

Name	Description
$\bar{t}\bar{t}$ system	
$b p_T$	p_T of the leading (subleading) b jet
b score	DEEPCSV score of the leading (subleading) b jet
$q p_T$	p_T of the leading (subleading) non-b jet
q score	DEEPCSV score of the leading (subleading) non-b jet
$\Delta R(b, q)$	minimum ΔR between the leading (subleading) b jet and any non-b jet
$\Delta R(q, q)$	ΔR between the two non-b jets closest to the leading (subleading) b jet
$m(q + q)$	invariant mass of the two non-b jets closest to the leading (subleading) b jet
$\Delta R(b, q + q)$	ΔR between the leading (subleading) b jet and the sum of the nearest two non-b jets
$m(b + q + q)$	invariant mass of the leading (subleading) b jet and the nearest two non-b jets
$\Delta R(Z/H, b + q + q)$	ΔR between the Z or Higgs boson candidate and the sum of the leading (subleading) b jet and the two non-b jets nearest to the leading (subleading) b jet
$\Delta R(Z/H, b + b + q + q + \ell)$	ΔR between the Z or Higgs boson candidate and the sum of the leading and subleading b jets, the two non-b jets nearest to the leading (subleading) b jet, and the lepton
$m_T(b + \ell, \vec{p}_T^{\text{miss}})$	transverse mass of the subleading b jet and the lepton
$m(Z/H + b)$	invariant mass of the Z or Higgs boson candidate and the nearest b jet
$m(b + b)$	invariant mass of the leading and subleading b jets
$\Delta R(b, b)$	ΔR between the leading and subleading b jets
$\Delta R(Z/H, q)$	ΔR between the Z or Higgs boson candidate and the leading non-b jet
$\Delta R(Z/H, b)$	ΔR between the Z or Higgs boson candidate and the leading b jet
$\Delta R(Z/H, \ell)$	ΔR between the Z or Higgs boson candidate and the lepton
$m(Z/H + \ell)$	invariant mass of the Z or Higgs boson candidate and the lepton
$\Delta R(b, \ell)$	ΔR between the leading (subleading) b jet and the lepton
$m(b + \ell)$	invariant mass of the leading (subleading) b jet and the lepton
$N(b_{\text{out}})$	number of b jets outside the Z or Higgs boson candidate cone ($\Delta R > 0.8$)
$N(q_{\text{out}})$	number of non-b jets outside the Z or Higgs boson candidate cone ($\Delta R > 0.8$)

Event topology

$N(\text{AK8 jets})$	number of AK8 jets, including the Z or Higgs boson candidate
$N(\text{AK4 jets})$	number of AK4 jets
$N(Z/H)$	number of AK8 jets with a minimum AK8 $b\bar{b}$ tagger score of 0.8
AK8 m_{SD}	maximum m_{SD} of AK8 jets, excluding the Z or Higgs boson candidate
$H_T(b_{\text{out}})$	H_T of the b jets outside the Z or Higgs boson candidate cone ($\Delta R > 0.8$)
$H_T(b_{\text{out}}, q_{\text{out}}, \ell)$	H_T of all AK4 jets outside the Z or Higgs boson candidate cone ($\Delta R > 0.8$) and the lepton
sphericity	sphericity calculated from the AK4 jets and the lepton [89]
aplanarity	aplanarity calculated from the AK4 jets and the lepton [89]

Z or Higgs boson candidate substructure

b_{in} score	maximum (minimum) DEEPCSV score of AK4 jets within the Z or Higgs boson candidate cone ($\Delta R < 0.8$)
$\Delta R(b_{\text{in}}, b_{\text{out}})$	ΔR between one b jet within the Z or Higgs boson candidate cone ($\Delta R < 0.8$) and the leading b jet outside of the Z or Higgs boson candidate cone
$N(b_{\text{in}})$	number of b jets within the Z or Higgs boson candidate cone ($\Delta R < 0.8$)
$N(q_{\text{in}})$	number of non-b jets within the Z or Higgs boson candidate cone ($\Delta R < 0.8$)
Z/H $b\bar{b}$ score	AK8 $b\bar{b}$ tagger score of the Z or Higgs boson candidate