

Events / 6.00 GeV

**ATLAS** Internal

$\sqrt{s} = 13\text{TeV}, 139\text{ fb}^{-1}$

FCNC tqH  $H \rightarrow \tau\tau$

$t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only  $\tau_{\text{sub}}$  real

data

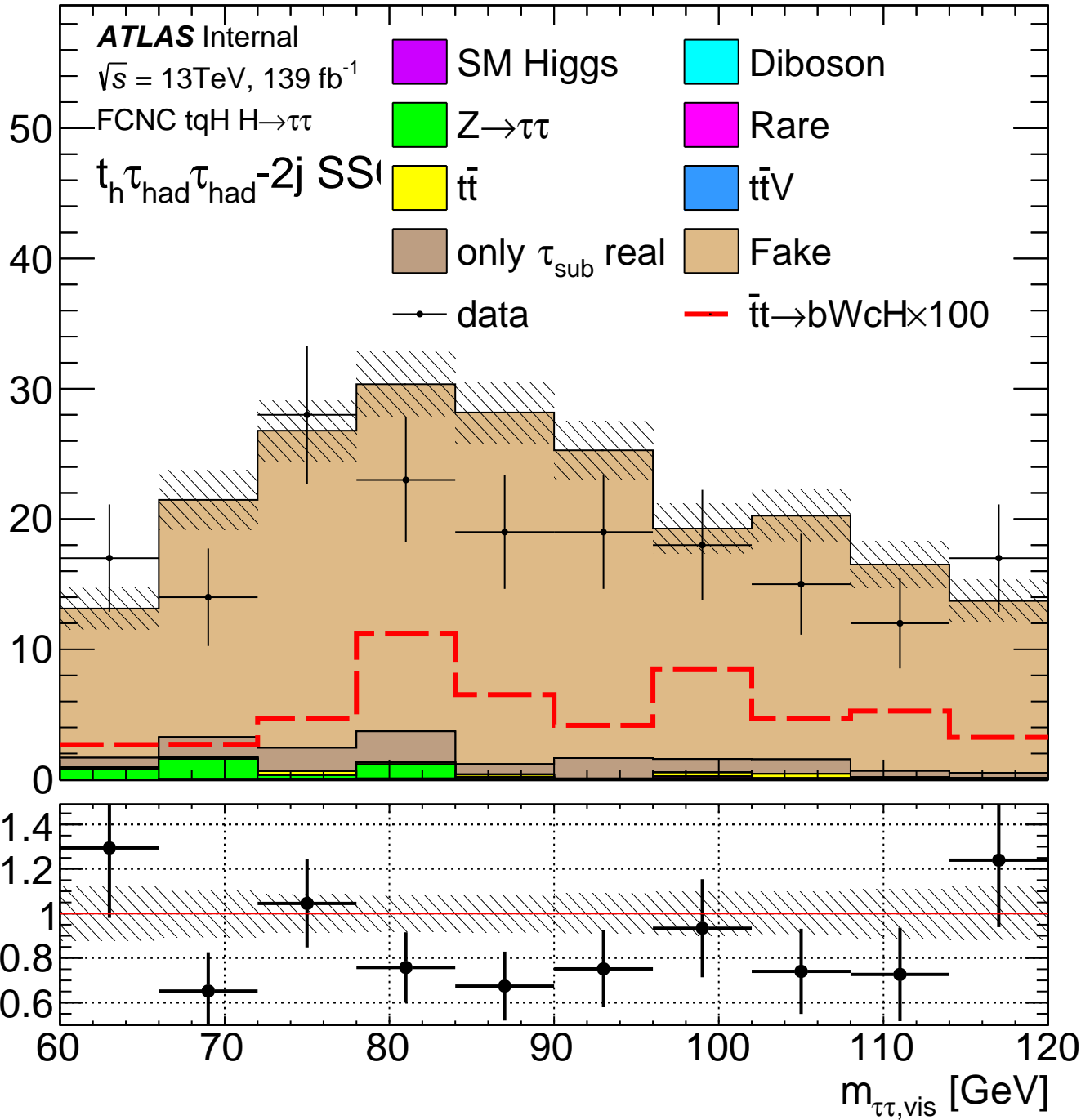
Diboson

Rare

$t\bar{t}V$

Fake

$t\bar{t} \rightarrow bWcH \times 100$



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SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only  $\tau_{\text{sub}}$  real

