Detector induced assymetry in CP violation measurements

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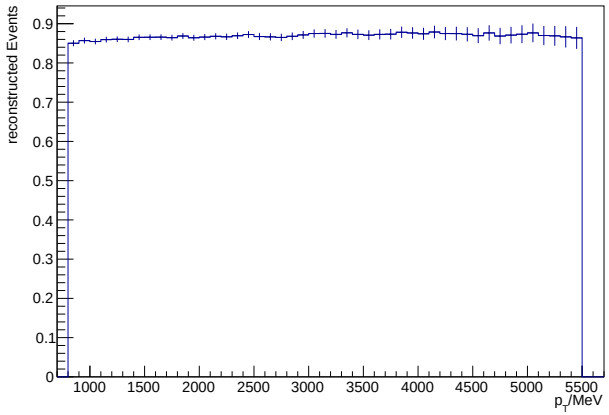
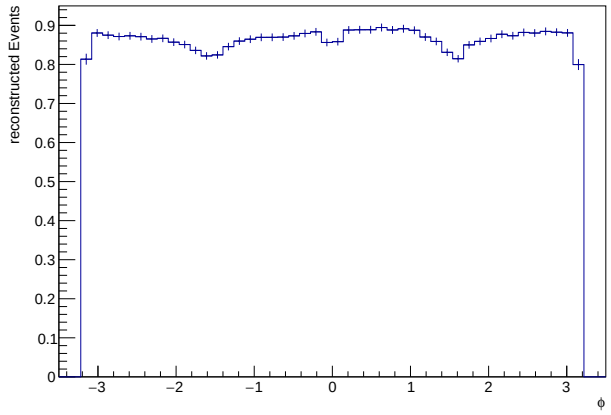
Total

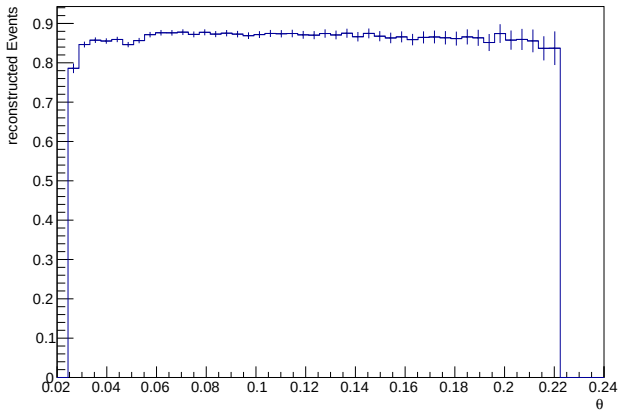
Efficiencies

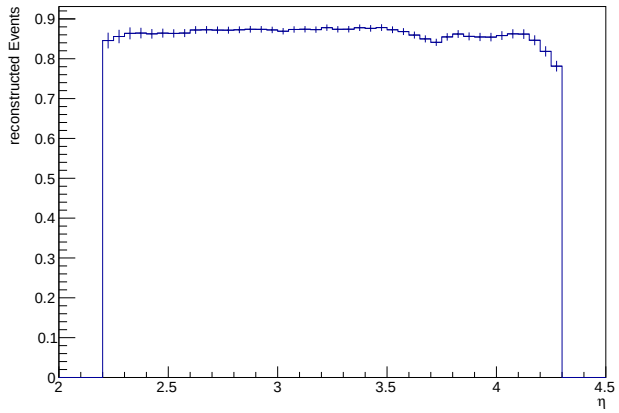
Polarity	ϵ_π	ϵ_K	$\epsilon_{\pi,s}$	ϵ_{D^0}	ϵ_{D^*}
UP	86.61(15)	84.65(14)	76.61(13)	73.33(13)	56.26(11)
DOWN	86.61(17)	84.67(16)	76.54(15)	73.33(15)	56.23(12)

