

Event variable	Description
Object and event kinematics	
$\langle \Delta R_{tag,tag} \rangle$	Average ΔR between b-tagged jets
$\sum p_{T,jets,leptons}$	Sum of the p_T of all jets and leptons
$\tau_{jet,jet}^{\max\ mass}$	Twist angle between jet pair
$\min \Delta R_{tag,tag}$	ΔR between the two closest b-tagged jets
$\max \Delta \eta_{tag,tag}$	$\Delta \eta$ between the two furthest b-tagged jets
$m_{jet,jet}^{\min \Delta R}$	Invariant mass of jet pair ΔR
$M_{higgs-like}^{jj}$	Invariant mass of a jet pair ordered in closeness to a Higgs mass
$m_{tag,tag}^{\min \Delta R}$	Invariant mass of b-tag jet pair with minimum ΔR
$p_{T,tag,tag}^{\min \Delta R}$	Sum p_T of b-tag jet pair with minimum ΔR
Centrality (tags)	Ratio of the sum of the transverse momentum of all b-tagged jets and the sum of the energy of all b-tagged jets
H_T	Scalar sum of transverse momentum for all jets
$\min \Delta R_{jet,jet}$	ΔR between the two closest jets
median $m_{jet,jet}$	Median invariant mass of all combinations of jet pairs
$m_{tag,tag}^{\max\ mass}$	Invariant mass of b-tagged jet pair with maximum invariant mass combination
$\langle \Delta R_{jet,tag} \rangle$	Average ΔR between jets (with at least one b-tagged)
$p_{T,jet,tag}^{\min \Delta R}$	Sum p_T of jet pair with minimum ΔR between them (with at least one b-tag jet)
$\tau_{jet,tag}^{\max\ mass}$	Twist angle between jet pair (with at least one b-tagged)
$m_{jet,tag,tag}^{\max\ p_T}$	Invariant mass of the 3-jet system with the largest transverse momentum where at least two jets are b-tagged.
$M_{higgs-like}^{bj}$	Invariant mass of a jet pair (with at least one b-tagged) ordered in closeness to a Higgs mass.
CSVv2IVF b-tag	
$\langle d \rangle_{tagged/untagged}$	Average CSV b-tag discriminant value for b-tagged/un-b-tagged jets
Event shape	
H_0, H_1, H_2, H_3, H_4	Fox-Wolfram moments [74]