data

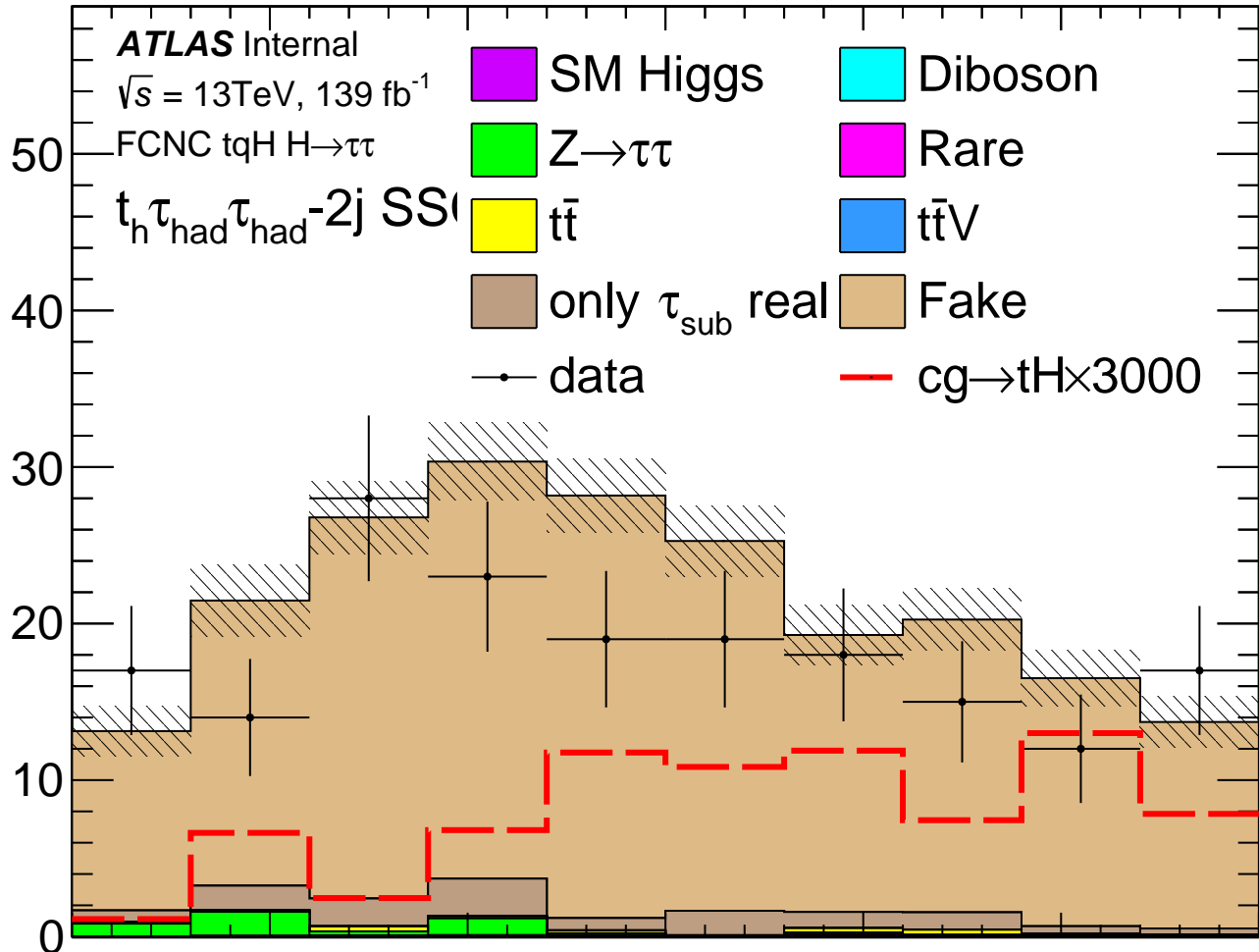
Diboson

Rare

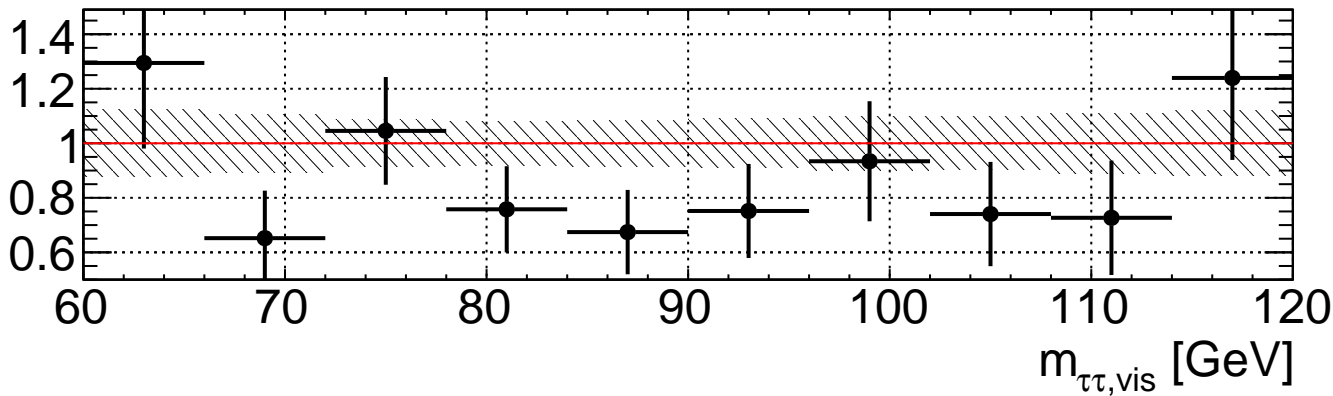
$t\bar{t}V$

Fake

$cg \rightarrow tH \times 3000$



Data/Bkg



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SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only  $\tau_{\text{sub}}$  real

