

Variable	Description	SM	$f_{\nu}^L f_{\nu}^R$	$f_{\nu}^L f_{\tau}^L$	$f_{\nu}^L f_{\tau}^R$	FCNC
$p_T(\mathbf{b}_1)$	p_T of the leading b jet (the b-tagged jet with the highest p_T)	×				
$p_T(\mathbf{b}_2)$	p_T of the next-to-leading b jet	7				
$p_T(\mathbf{j}_1)$	p_T of the leading jet			×	×	×
$p_T(\mathbf{j}_1, \mathbf{j}_2)$	vector sum of the p_T of the leading and the next-to-leading jet	×		×		
$p_T(\sum_{i \neq i_{\text{best}}} \vec{p}_T(\mathbf{j}_i))$	vector sum of the p_T of all jets without the best jet	7				
$p_T(\mathbf{j}_L)$	p_T of the light-flavour jet (untagged jet with the highest value of $ \eta $)	×		×	×	×
$p_T(\mu)$	p_T of the muon	7	×	×		
$p_T(W, \mathbf{b}_1)$	p_T of the W boson and the leading b jet	×		×	×	×
$H_T(\mathbf{j}_1, \mathbf{j}_2)$	scalar sum of the p_T of the leading and the next-to-leading jet	×		×	×	×
E_T^{miss}	missing transverse energy		×			
$\eta(\mu)$	η of the muon	×				
$\eta(\mathbf{j}_L)$	η of the light-flavour jet	×		×		×
$M(\mathbf{j}_1, \mathbf{j}_2)$	invariant mass of the leading and the next-to-leading jets	×		×	×	×
$M(\sum_{i \neq i_{\text{best}}}(\mathbf{j}_i))$	invariant mass of all jets without the best one	7				
$M(\mathbf{j}W)$	invariant mass of the W boson and all jets	×			×	×
$M(W, \mathbf{b}_1)$	invariant mass of the W boson and the leading b jet	×				
$\Delta R(\mu, \mathbf{b}_1)$	$\sqrt{(\eta(\mu) - \eta(\mathbf{b}_1))^2 + (\phi(\mu) - \phi(\mathbf{b}_1))^2}$				8	
$\Delta R(\mu, \mathbf{j}_1)$	$\sqrt{(\eta(\mu) - \eta(\mathbf{j}_1))^2 + (\phi(\mu) - \phi(\mathbf{j}_1))^2}$				7	
$\Delta\phi(\mu, E_T^{\text{miss}})$	azimuthal angle between the muon and \vec{p}_T^{miss}			×	×	
$\Delta\phi(\mu, W)$	azimuthal angle between the muon and the W boson			8		
$\cos(\theta_{\mu, \mathbf{j}_L}) _{\text{top}}$	cosine of the angle between the muon and the light-flavour jet in the top quark rest frame, for top quark reconstructed with the leading b jet [55]	×	×		7	×
$\cos(\theta_{\mu, W}) _W$	cosine of the angle between the muon momentum in the W boson rest frame and the direction of the W boson boost vector [56]	×	×	×		
$\cos(\theta_{W, \mathbf{j}_L}) _{\text{top}}$	cosine of the angle between the W boson and the light-flavour jet in the top quark rest frame [56]	8	×			
$Q(\mu)$	charge of the muon					tug
Planarity	measure of the flatness of the event using the smallest eigenvalue of the normalized momentum tensor [57]	8				
SM BNN	SM BNN discriminant					×