π-efficiency

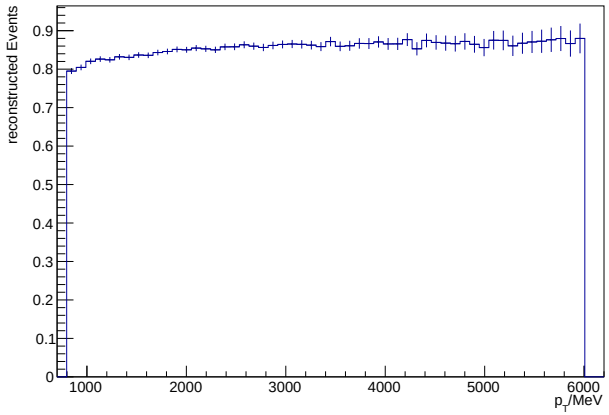


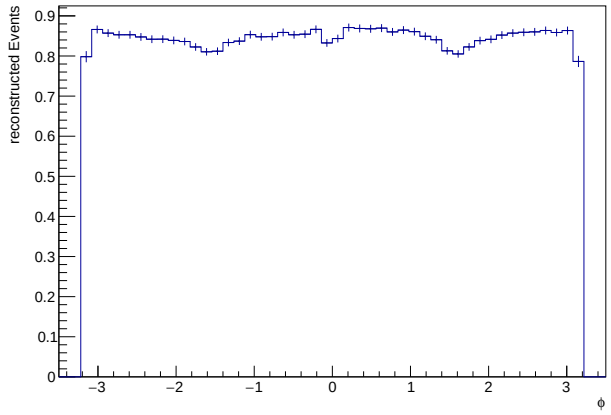


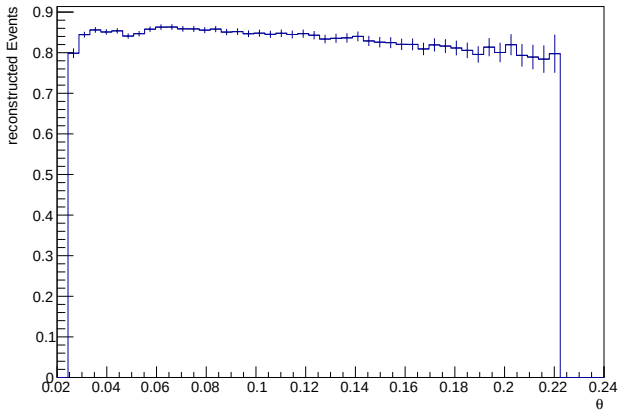


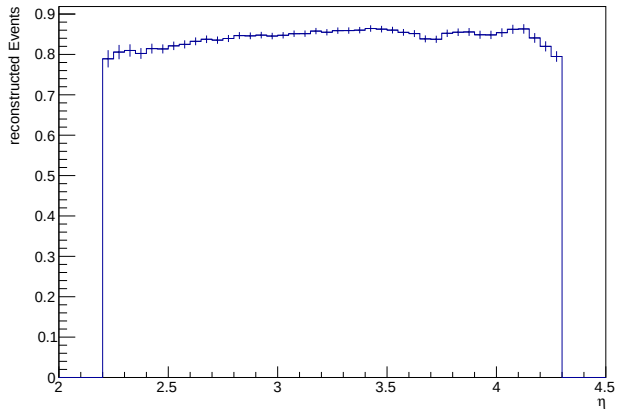


K-efficiency

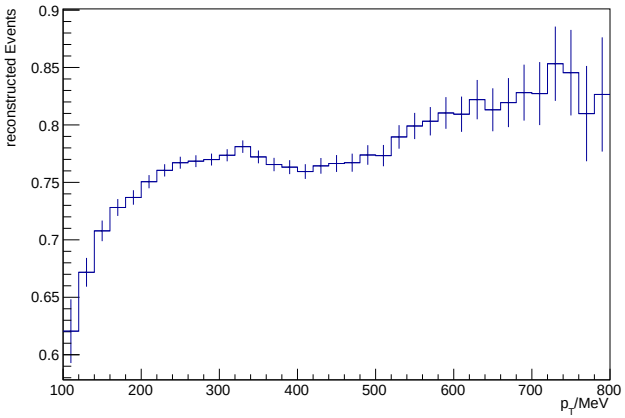


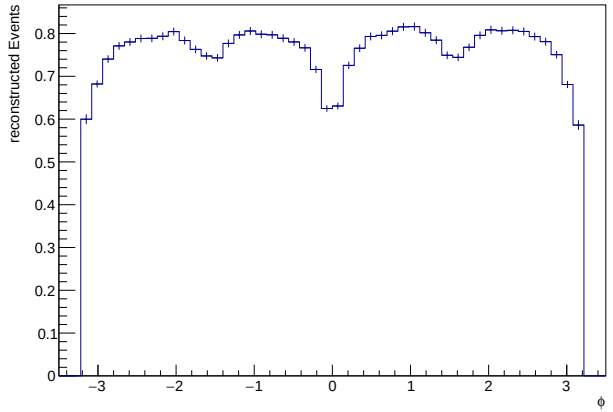


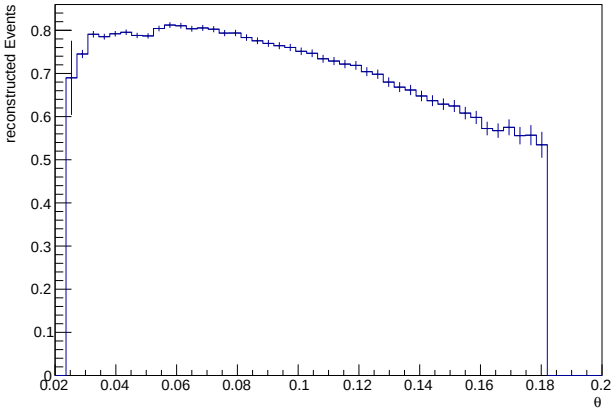


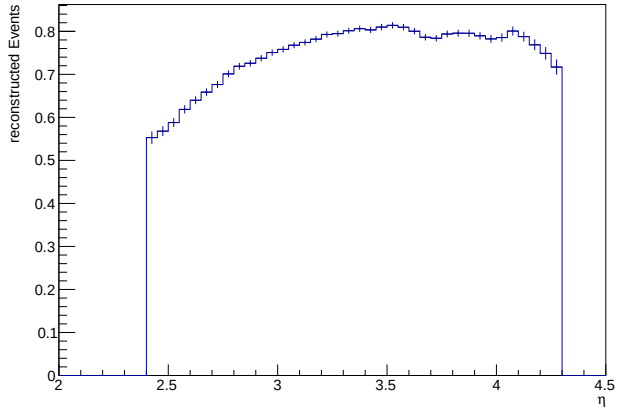


