













Events / 6.00 GeV

ATLAS Internal

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

FCNC $tqH \rightarrow \tau\tau$

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

SM Higgs

$Z \rightarrow \tau\tau$

$t\bar{t}$

only τ_{sub} real

data

$cg \rightarrow tH \times 4000$

$ug \rightarrow tH \times 700$

Diboson

Rare

$t\bar{t}V$

Fake

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

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

60

50

40

30

20

10

0

Data/Bkg

1.4

1.2

1.0

0.8

0.6

60

70

80

90

100

110

120

$m_{\tau\tau, \text{vis}} [\text{GeV}]$

