

Events / 40.00 GeV

ATLAS Internal

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

FCNC tqH $H \rightarrow \tau\tau$

$t_h \tau_{\text{had}} \tau_{\text{had}}^{-3j} SS(\tau_{\text{had}})$

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only τ_{sub} real

data

Diboson

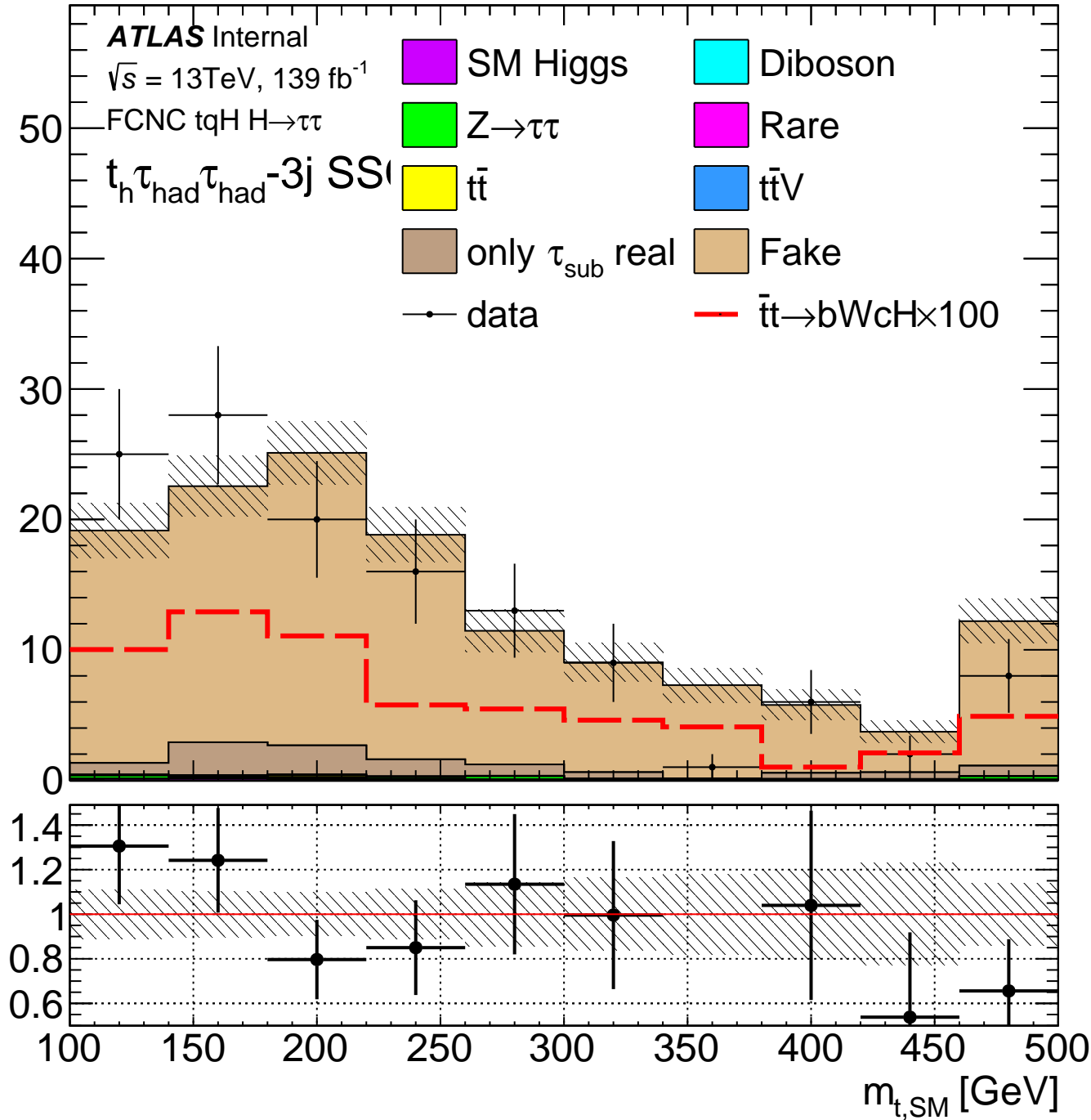
