

Events / 0.30

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 τ_{sub} real

data

Diboson

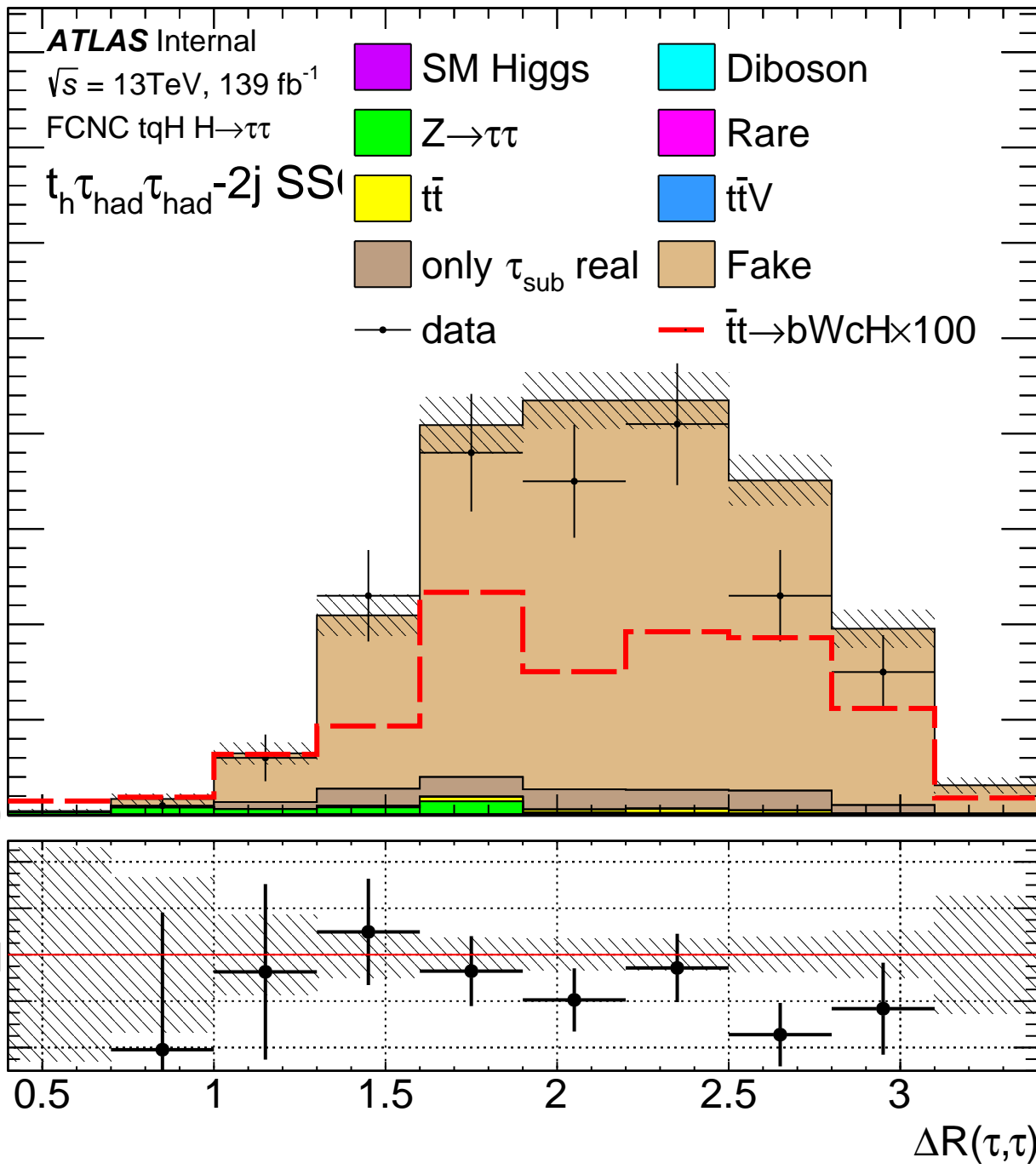
Rare

 $t\bar{t}V$

Fake

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

Data/Bkg

 $\Delta R(\tau, \tau)$ 

