

Events / 0.20

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

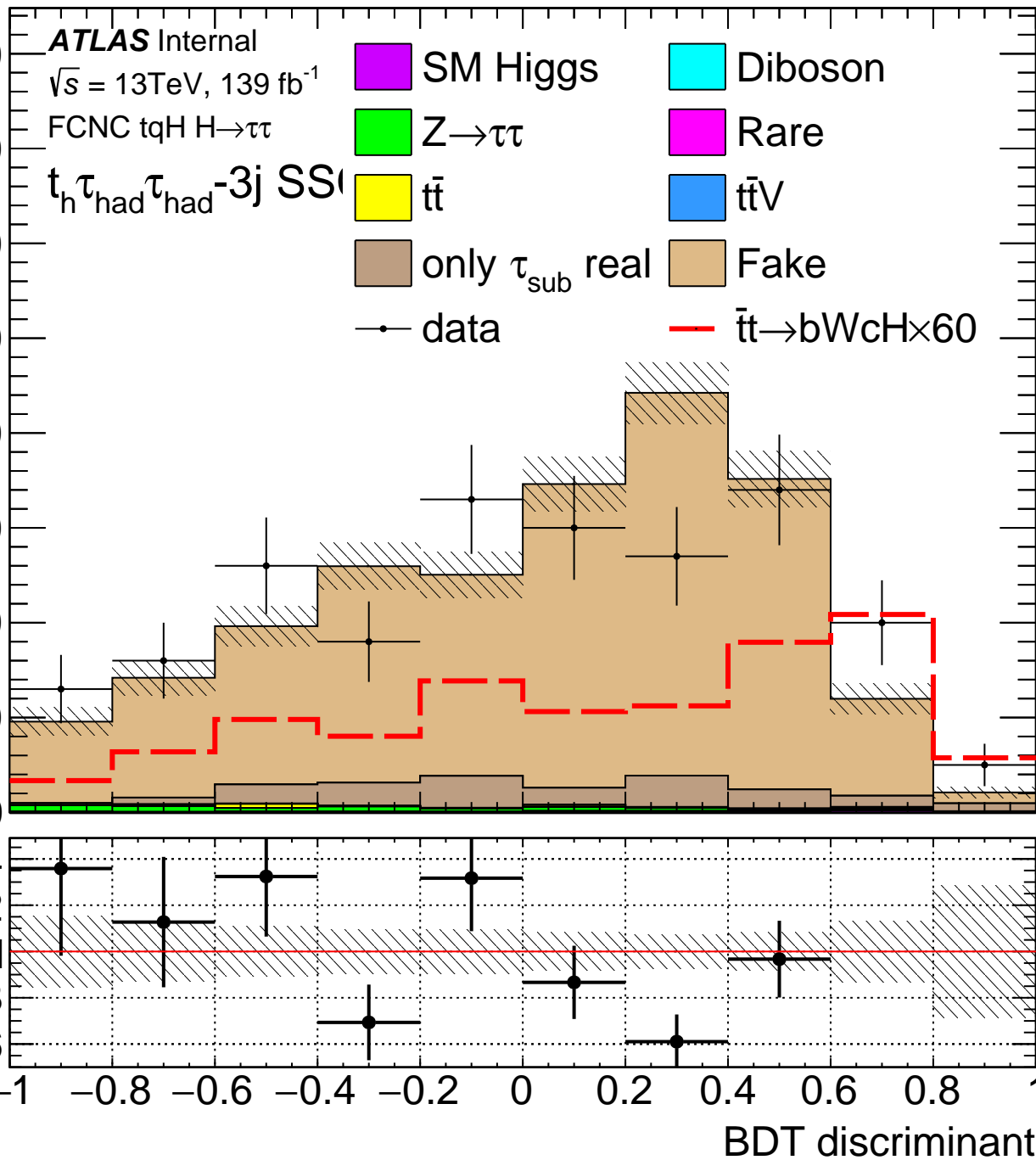
 $t\bar{t}V$

Fake

 $t\bar{t} \rightarrow bWcH \times 60$

Data/Bkg

BDT discriminant



Events / 0.20