Rare

$t\bar{t}V$

Fake

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

Data/Bkg



Events / 40.00 GeV

ATLAS Internal

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

FCNC tqH $H \rightarrow \tau\tau$

$t_h \tau_{\text{had}} \tau_{\text{had}} - 3j \text{ SS}($

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only τ_{sub} real

data

Diboson

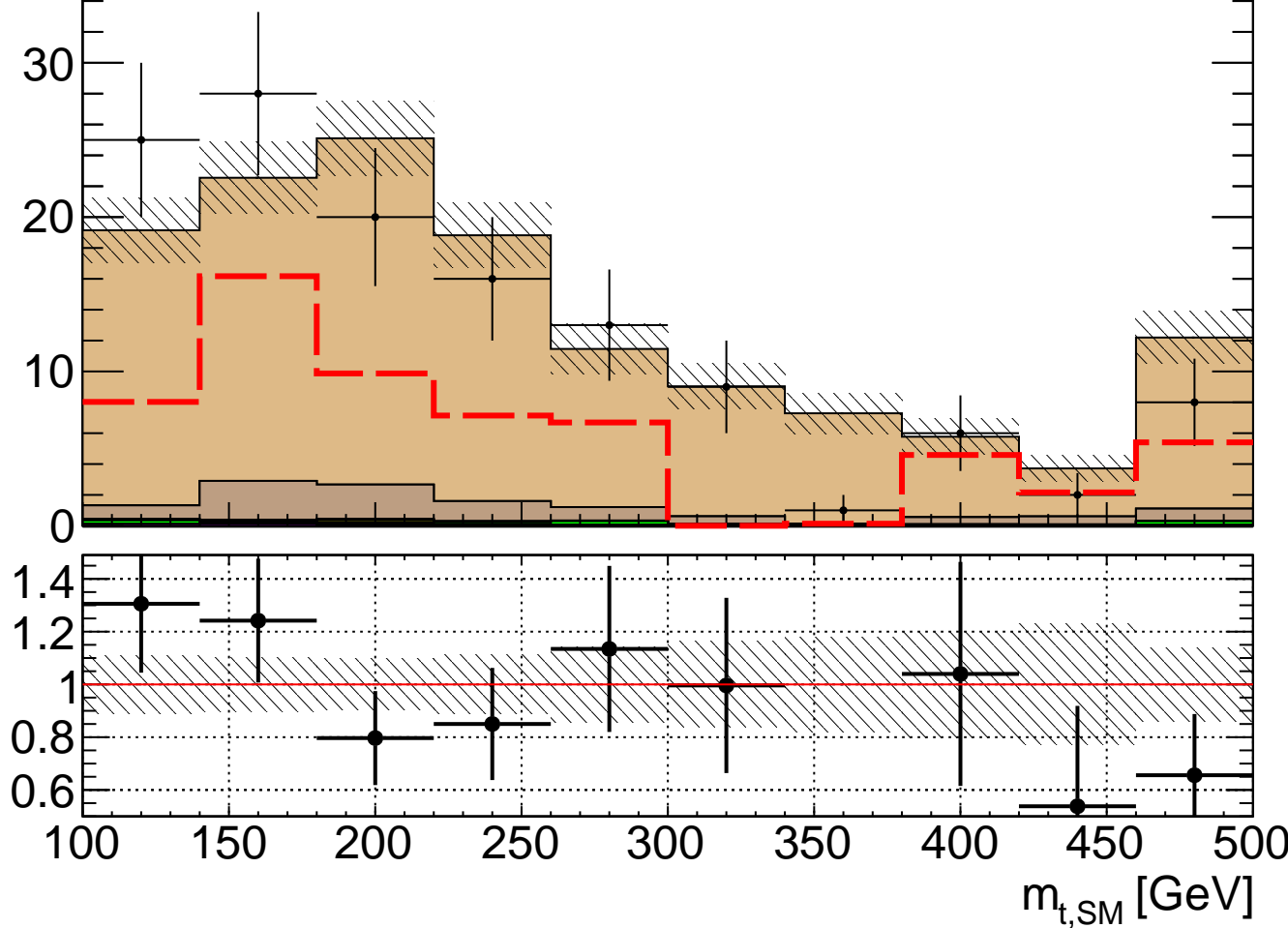
Rare

$t\bar{t}V$

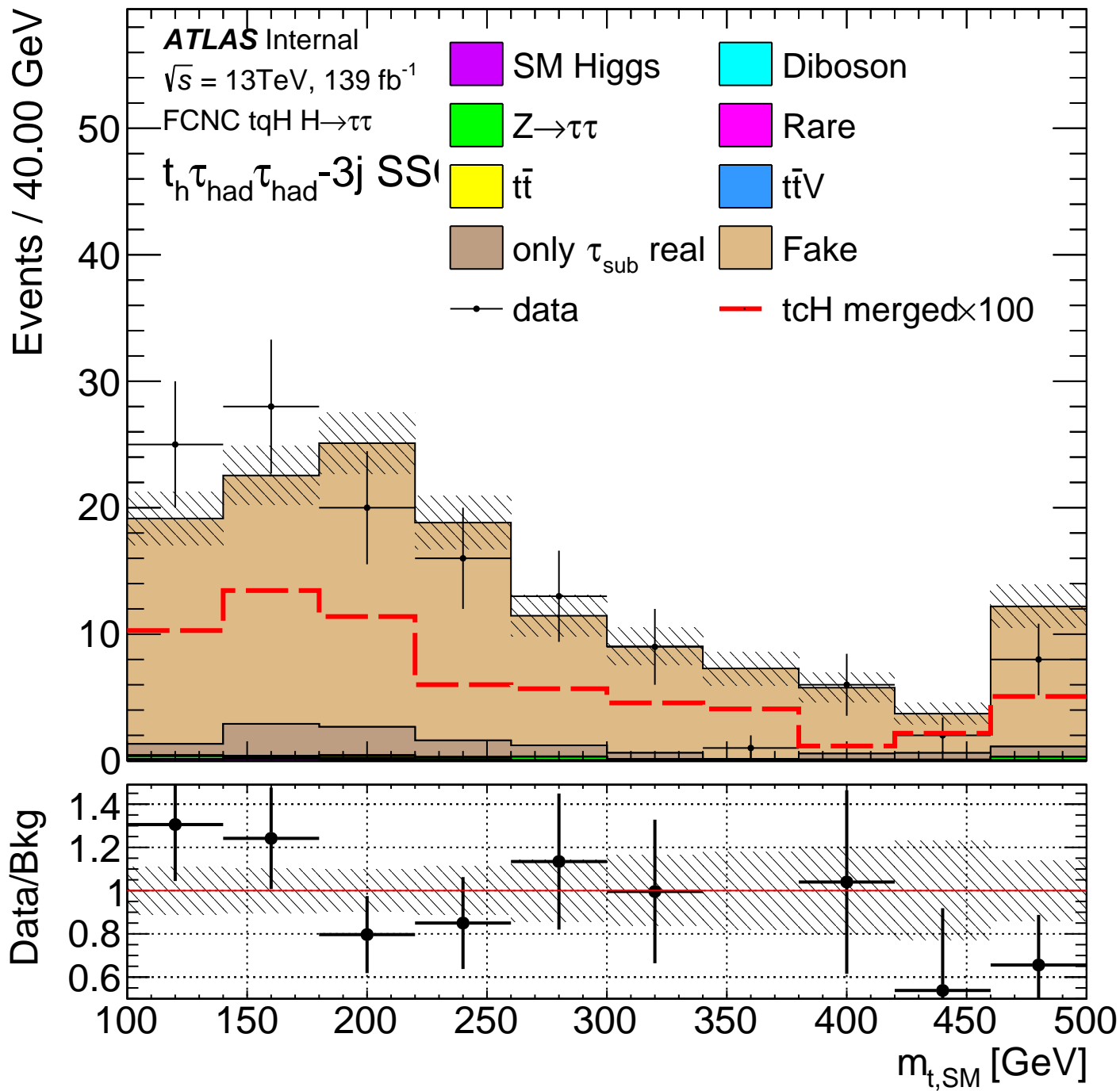
Fake

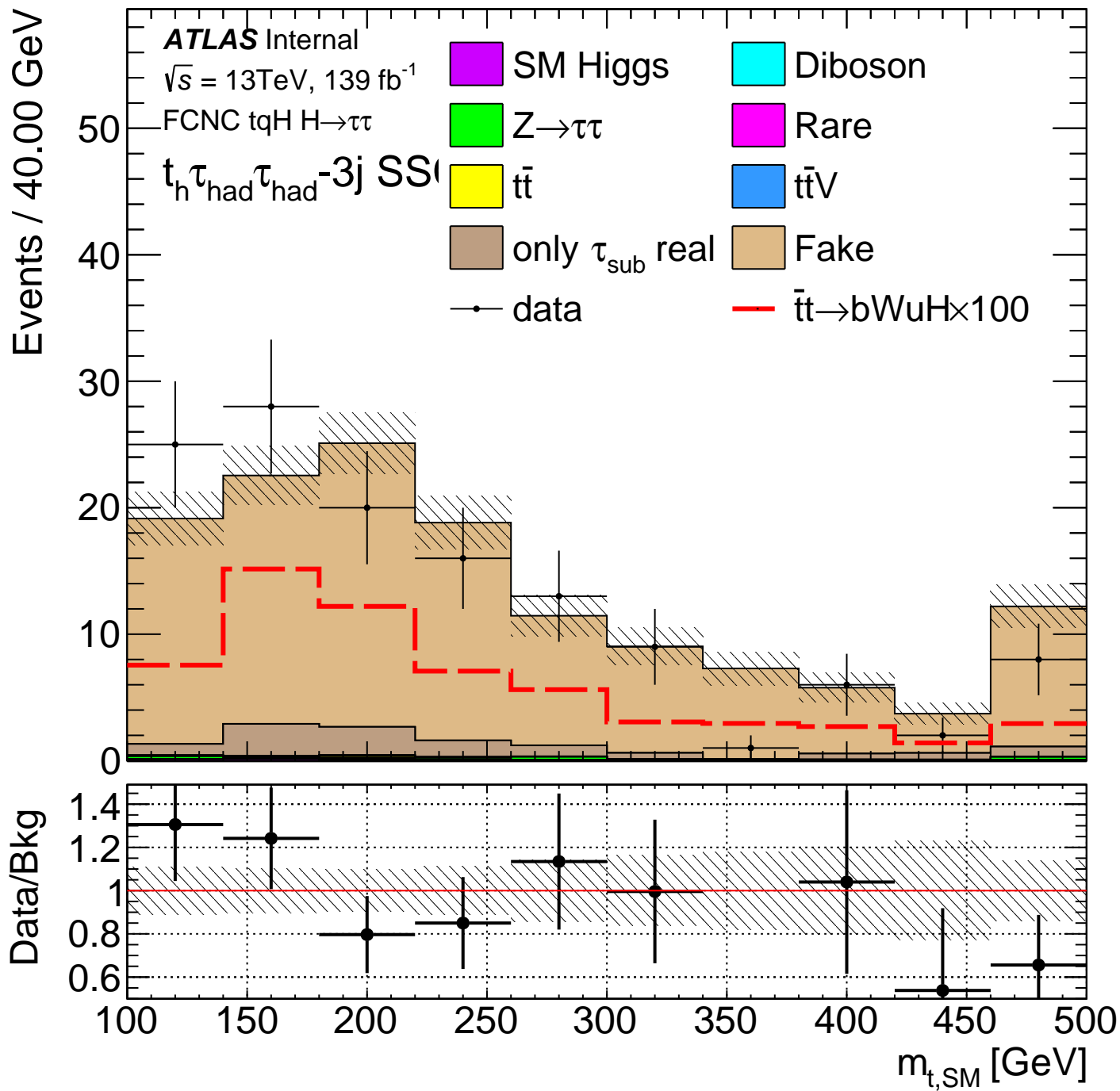
$cg \rightarrow tH \times 3000$

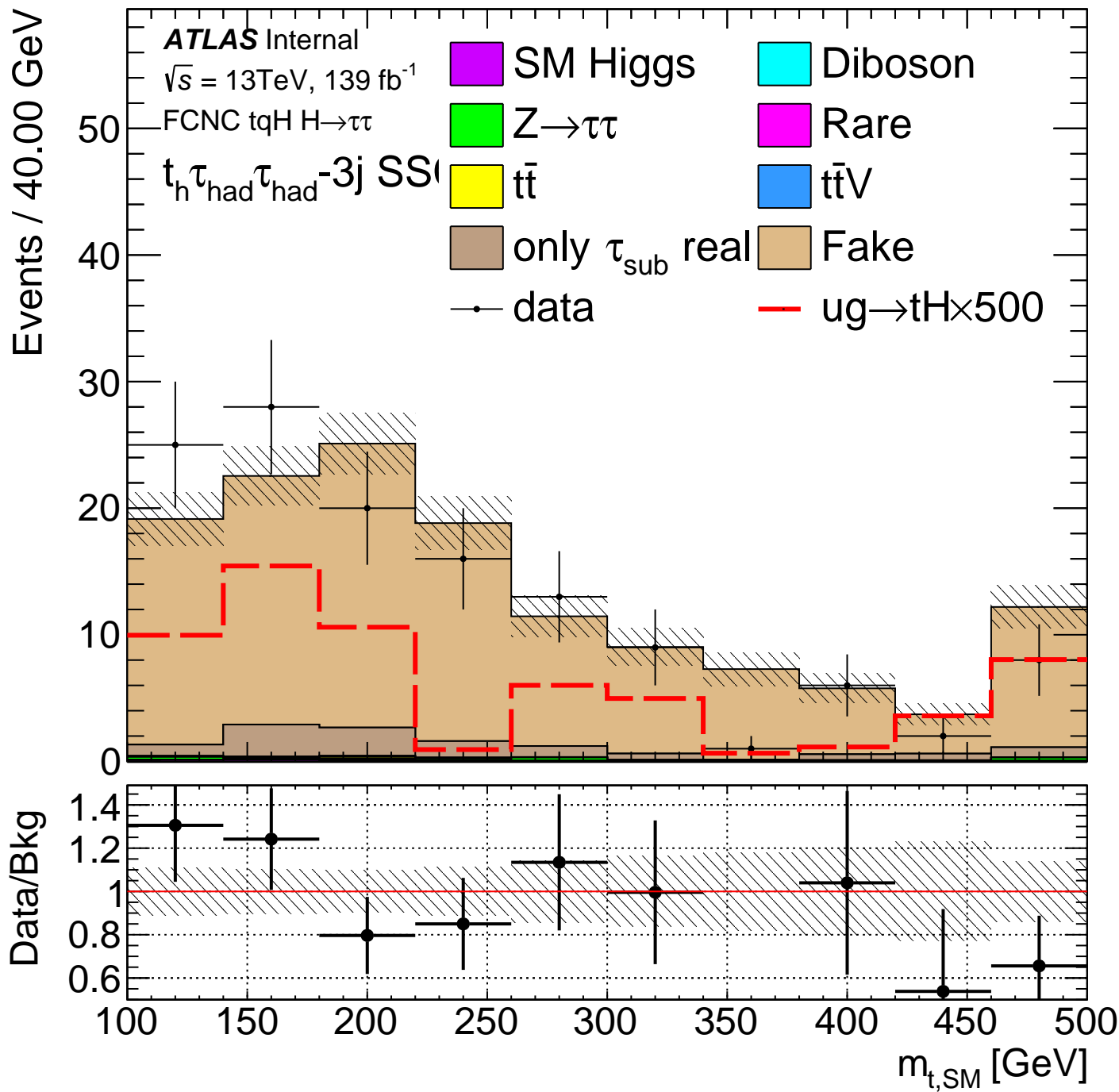
Data/Bkg



$m_{t,SM} [\text{GeV}]$







Events / 40.00 GeV