data

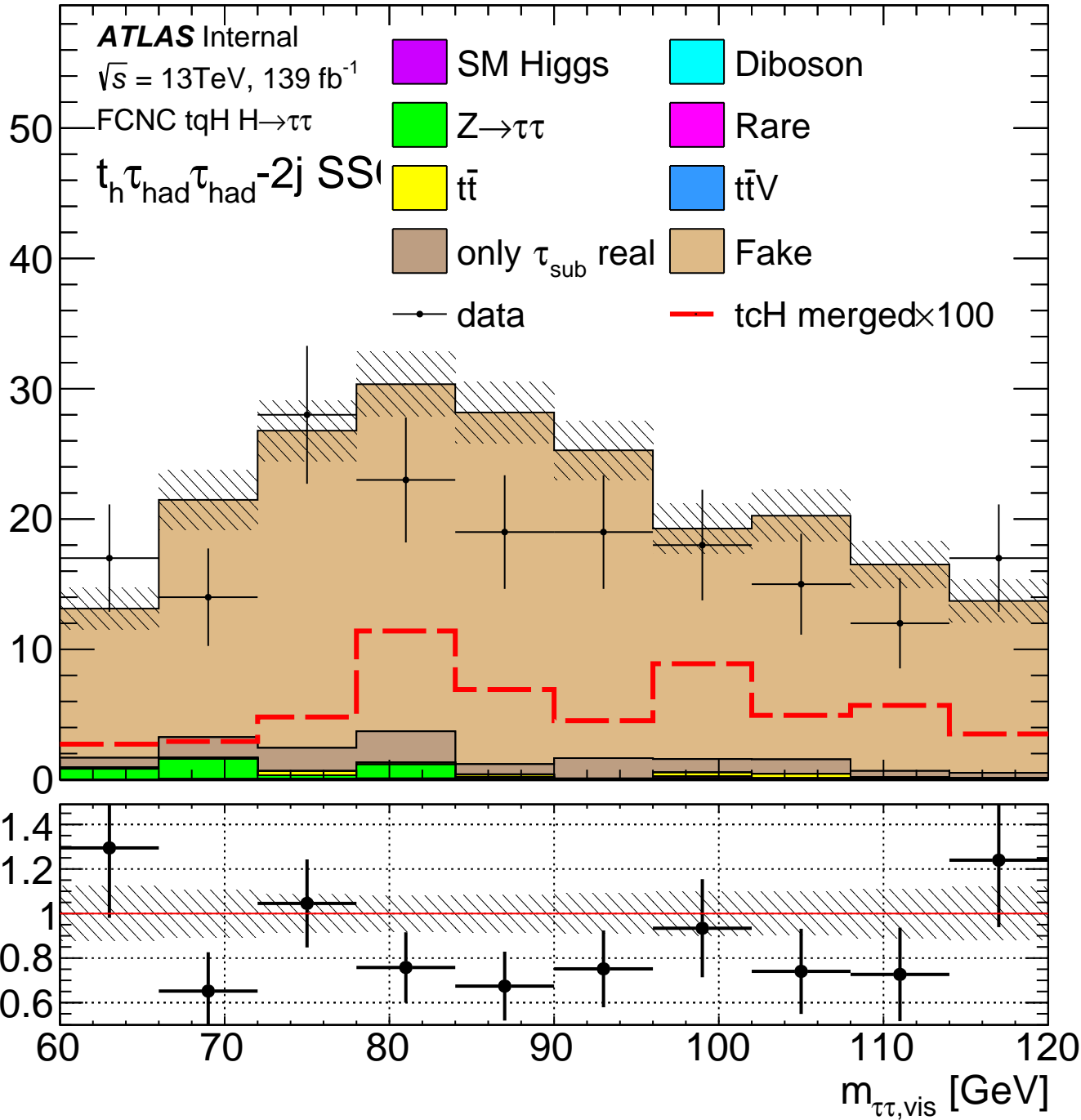
Diboson

Rare

$t\bar{t}V$

Fake

tcH merged  $\times 100$



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FCNC tqH  $H \rightarrow \tau\tau$

$t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only  $\tau_{\text{sub}}$  real