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

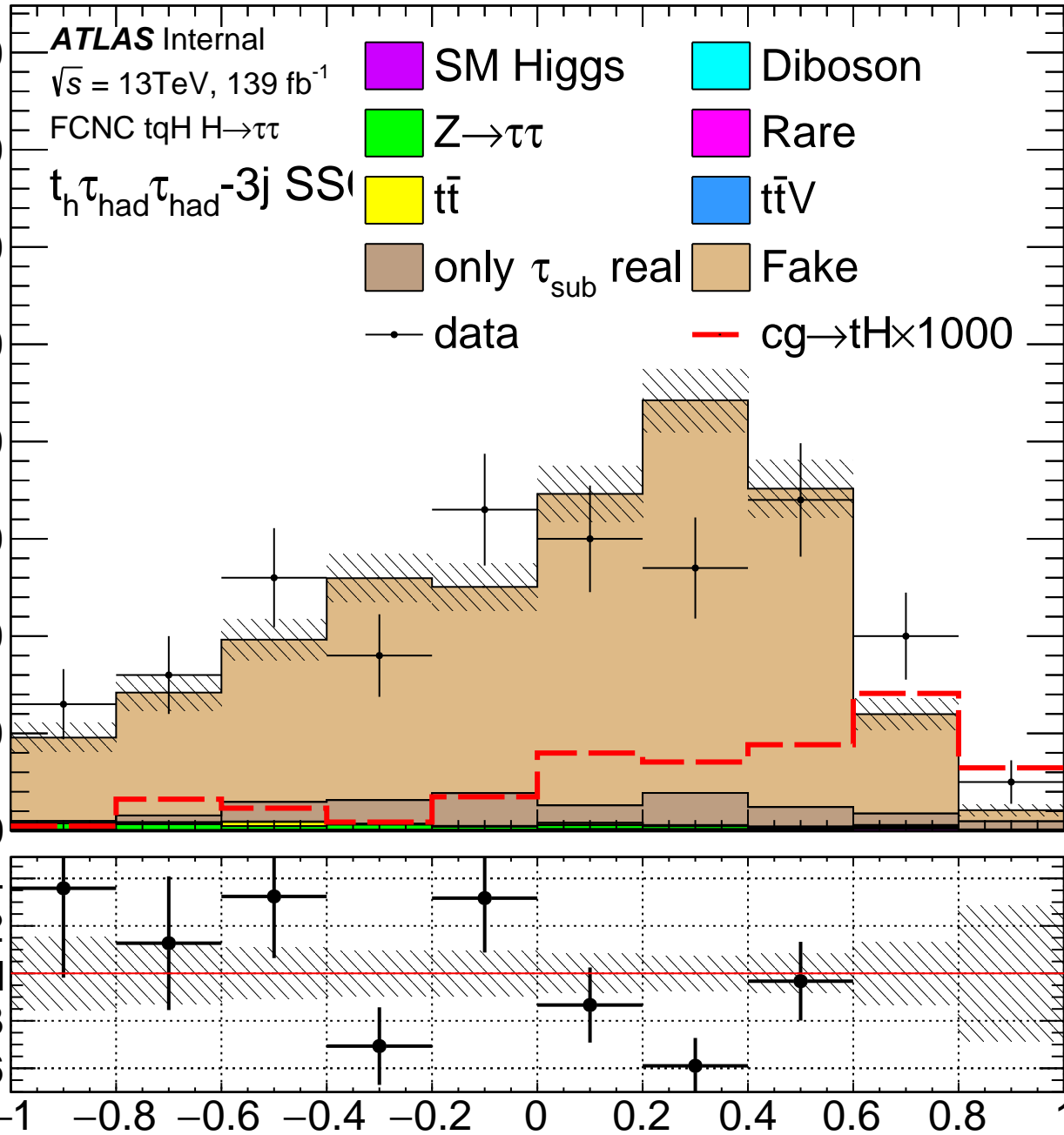
 $t\bar{t}V$

Fake

 $cg \rightarrow tH \times 1000$

Data/Bkg

BDT discriminant



Events / 0.20

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