soft π-efficiency

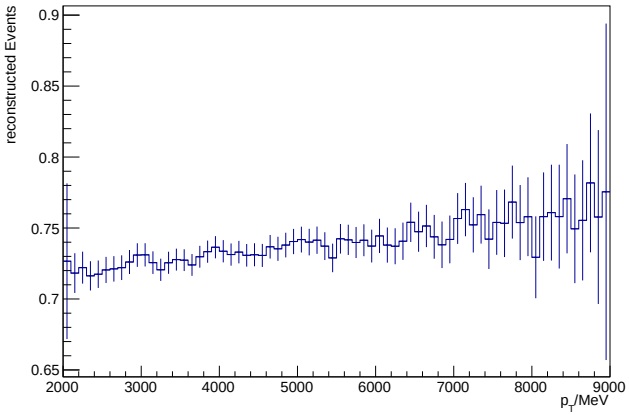


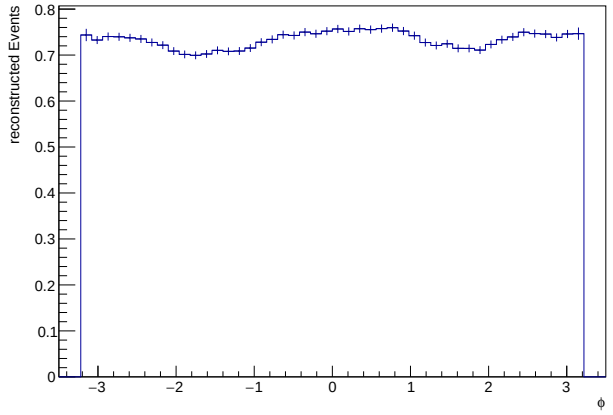


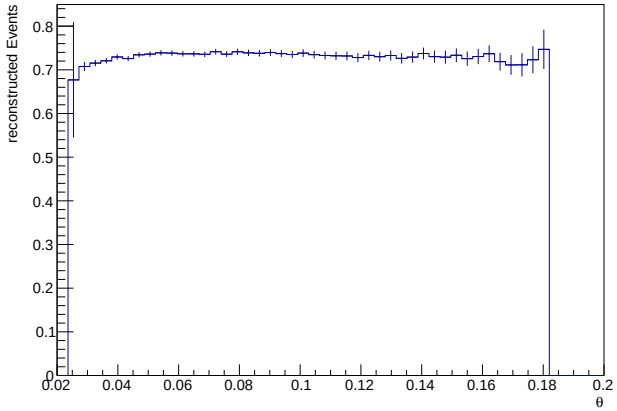


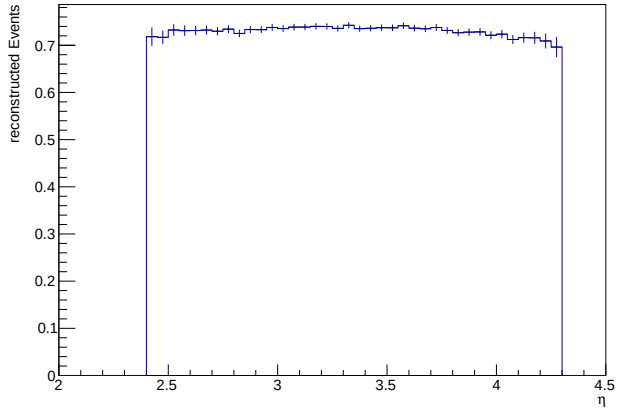


D^0-efficiency

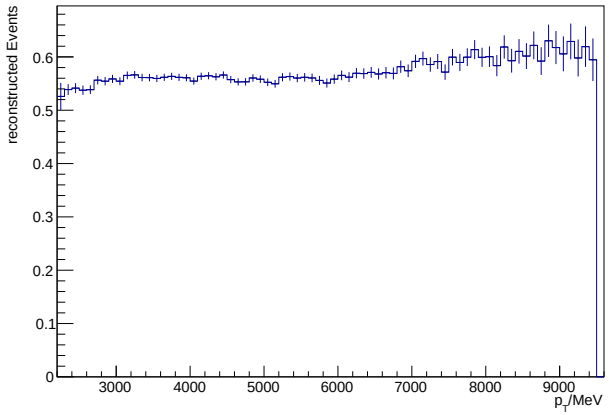


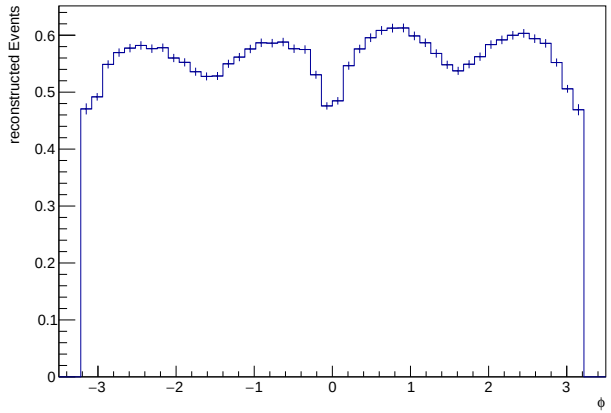


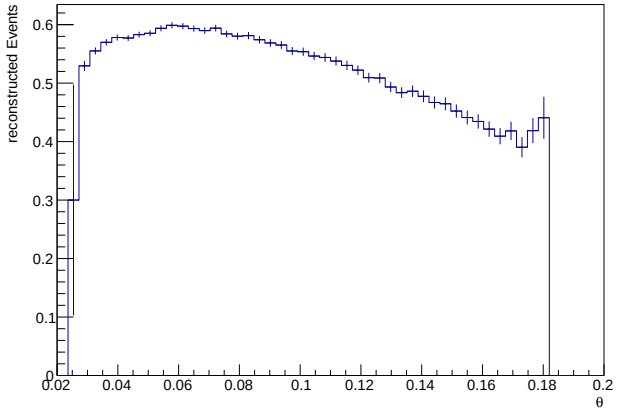


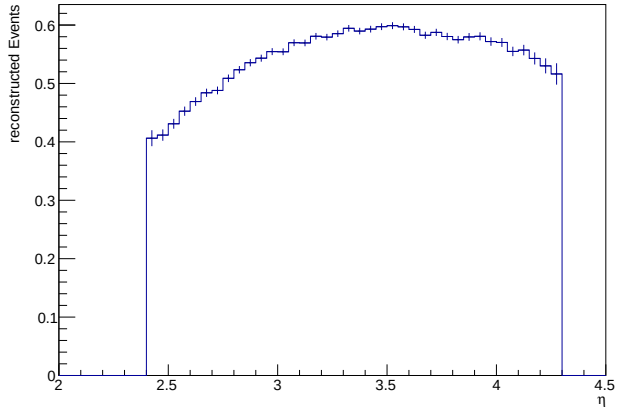


