

Variable	Description	Target	Type
$m_{4\ell}$	Invariant mass of the four-lepton system	Production	1D
$p_T^{4\ell}$	Transverse momentum of the four-lepton system	Production	1D
$y_{4\ell}$	Rapidity of the four-lepton system	Production	1D
$N_j$	Number of jets	Production	1D
$p_T^{j1}$	Transverse momentum of the leading jet	Production	1D
$p_T^{j2}$	Transverse momentum of the subleading jet	Production	1D
$m_{jj}$	Invariant mass of the dijet system	Production	1D
$\Delta\eta_{jj}$	Pseudorapidity difference between the leading jets	Production	1D
$\Delta\phi_{jj}$	Azimuthal angle difference between leading jets	Production	1D
$m_{Hj_1}$	Invariant mass of Higgs + leading jet	Production	1D
$p_T^{Hj_1}$	Transverse momentum of Higgs + leading jet	Production	1D
$p_T^{Hjj}$	Transverse momentum of Higgs + two leading jets	Production	1D
$\mathcal{T}_C^{\max}$	Rapidity-weighted jet veto	Production	1D
$\mathcal{T}_B^{\max}$	Rapidity-weighted jet veto	Production	1D
$m_{Z_1}$	Invariant mass of the leading lepton pair	Decay	1D
$m_{Z_2}$	Invariant mass of the subleading lepton pair	Decay	1D
$\cos\theta^*$	Cosine of angle between beam and $Z_1$ in Higgs rest frame	Decay	1D
$\cos\theta_1$	Cosine of angle between negative lepton and $Z_1$ in $Z_1$ rest frame	Decay	1D
$\cos\theta_2$	Cosine of angle between negative lepton and $Z_2$ in $Z_2$ rest frame	Decay	1D
$\Phi$	Azimuthal angle between decay planes of the two Z bosons	Decay	1D
$\Phi_1$	Azimuthal angle between production and decay planes	Decay	1D
$ y(H) $ vs $p_T^H$	Rapidity vs transverse momentum of the $4\ell$ system	Production	2D
$p_T^{j1}$ vs $p_T^{j2}$	Transverse momentum of the leading vs transverse momentum of the subleading jets	Production	2D
$p_T^H$ vs $N_j$	Transverse momentum of $4\ell$ system vs number of jets	Production	2D
$p_T^H$ vs $p_T^{Hj_1}$	Transverse momentum of $4\ell$ system vs transverse momentum of $4\ell$ system + leading jet	Production	2D
$ \Delta\eta_{jj} $ vs $m_{jj}$	Pseudorapidity gap vs invariant mass of two leading jets	Production	2D
$\mathcal{T}_C^{\max}$ vs. $p_T^H$	Rapidity-weighted jet veto vs transverse momentum of the $4\ell$ system	Production	2D
$m_{Z_1}$ vs $m_{Z_2}$	Invariant masses of the two Z boson candidates	Decay	2D