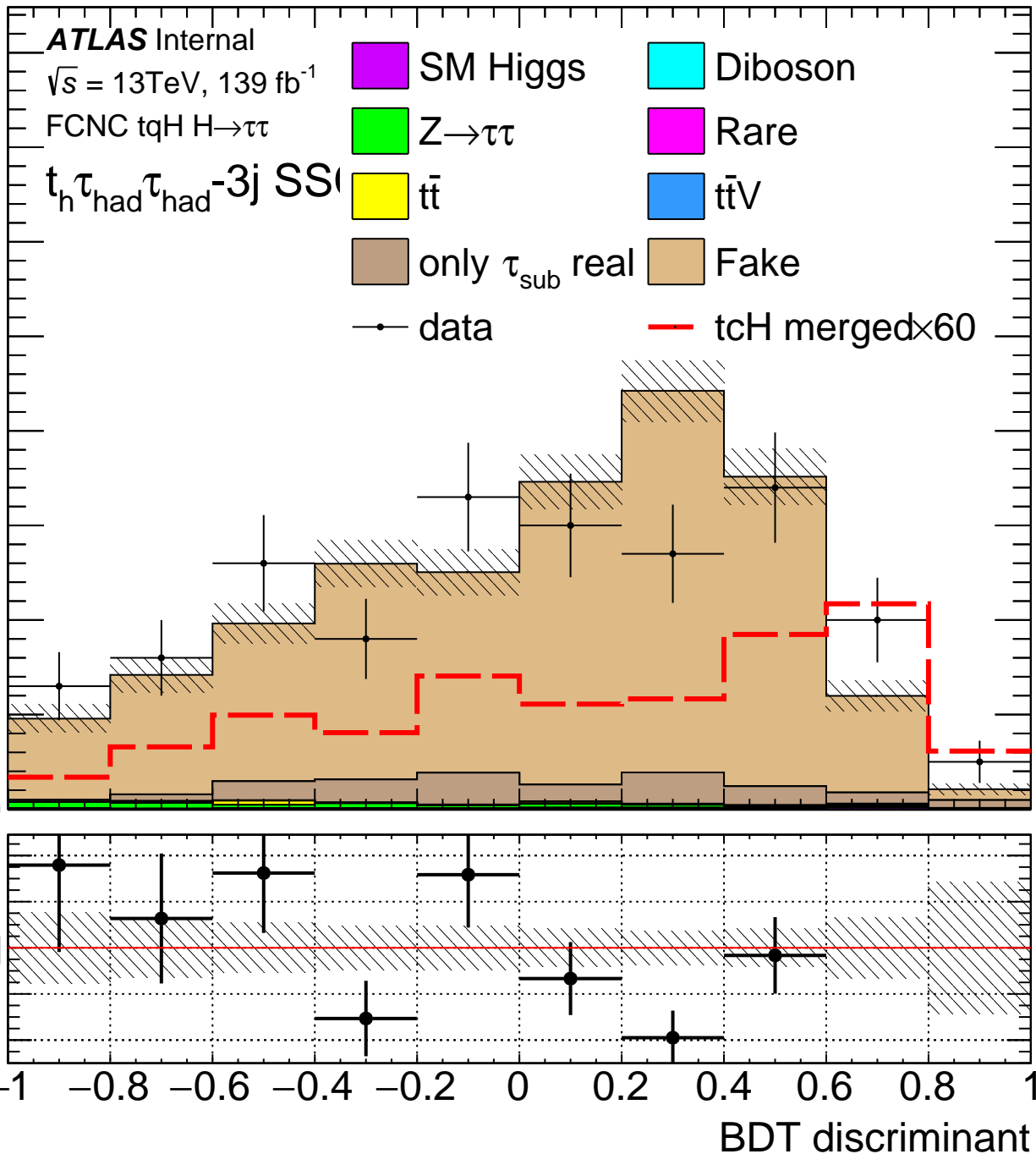
 $t\bar{t}V$

Fake

tcH merged $\times 60$

Data/Bkg

BDT discriminant



Events / 0.20

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

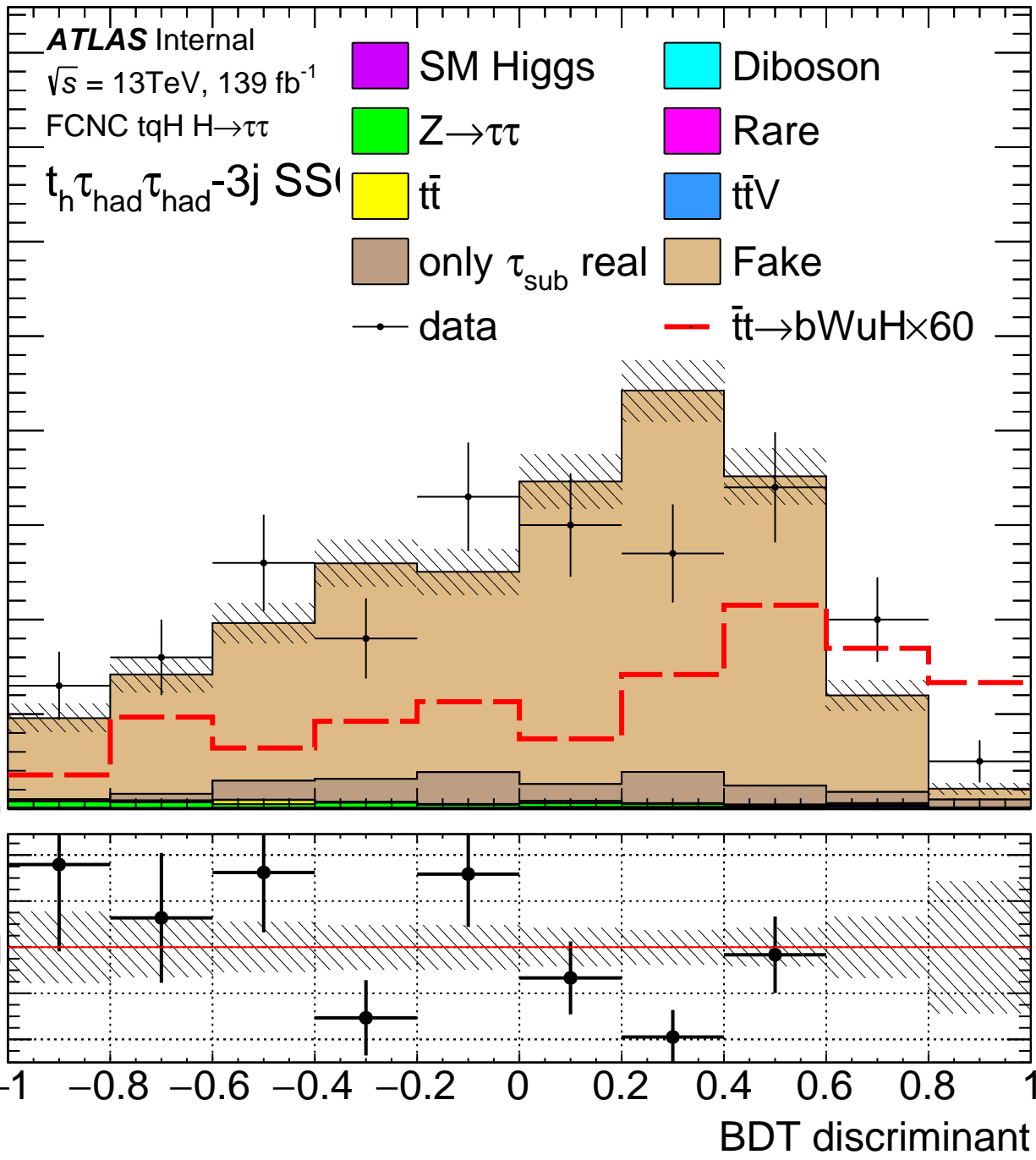
 $t\bar{t}V$

Fake