D^*-efficiency







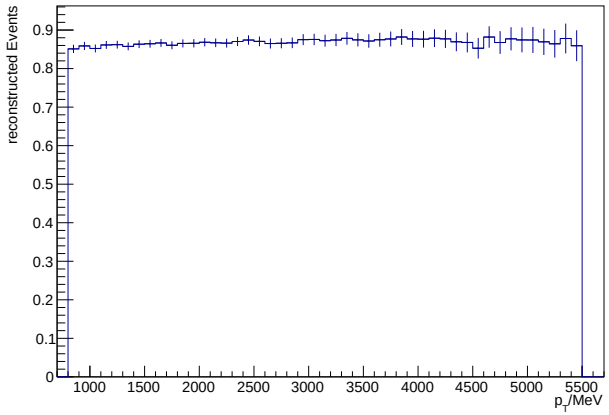


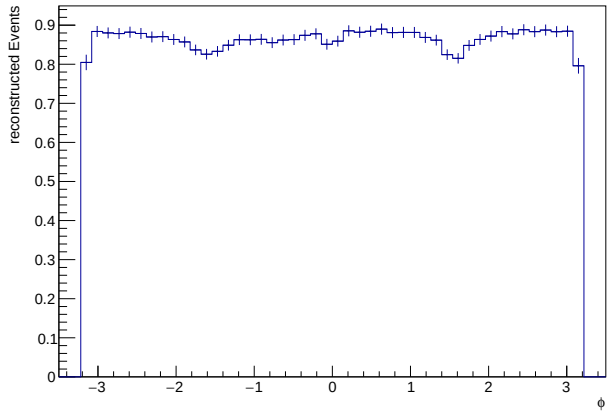
Charge: +

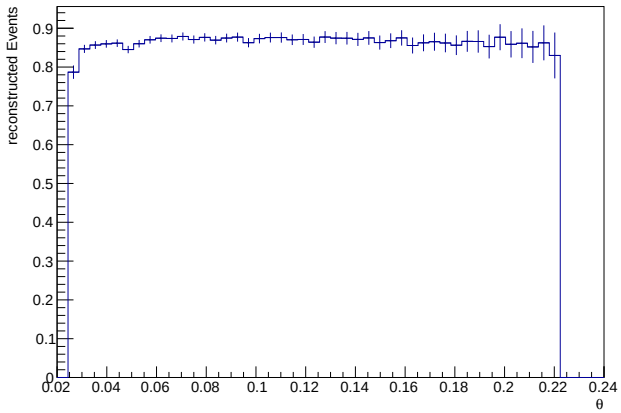
Efficiencies

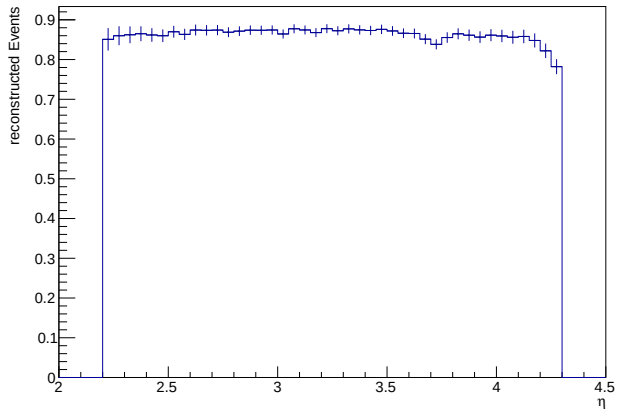
Polarity	ϵ_π	ϵ_K	$\epsilon_{\pi,s}$	ϵ_{D^0}	ϵ_{D^*}
UP	86.63(21)	85.01(21)	76.26(19)	73.00(18)	55.71(15)
DOWN	86.57(24)	85.38(23)	76.71(22)	72.92(21)	56.09(17)

