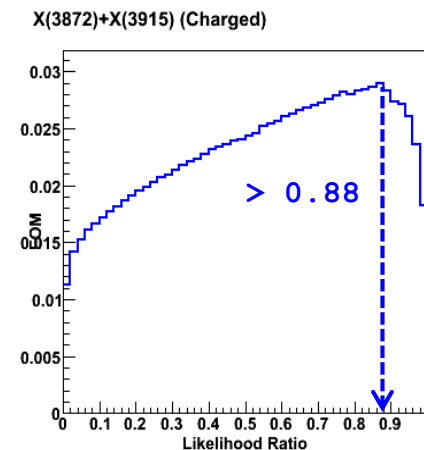
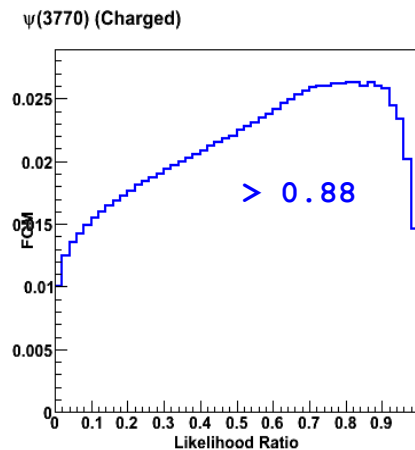
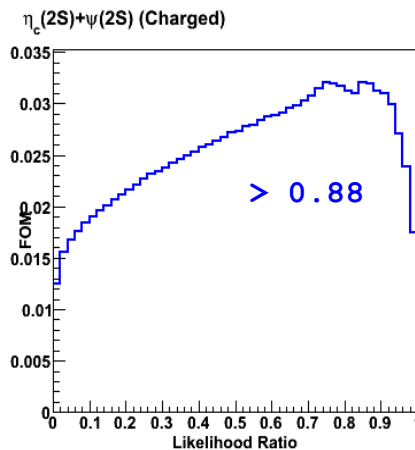
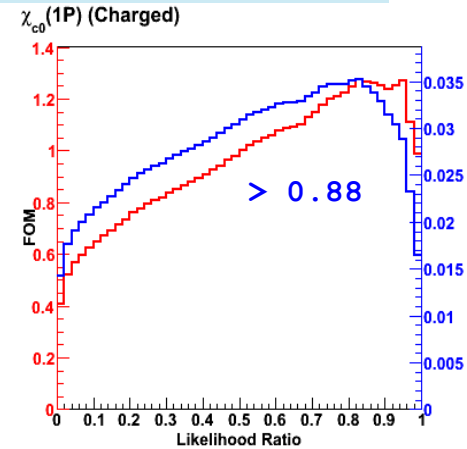
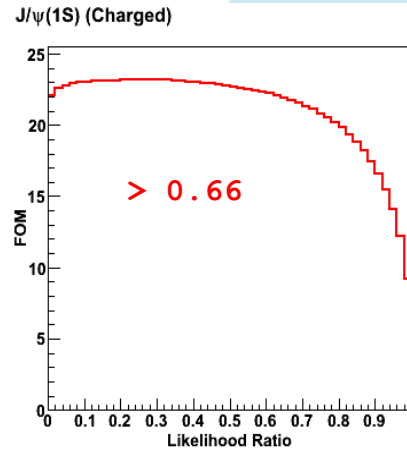
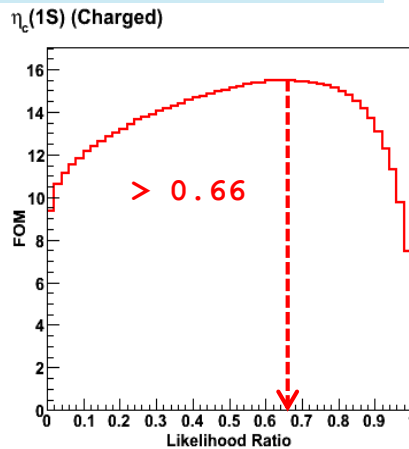