ATLAS Internal

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

FCNC tqH $H \rightarrow \tau\tau$

$t_h \tau_{\text{had}} \tau_{\text{had}} - 3j \text{ SS}($

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only τ_{sub} real

data

Diboson

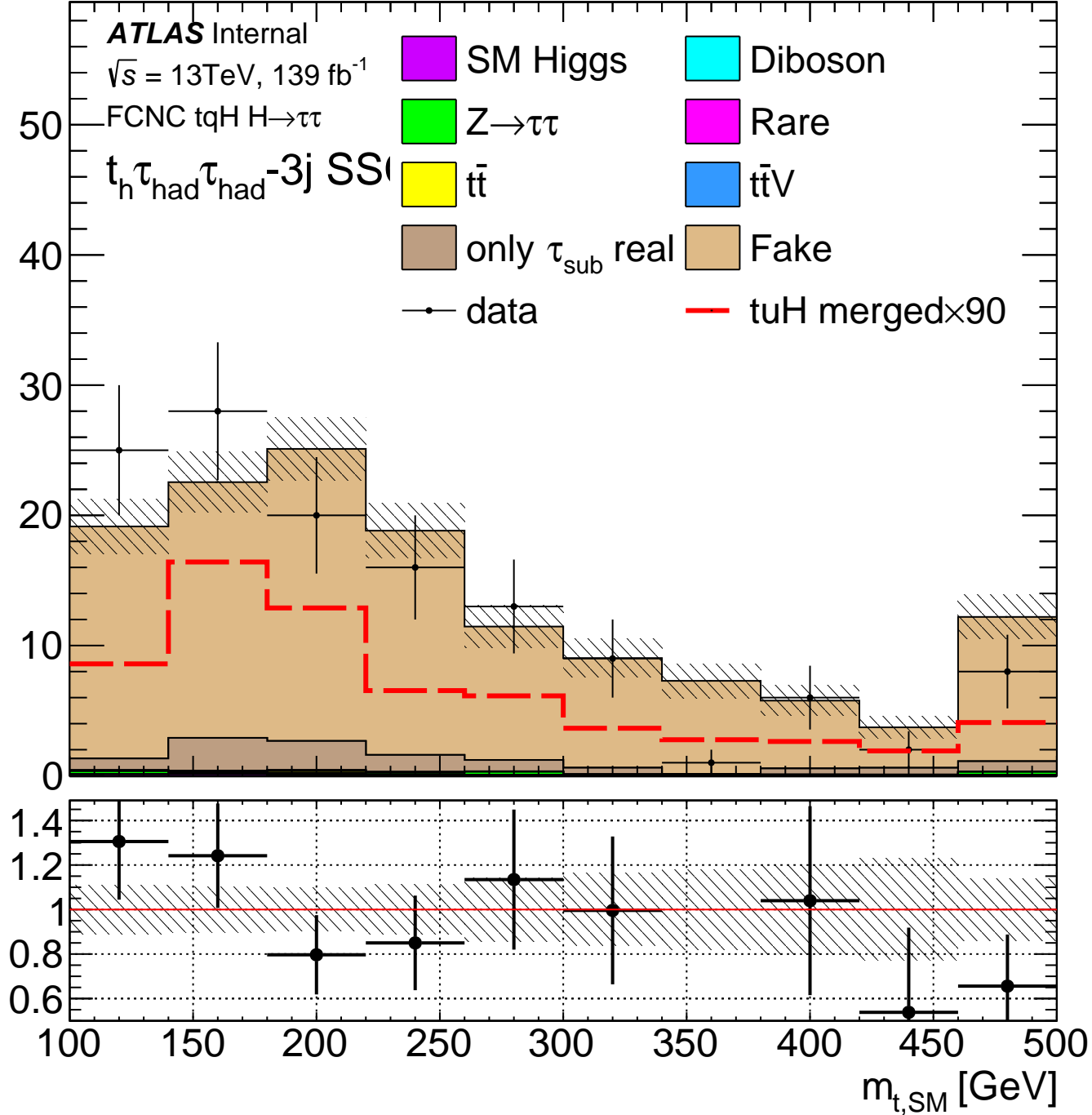
Rare

$t\bar{t}V$

Fake

tuH merged $\times 90$

Data/Bkg



Events / 40.00 GeV

ATLAS Internal

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

FCNC tqH $H \rightarrow \tau\tau$

$t_h \tau_{\text{had}} \tau_{\text{had}} - 3j \text{ SS}($

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only τ_{sub} real

data

$cg \rightarrow tH \times 3000$

$ug \rightarrow tH \times 500$

Diboson

Rare

$t\bar{t}V$

Fake

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

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

50

40

30

20

10

0

Data/Bkg

1.4

1.2

1.0

0.8

0.6

100

150

200

250

300

350

400

450

500

$m_{t,\text{SM}} [\text{GeV}]$

