

Event category	Discriminating variable	Reconstructed using	Shown in
$W^- qq$	VLQ mass	Lepton, neutrino, leading jet	Fig. 2 and 3
Zqq	VLQ mass	Two opposite-sign leptons, leading jet	Fig. 4
ZqHq	VLQ mass	Two opposite-sign leptons, high- p_T anti-b-tagged, jet with the largest ΔR separation from the Z boson candidate	Fig. 5
VqZq semi-leptonic	VLQ mass	Two opposite-sign leptons, high- p_T anti-b-tagged, jet with the largest ΔR separation from the Z boson candidate	Fig. 6
WqWq	S_T	See subsection 2.1	Fig. 7
VqZq full-leptonic	Event count	See text	Table 8