Optimization of LR Cut: FOM $B^+ \rightarrow (cc\bar{b})K^+ \rightarrow pp\bar{b}K^+$

$$FOM(t) = \frac{S(t)}{\sqrt{S(t) + B(t)}}$$

$$FOM(t) = \frac{\varepsilon(t)}{\frac{a}{2} + \sqrt{B(t)}}$$

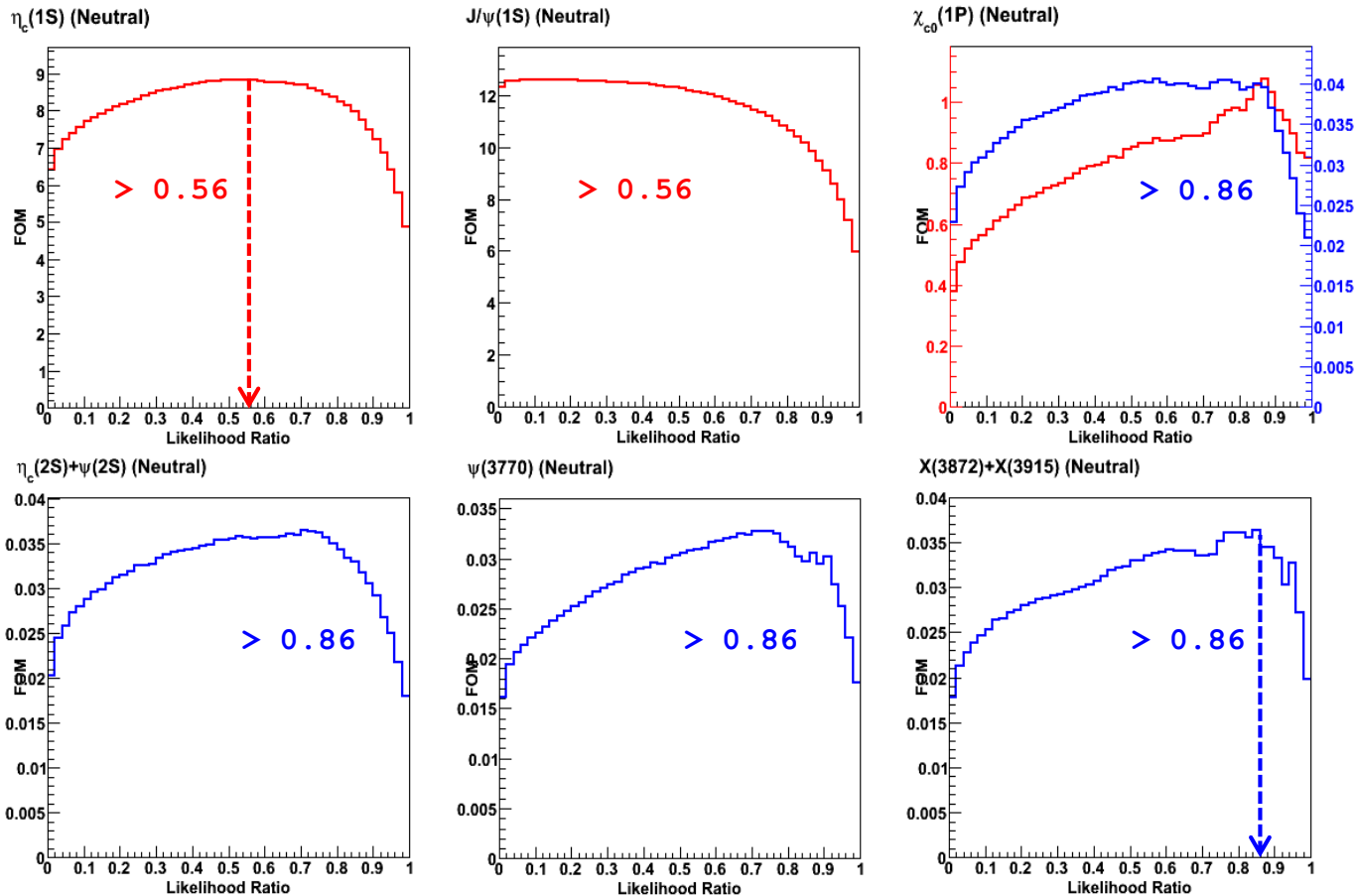
Standard FOM
Punzi FOM



Optimization of LR Cut: FOM

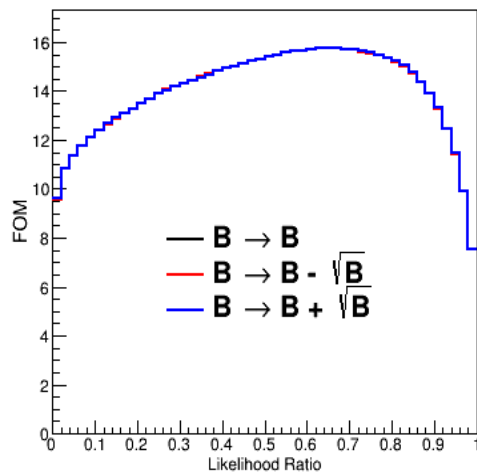
- $B^0 \rightarrow (ccbar)K^0_s \rightarrow ppbar K^0_s$

