













Events / 0.07

ATLAS Internal $\sqrt{s} = 13\text{TeV}, 139\text{ fb}^{-1}$ FCNC tqH $H \rightarrow \tau\tau$

reg1mtau1ltau

SM Higgs

 $Z \rightarrow \tau\tau$ $t\bar{t}V$

—•— data

— $cg \rightarrow tH \times 64000$ — $ug \rightarrow tH \times 4000$

Diboson

 $t\bar{t}$ only τ_{sub} real— $t\bar{t} \rightarrow bWcH \times 2000$ — $t\bar{t} \rightarrow bWuH \times 1000$

Data/Bkg

1.4
1.2
1.0
0.8
0.6

0.3

0.4

0.5

0.6

0.7

0.8

0.9

1

 $E_{\text{vis-}\tau,2}/E_{\tau,2}$ 