π-efficiency

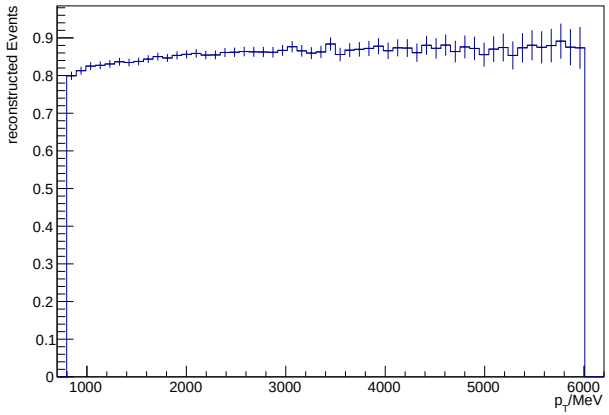


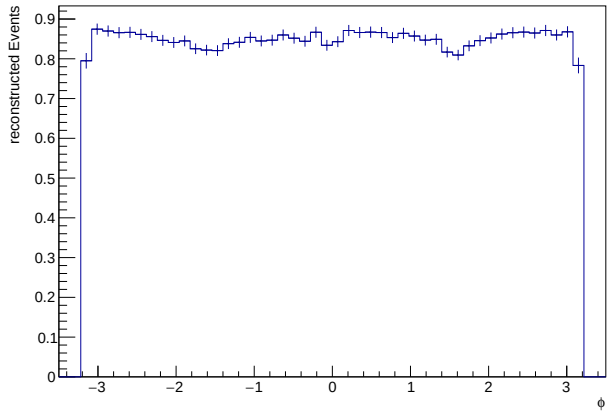


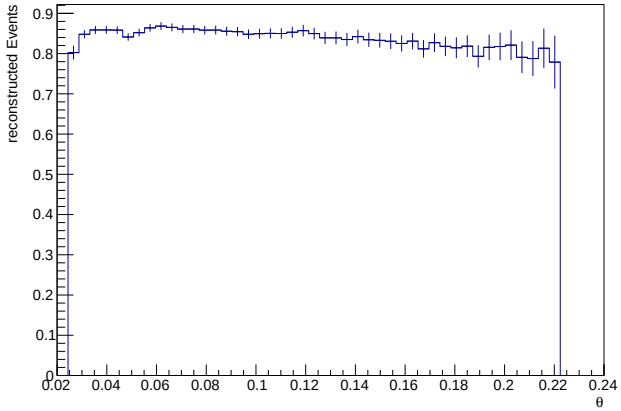


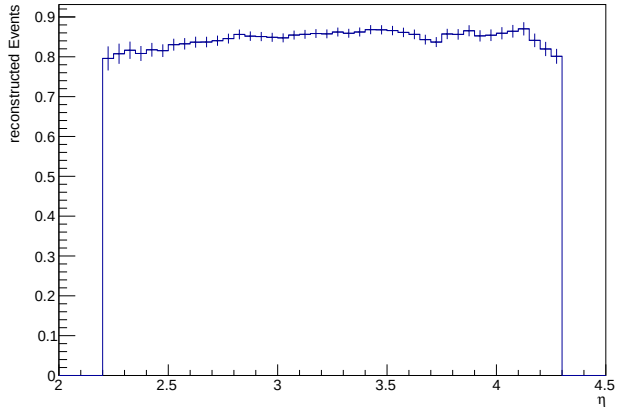


K-efficiency

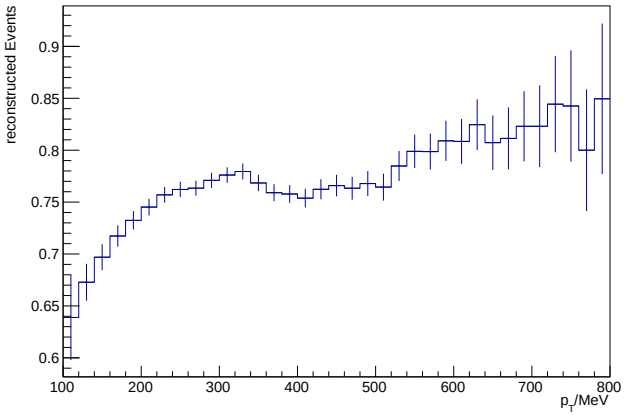


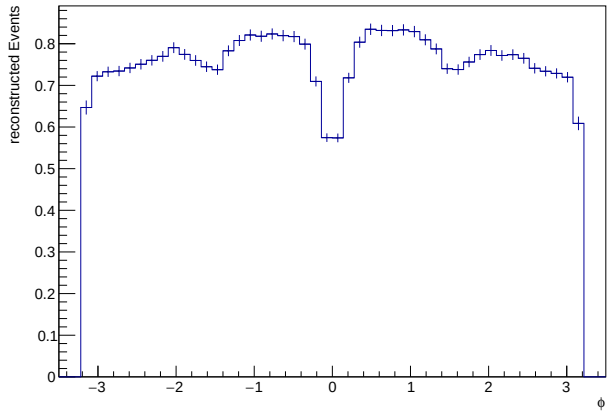