Standard FOM
Punzi FOM

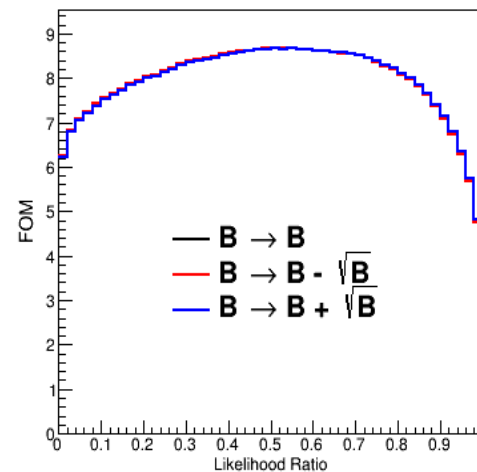


Optimization of LR Cut: FOM

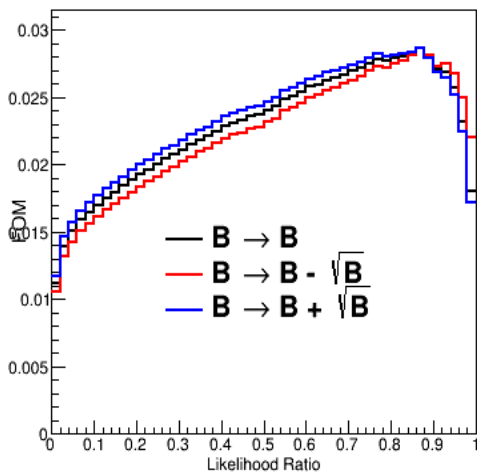
$\eta_c(1S)$ (Charged)



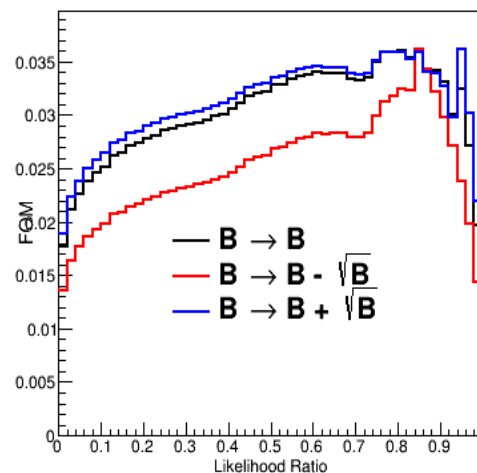
$\eta_c(1S)$ (Neutral)



$X(3872)+X(3915)$ (Charged)



$X(3872)+X(3915)$ (Neutral)



Optimization of LR Cut: FOM

B ⁺ Decay	BF (x10 ⁻⁶)	lrcut - 0.02	lrcut + 0.02	Deviation max [%]
$\eta_c(1S)$	1.399 ± 0.1343	1.407 ± 0.138	1.386 ± 0.140	0.93
J/ ψ	2.197 ± 0.101	2.187 ± 0.100	2.197 ± 0.102	0.46
$\chi_{c0}(1P)$	0.0972 ± 0.0378	0.0931 ± 0.0360	0.0936 ± 0.0393	4.28
$\eta_c(2S)$	0.0515 ± 0.0331	0.0455 ± 0.0315	0.0334 ± 0.0327	35.27
$\Psi(2S)$	0.165 ± 0.037	0.191 ± 0.038	0.161 ± 0.0383	15.87
$\Psi(3770)$	0.0107 ± 0.0376	-0.0021 ± 0.0342	0.0050 ± 0.0387	
X(3872)	0.00242 ± 0.01152	0.00468 ± 0.01349	0.00055 ± 0.01822	
X(3915)	0.0146 ± 0.0255	0.0233 ± 0.0266	0.0216 ± 0.0289	