

Process	Discriminant	Main goal
VBF	$\mathcal{D}_{0-}^{\text{VBF}}$	Separate between $CP$ -even, $CP$ -odd and mixed $CP$ scenarios
VBF	$\mathcal{D}_{\text{NNbkg}}^{\text{VBF}}$	Separate H signal from nonresonant backgrounds
VBF	$\mathcal{D}_{\text{NNBSM}}^{\text{VBF}}$	Separate between SM H and several BSM H scenarios
V(qq)H	$\mathcal{D}_{\text{NNbkg}}^{\text{VHhad}}$	Separate H signal from nonresonant backgrounds
V(qq)H	$\mathcal{D}_{\text{NNBSM}}^{\text{VHhad}}$	Separate between SM H and several BSM H scenarios
$W(\ell\nu)$ H-lep	$\mathcal{D}_{\text{STXS}}^{\text{WHlep}}$	Separate H signal from nonresonant backgrounds
$W(\ell\nu)$ H-lep	$\mathcal{D}_{\text{BSM}}^{\text{WHlep}}$	Separate H signal from several BSM H scenarios
$Z(\ell\ell)$ H-lep	$\mathcal{D}_{\text{STXS}}^{\text{ZHlep}}$	Separate H signal from nonresonant backgrounds
$Z(\ell\ell)$ H-lep	$\mathcal{D}_{\text{BSM}}^{\text{ZHlep}}$	Separate H signal from several BSM H scenarios
$Z(\nu\nu)$ H-MET	$\mathcal{D}_{\text{STXS}}^{\text{VHMET}}$	Separate H signal from nonresonant backgrounds
$Z(\nu\nu)$ H-MET	$\mathcal{D}_{\text{BSM}}^{\text{VHMET}}$	Separate H signal from several BSM H scenarios