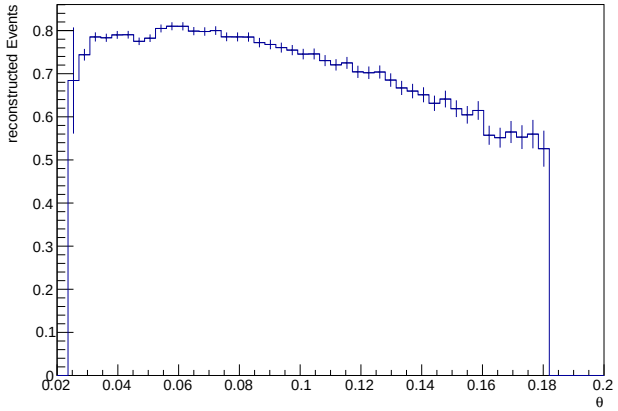


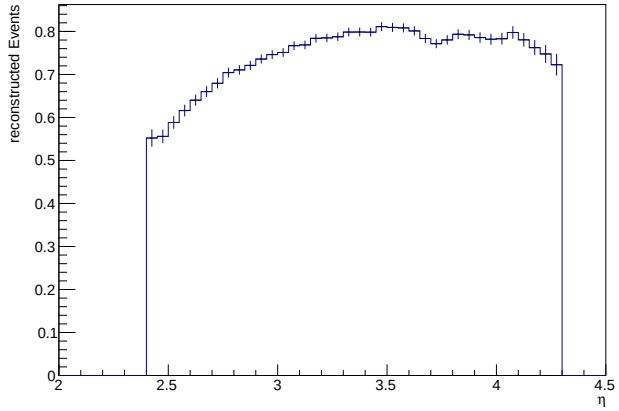


soft π-efficiency

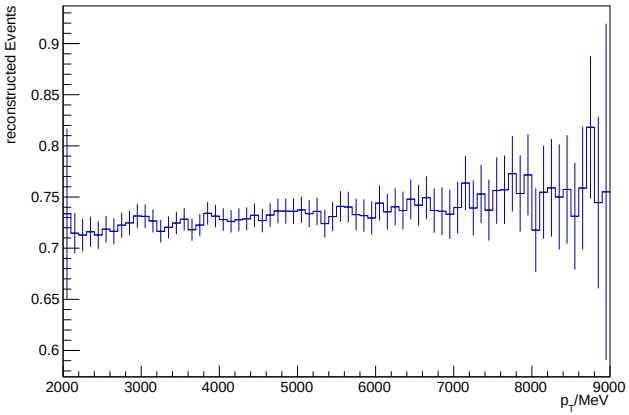


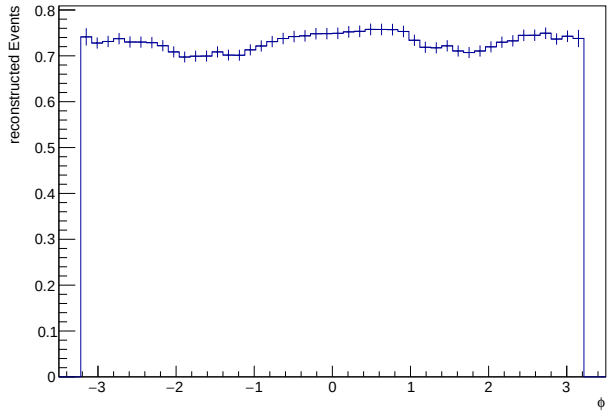


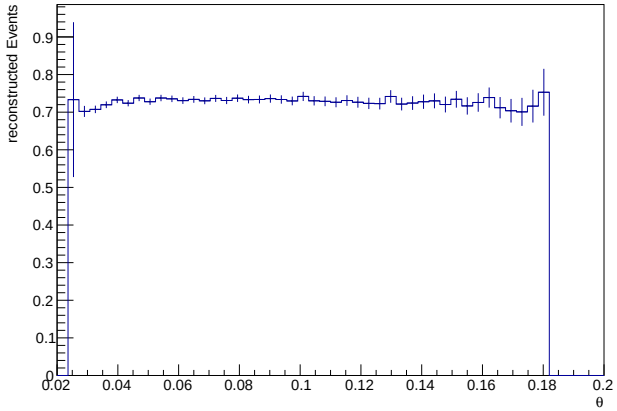


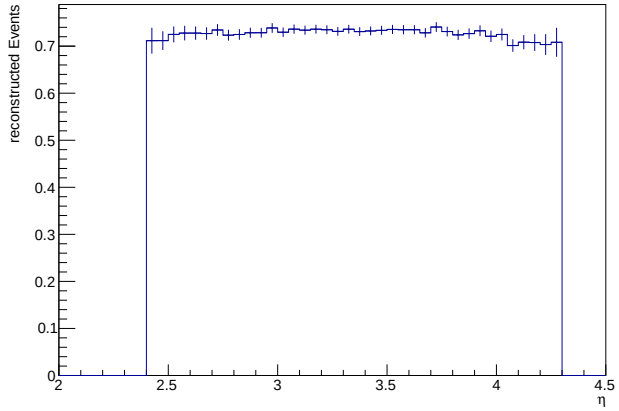


D^0-efficiency

