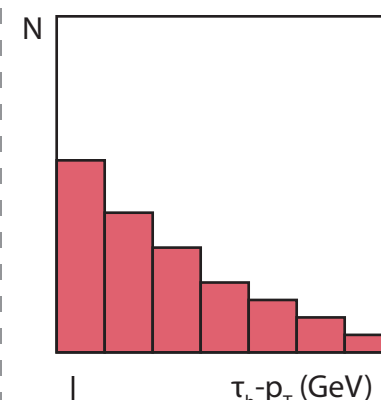
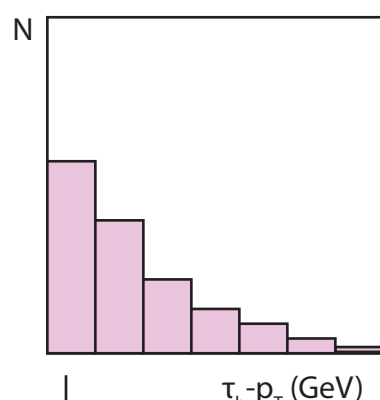


$$N_{SR} = N_{AR}(\text{data}) \cdot F_F$$

QCD

W+jets

$t\bar{t}$



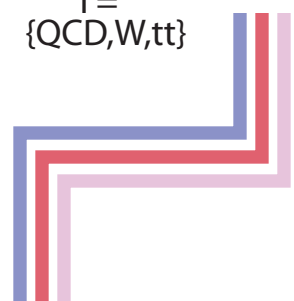
numerator

τ_h-p_T (GeV)

τ_h-p_T (GeV)

medium

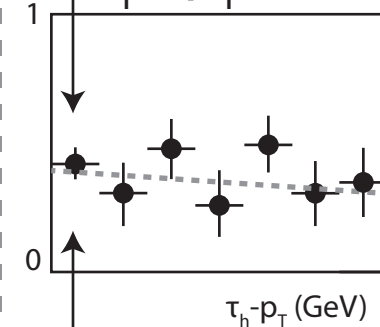
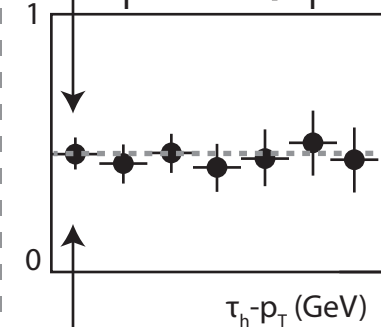
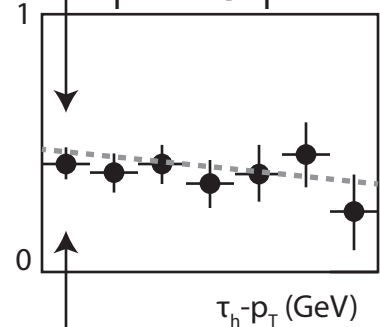
$$F_F = \sum_{i \in \{\text{QCD}, W, t\bar{t}\}} \text{frac}^i \cdot F_F^i$$



$F_F^{\text{QCD}}(p_T)$

$F_F^{W+jets}(p_T)$

$F_F^{t\bar{t}}(p_T)$



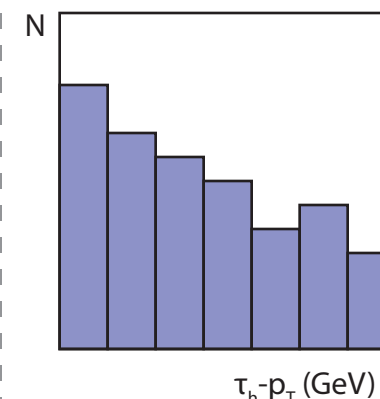
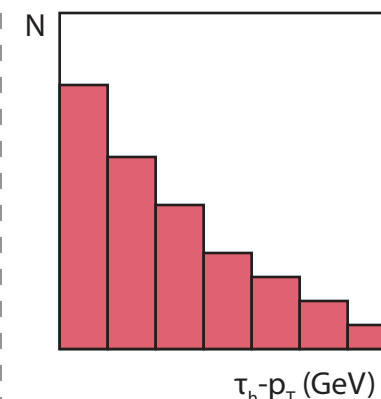
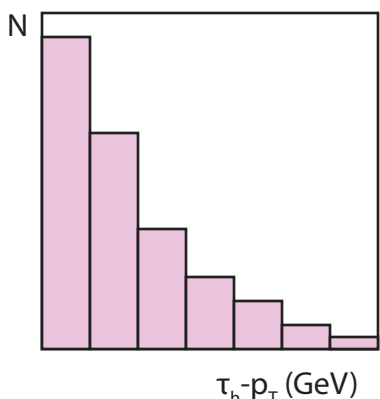
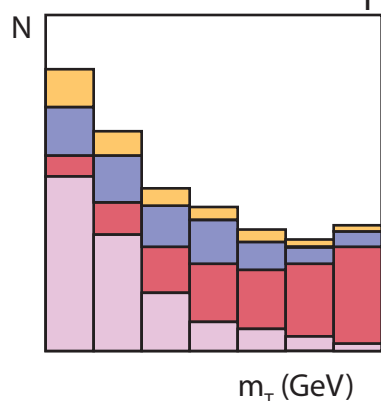
denominator

τ_h-p_T (GeV)

τ_h-p_T (GeV)

τ_h-p_T (GeV)

$\text{frac}^{\text{QCD}/W/t\bar{t}}(m_T)$



τ_h-p_T (GeV)

τ_h-p_T (GeV)

τ_h-p_T (GeV)

vvlouise

application region

opposite sign

same sign

$$N_{b\text{-tag}} > 0$$

no add. leptons

$$N_{b\text{-tag}} = 0$$

add. leptons