 $t\bar{t} \rightarrow bWuH \times 60$

Data/Bkg

BDT discriminant



Events / 0.20

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

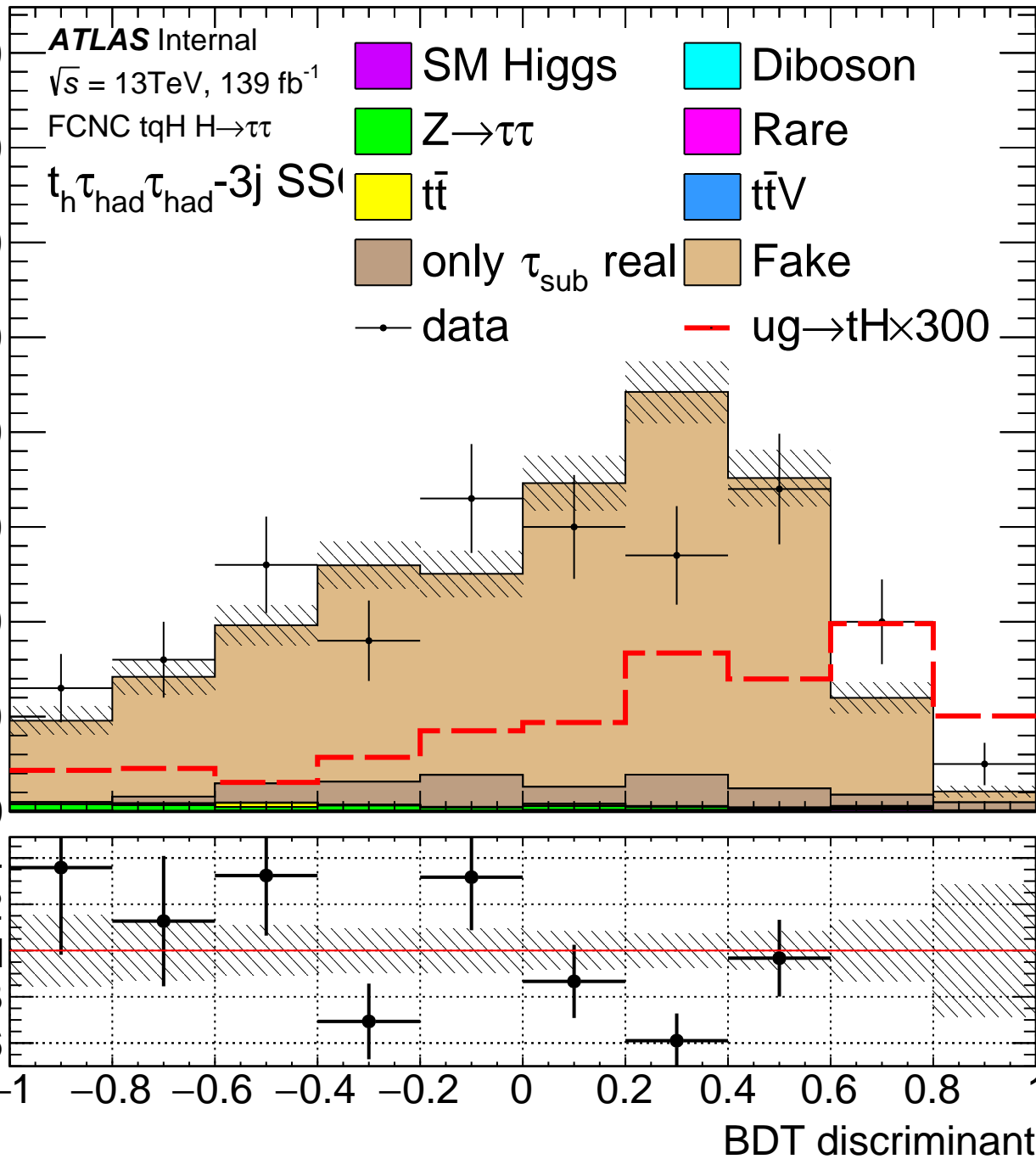
 $t\bar{t}V$

Fake

 $u\bar{g} \rightarrow tH \times 300$