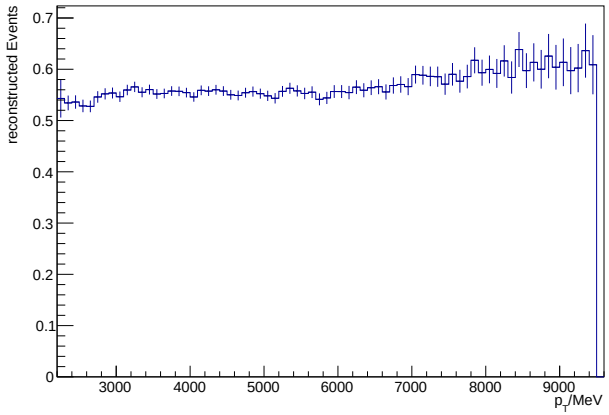


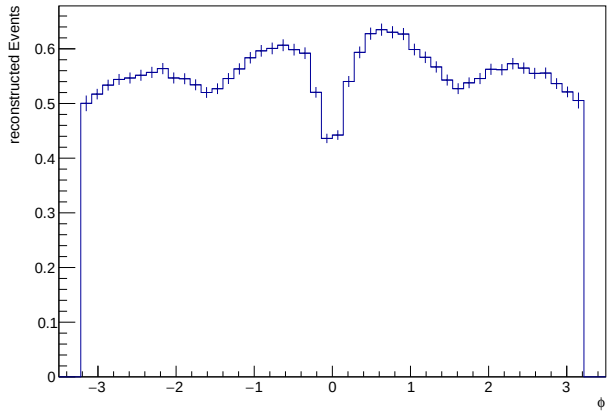


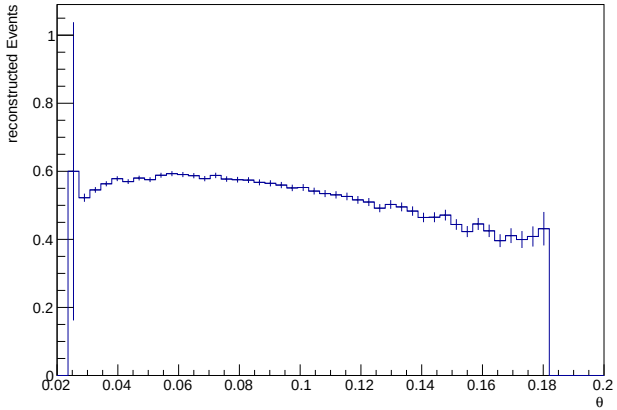


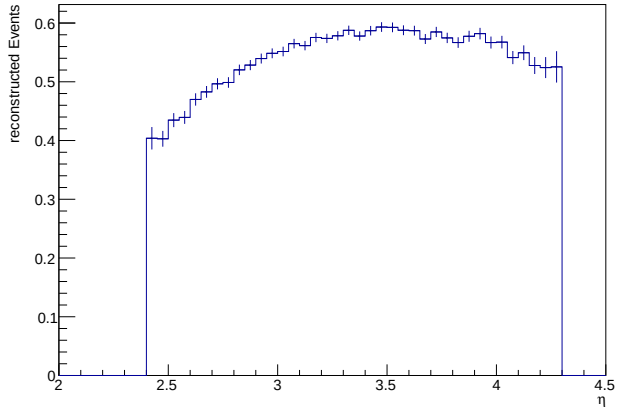


D^*-efficiency







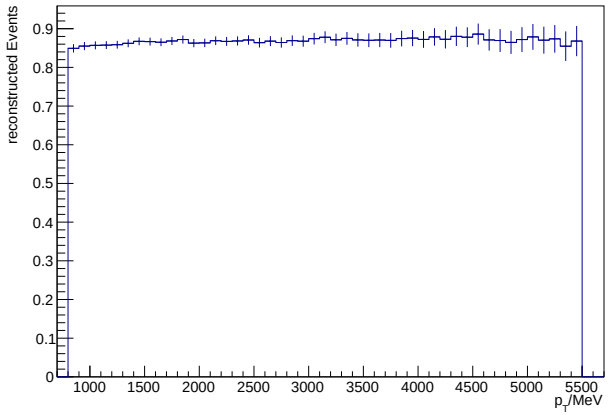


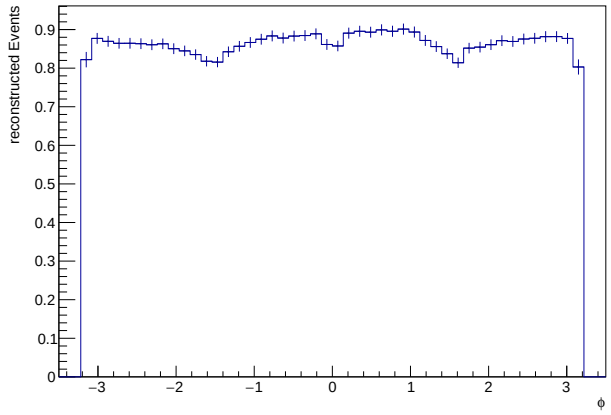
Charge: -

