

Expected Limit Studies with PHX Electron (W.-M. Yao)

The limits are calculated using the standard Bayesian procedure with pseudo-data generated from the input provided by Thomas and Yoshikazu. The expected is the mean of pseudo-experiments.

Systematic:

Source (%)	KA Single	KA Doub	STST	STJP
Lum	6	6	6	6
btag	4.3	10	8	9
ID	2	2	2	2
JES	1	1	1	1
ISR/FSR	5	5	5	5
Mistag	14	14	8	8
QCD	40	40	30	30
W+HF	35	35	35	35
Top	20	20	15	15
Diboson	11	11	10	10

Limits:

	No Systematic				With Systematic			
mH (GeV)	110	115	120	130	110	115	120	130
KA one tag	39.6	44.6	55.8	86.8	46.9	51.3	64.5	97.7
KA two tags	57.3	57.1	72.0	106.0	63.1	61.2	78.3	114.1
KA combined	30.8	32.4	40.9	61.4	35.2	37.1	46.3	69.0
STST	63.1	63.0	81.6	122.5	71.0	68.0	88.7	135.4
STJP	84.9	91.4	118.5	180.0	93.0	97.3	128.5	188.2
combined	46.72	47.0	61.5	95	52.9	53.1	67.6	104.1