Events / 0.30

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 τ_{sub} real

data

Diboson

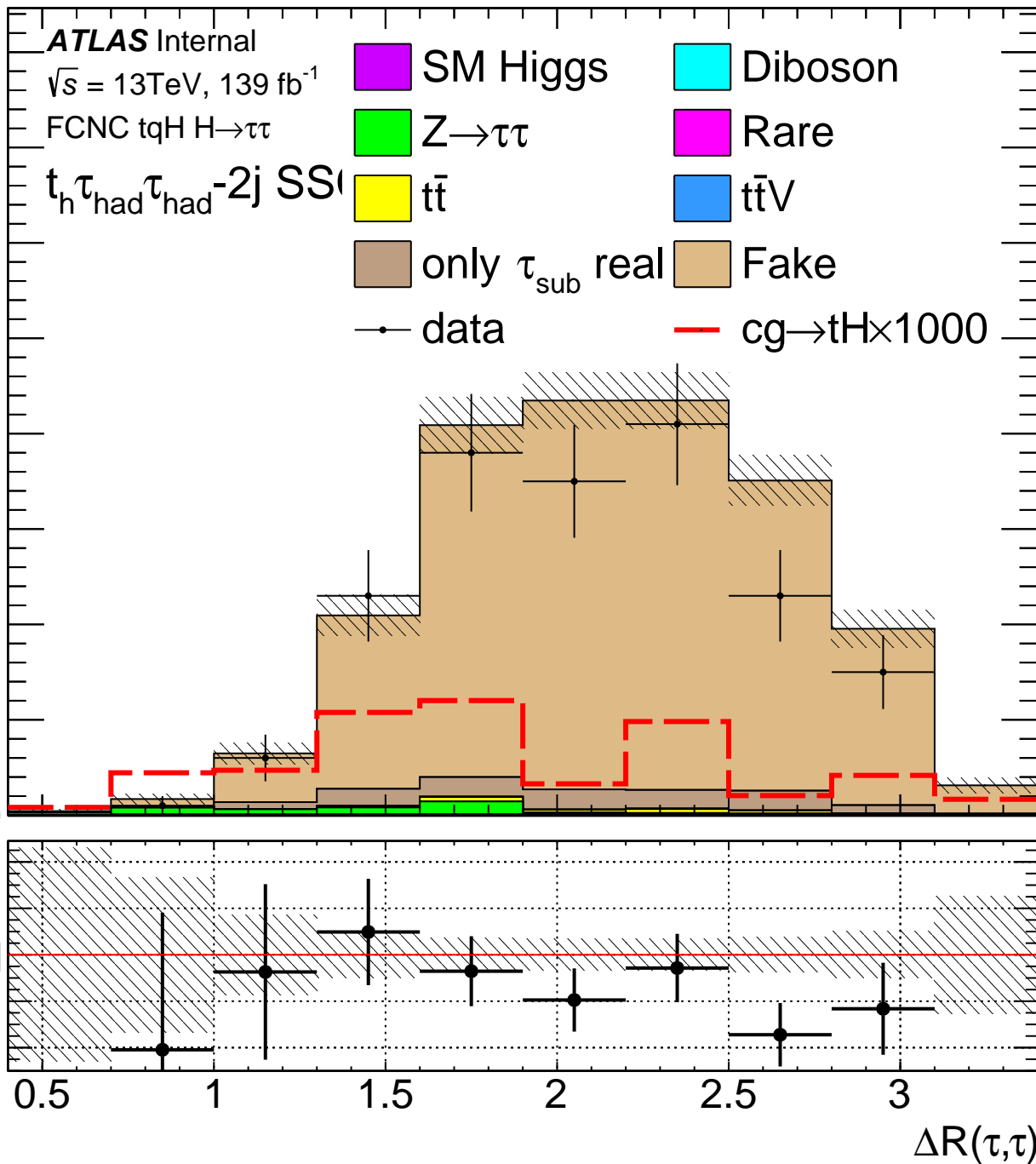
Rare

 $t\bar{t}V$

Fake

 $cg \rightarrow tH \times 1000$

Data/Bkg

 $\Delta R(\tau, \tau)$ 

Events / 0.30