data

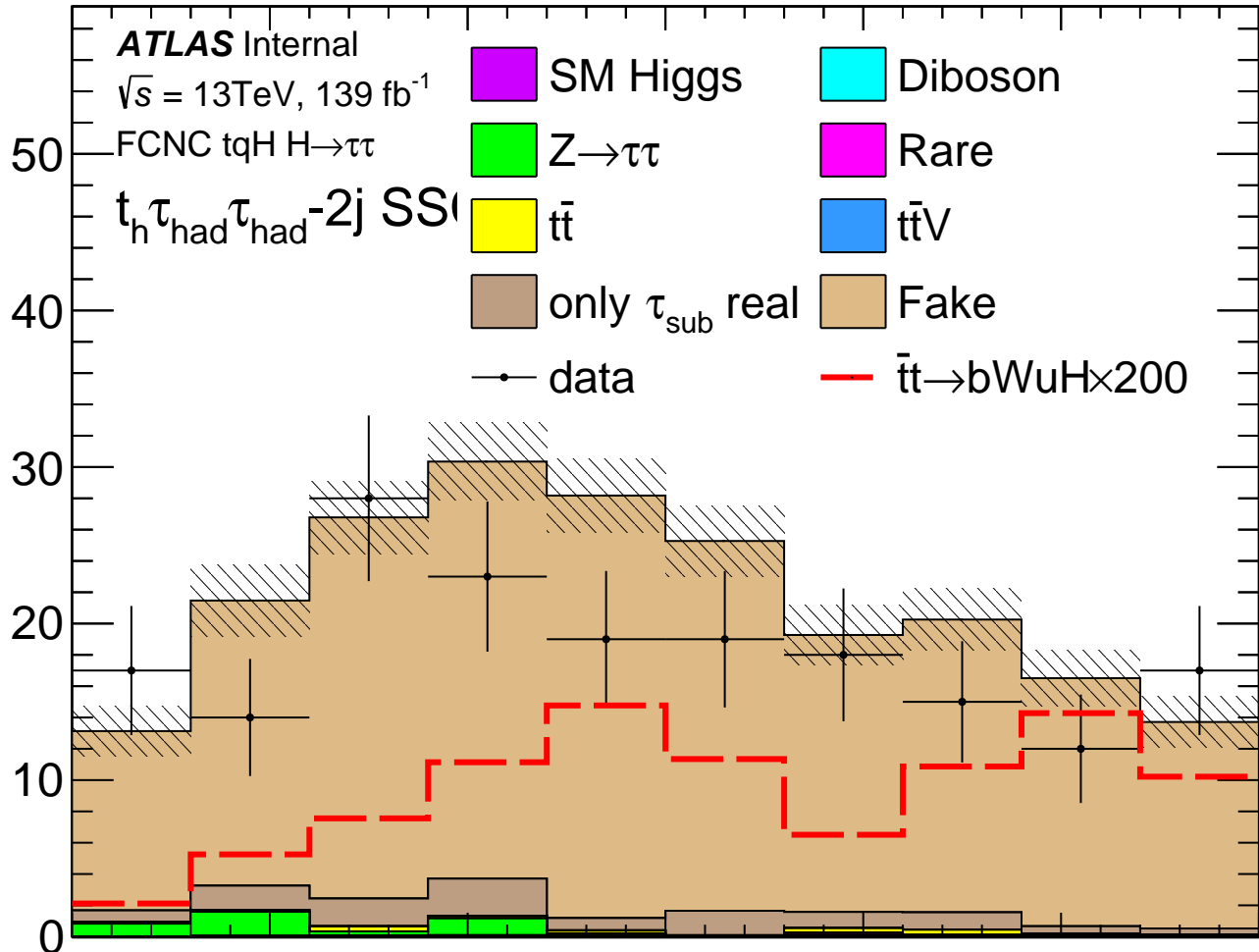
Diboson

Rare

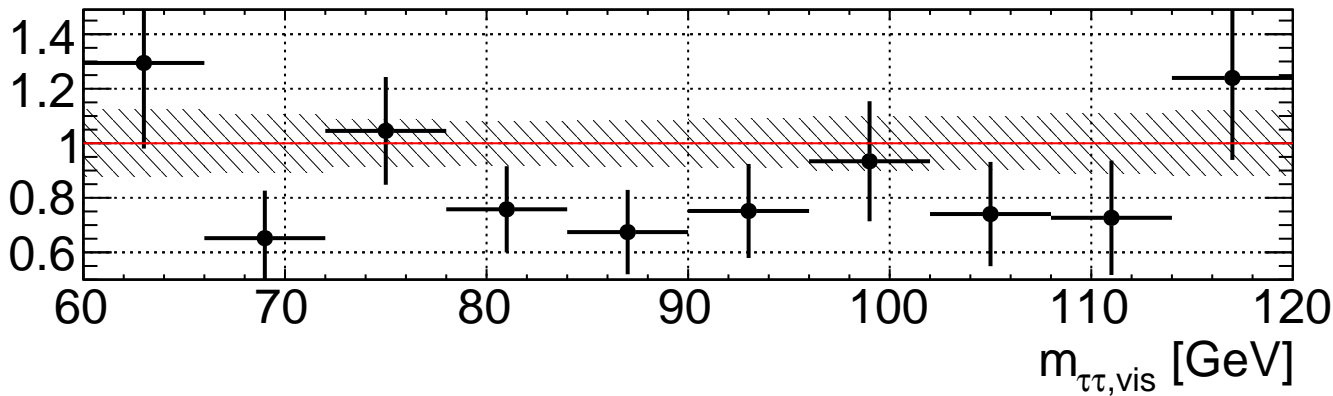
$t\bar{t}V$

Fake

$t\bar{t} \rightarrow bWuH \times 200$



Data/Bkg



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$\sqrt{s} = 13\text{TeV}, 139\text{ fb}^{-1}$

FCNC tqH  $H \rightarrow \tau\tau$

$t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only  $\tau_{\text{sub}}$  real

