

Improvements in Expected Sensitivities

Prongs	Process	Comparison	95% CL Limit	95% CL Limit	5 σ discovery
	$A \rightarrow BC$	Method	$m_A = 3$ TeV	$m_A = 5$ TeV	$m_A = 3$ TeV
2+2	$X \rightarrow YY' \rightarrow 4q$	2-prong (τ_{21}, m_{SD})	1.4 (<i>CATHODE</i>)	1.1 (<i>CATHODE</i>)	2.3 (<i>QUAK</i>)
3+3	$W' \rightarrow B't \rightarrow bZt$	3-prong (τ_{32}, m_{SD})	1.2 (<i>VAE-QR</i>)	1.3 (<i>TNT</i>)	2.1 (<i>TNT</i>)
4+2	$W_{KK} \rightarrow RW \rightarrow 3W$	Inclusive	1.5 (<i>CWoLa Hunting</i>)	0.9 (<i>VAE-QR</i>)	2.6 (<i>CWoLa Hunting</i>)
6+6	$Y \rightarrow HH \rightarrow 4t$	3-prong (τ_{32}, m_{SD})	1.5 (<i>QUAK</i>)	1.4 (<i>TNT</i>)	3.3 (<i>TNT</i>)