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 τ_{sub} real

data

Diboson

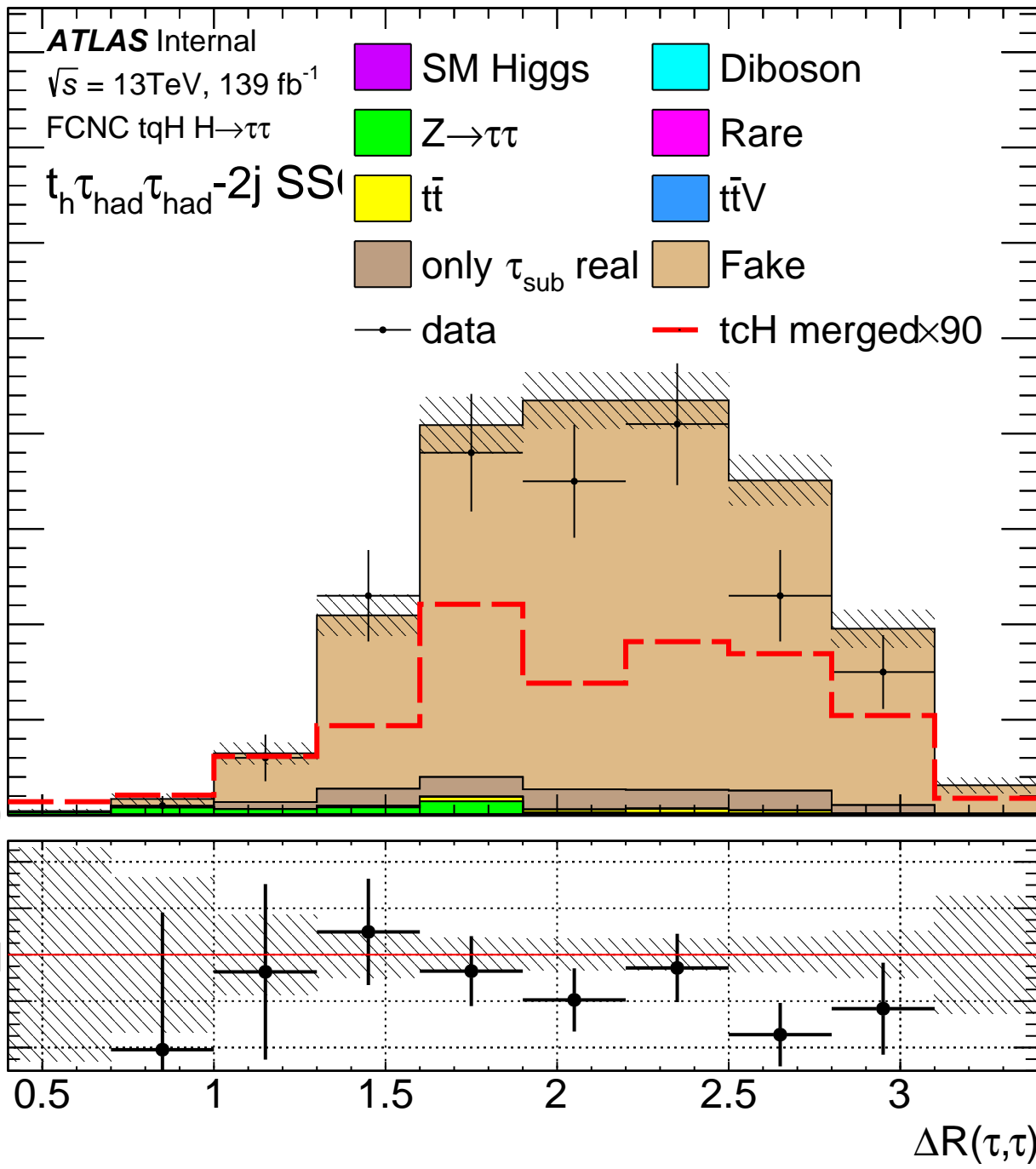
Rare

 $t\bar{t}V$

Fake

tcH merged $\times 90$

Data/Bkg

 $\Delta R(\tau, \tau)$ 

Events / 0.30

