

Category	Preselection	Additional requirements	Trigger requirement
Lepton multijet	$M_{\text{R}} > 550 \text{ GeV} \ \& \ R^2 > 0.20$	$m_{\text{T}} > 120 \text{ GeV}$	Single lepton
Lepton seven-jet	$M_{\text{R}} > 550 \text{ GeV} \ \& \ R^2 > 0.20$	$m_{\text{T}} > 120 \text{ GeV}$	Single lepton
Boosted W 4–5 jet	$M_{\text{R}} > 800 \text{ GeV} \ \& \ R^2 > 0.08$	$\Delta\phi_{\text{R}} < 2.8$	$H_{\text{T}}, \text{jet } p_{\text{T}}$
Boosted W 6 jet	$M_{\text{R}} > 800 \text{ GeV} \ \& \ R^2 > 0.08$	$\Delta\phi_{\text{R}} < 2.8$	$H_{\text{T}}, \text{jet } p_{\text{T}}$
Boosted top	$M_{\text{R}} > 800 \text{ GeV} \ \& \ R^2 > 0.08$	$\Delta\phi_{\text{R}} < 2.8$	$H_{\text{T}}, \text{jet } p_{\text{T}}$
Dijet	$M_{\text{R}} > 650 \text{ GeV} \ \& \ R^2 > 0.30$	$\Delta\phi_{\text{R}} < 2.8$	Hadronic razor
Multijet	$M_{\text{R}} > 650 \text{ GeV} \ \& \ R^2 > 0.30$	$\Delta\phi_{\text{R}} < 2.8$	Hadronic razor
Seven-jet	$M_{\text{R}} > 650 \text{ GeV} \ \& \ R^2 > 0.30$	$\Delta\phi_{\text{R}} < 2.8$	Hadronic razor