data

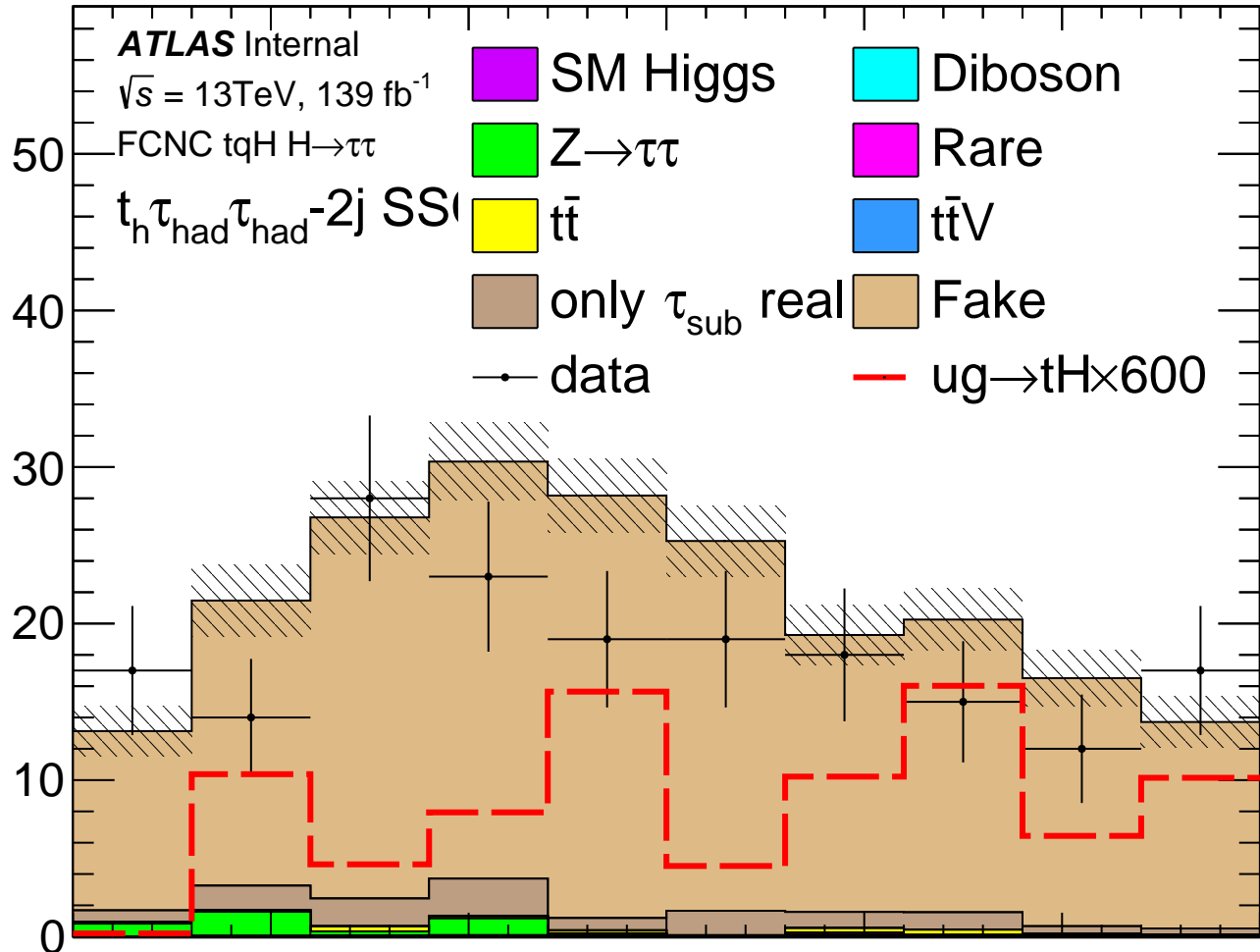
Diboson

Rare

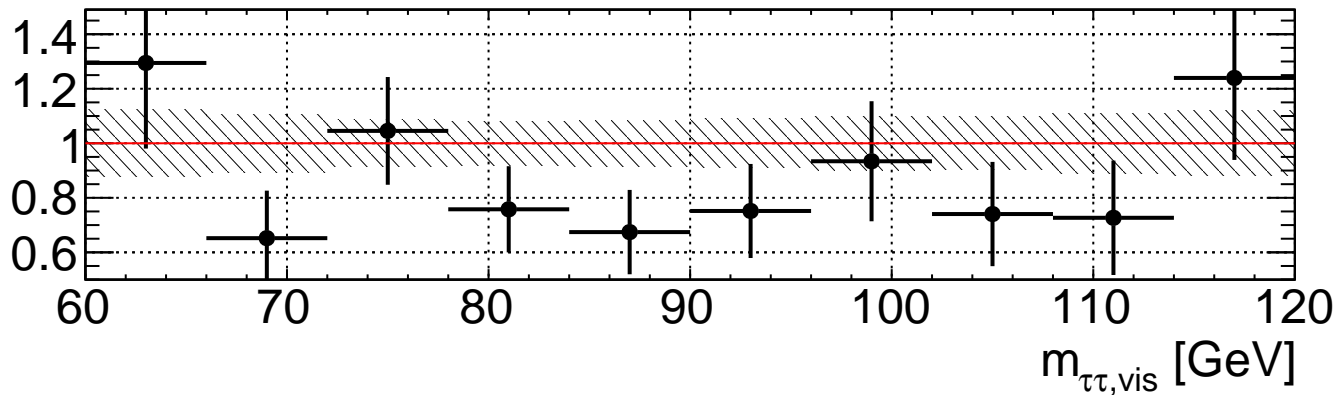
$t\bar{t}V$

Fake

$u g \rightarrow t H \times 600$



Data/Bkg



Events / 6.00 GeV

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FCNC tqH  $H \rightarrow \tau\tau$

$t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only  $\tau_{\text{sub}}$  real