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 τ_{sub} real

data

Diboson

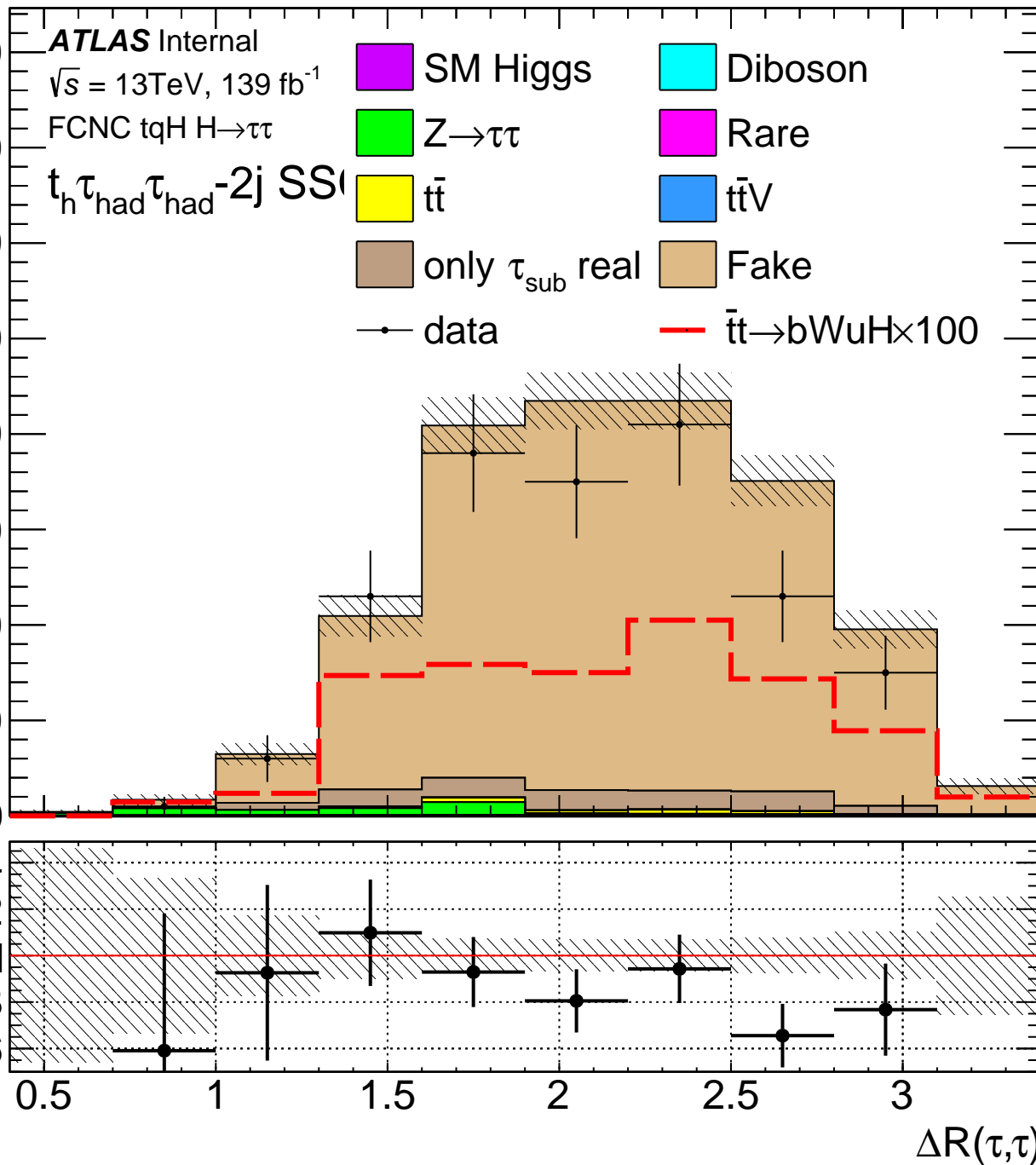
Rare

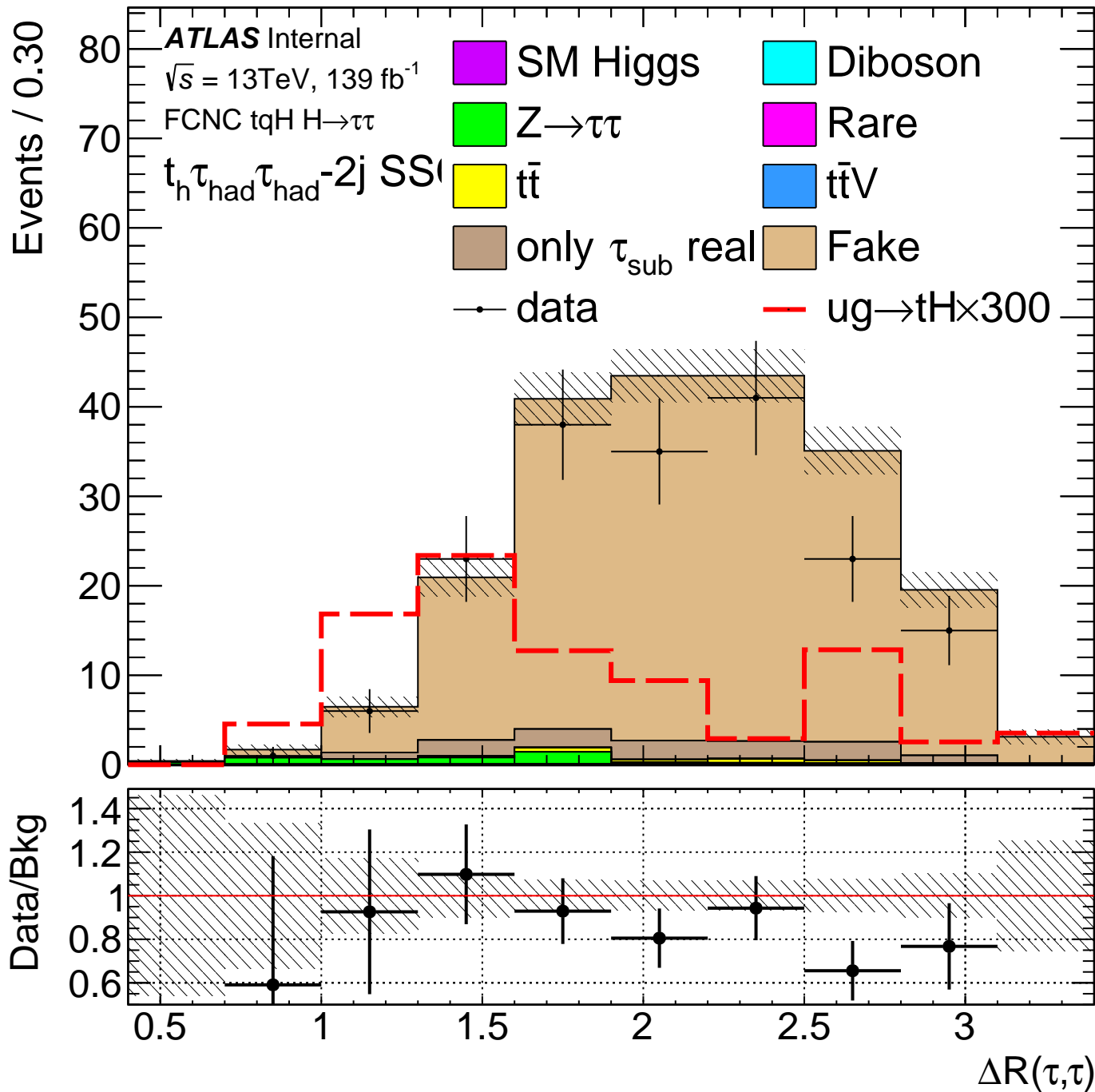
 $t\bar{t}V$

Fake

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

Data/Bkg