Data/Bkg

BDT discriminant



Events / 0.20

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

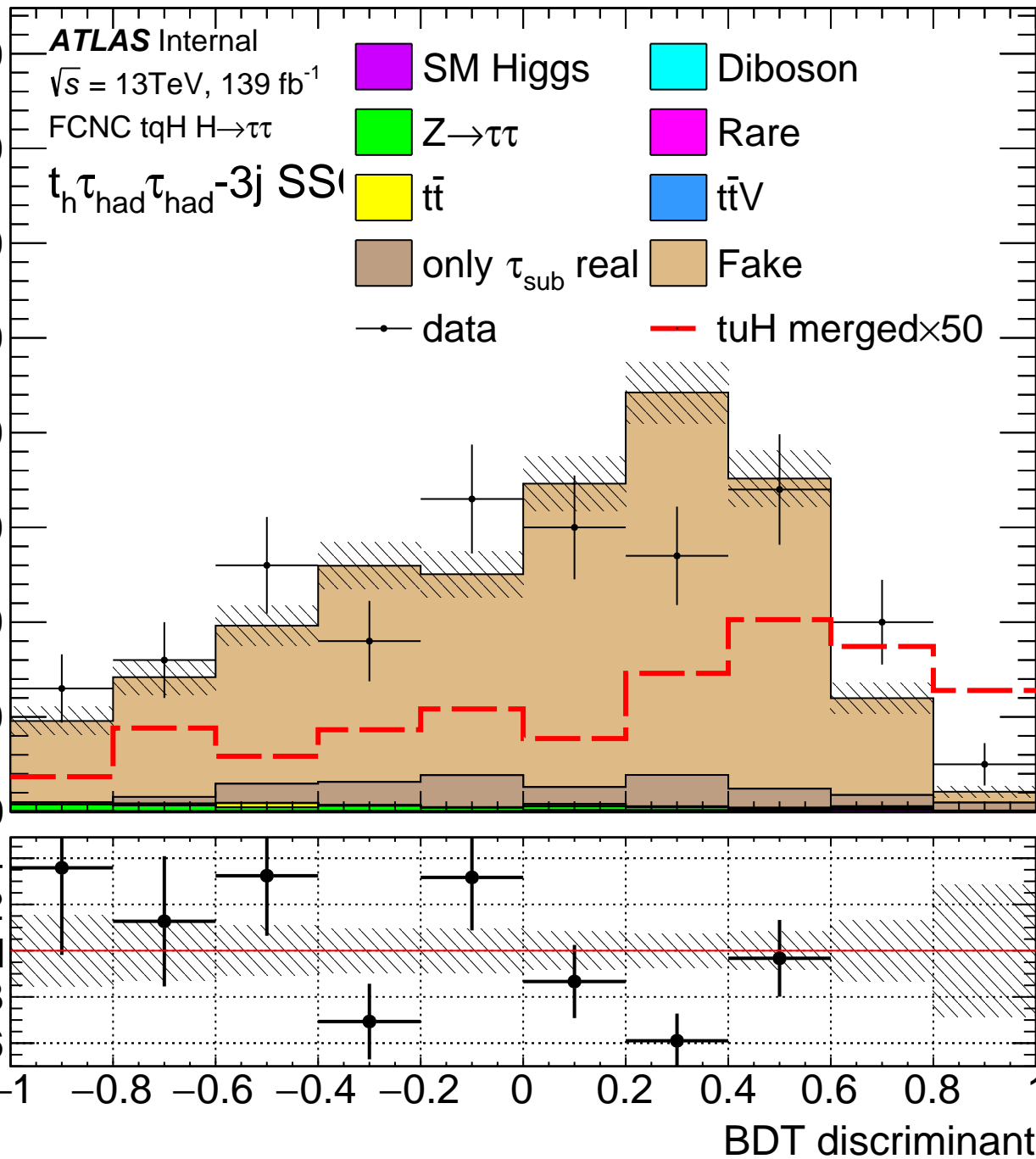
 $t\bar{t}V$

Fake

tuH merged $\times 50$

Data/Bkg

BDT discriminant



Events / 0.20

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

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

Diboson

Rare

 $t\bar{t}V$

Fake

 $t\bar{t} \rightarrow bWcH \times 60$ $t\bar{t} \rightarrow bWuH \times 60$

Data/Bkg

BDT discriminant