data

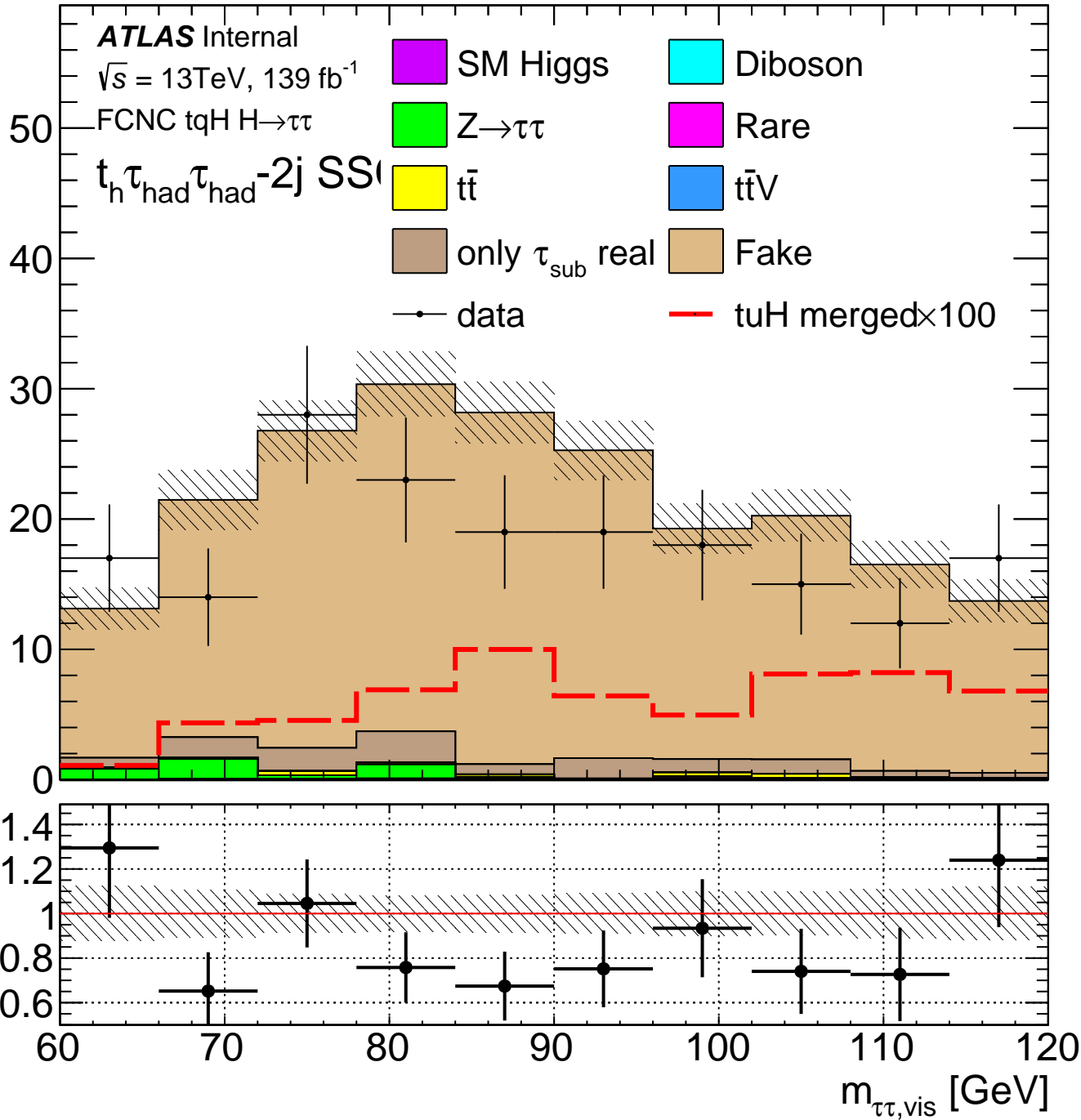
Diboson

Rare

$t\bar{t}V$

Fake

tuH merged  $\times 100$



Events / 6.00 GeV

**ATLAS** Internal $\sqrt{s} = 13\text{TeV}, 139\text{ fb}^{-1}$ FCNC tqH  $H \rightarrow \tau\tau$  $t_h \tau_{\text{had}} \tau_{\text{had}} - 2j \text{ SS}($ 

SM Higgs

 $Z \rightarrow \tau\tau$  $t\bar{t}$ only  $\tau_{\text{sub}}$  real

data

 $cg \rightarrow tH \times 3000$  $ug \rightarrow tH \times 600$ 

Diboson

Rare

 $t\bar{t}V$ 

Fake

 $t\bar{t} \rightarrow bWcH \times 100$  $t\bar{t} \rightarrow bWuH \times 200$ 

Data/Bkg