 $\Delta R(\tau, \tau)$ 



Events / 0.30

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 τ_{sub} real

—•— data

Diboson

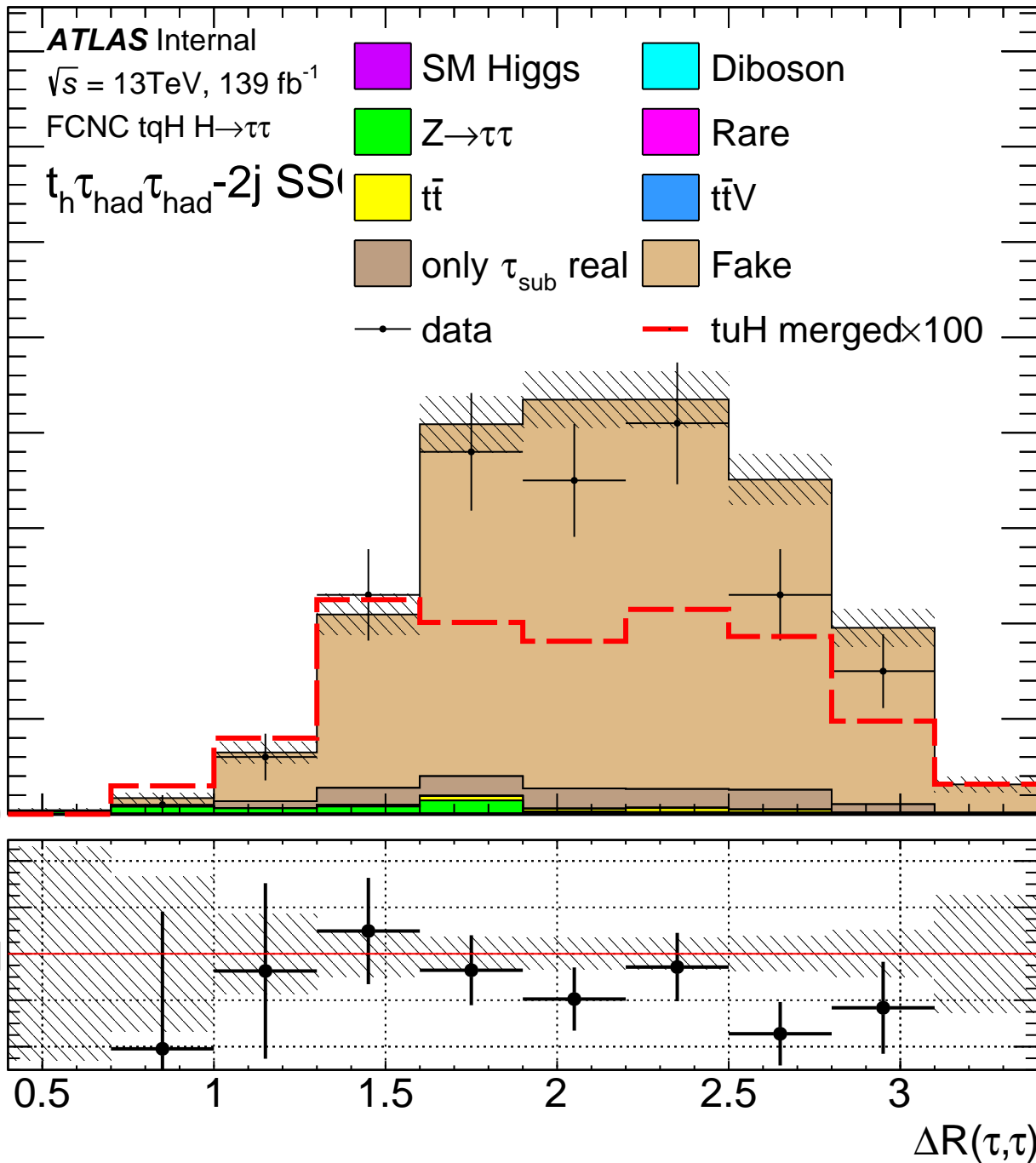
Rare

 $t\bar{t}V$

Fake

— tuH merged $\times 100$

Data/Bkg

 $\Delta R(\tau, \tau)$ 

Events / 0.30

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 τ_{sub} real

data

 $cg \rightarrow tH \times 1000$ $ug \rightarrow tH \times 300$

Diboson

Rare

 $t\bar{t}V$

Fake

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

Data/Bkg