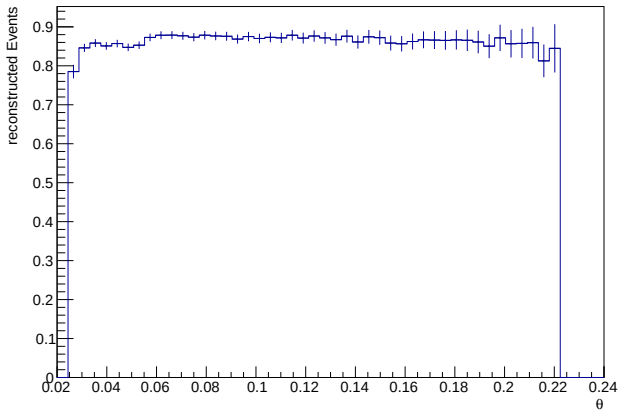
Efficiencies

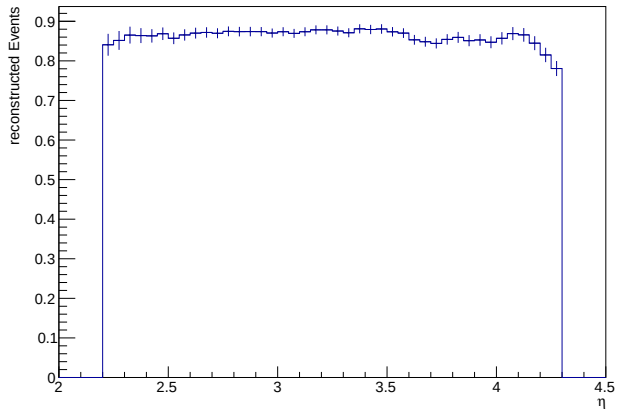
Polarity	ϵ_π	ϵ_K	$\epsilon_{\pi,s}$	ϵ_{D^0}	ϵ_{D^*}
UP	86.60(21)	84.30(20)	76.97(19)	73.65(19)	56.81(15)
DOWN	86.64(24)	83.95(23)	76.36(22)	73.74(21)	56.38(17)

π-efficiency

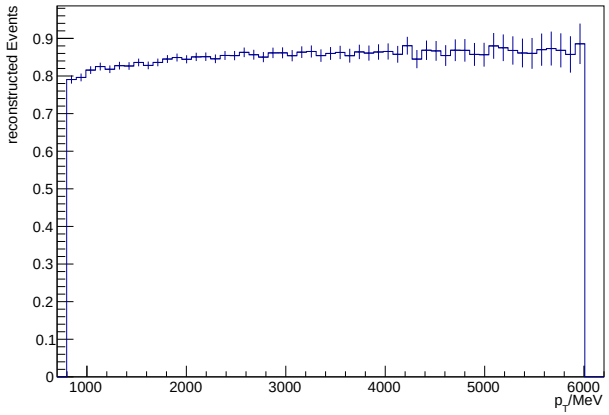


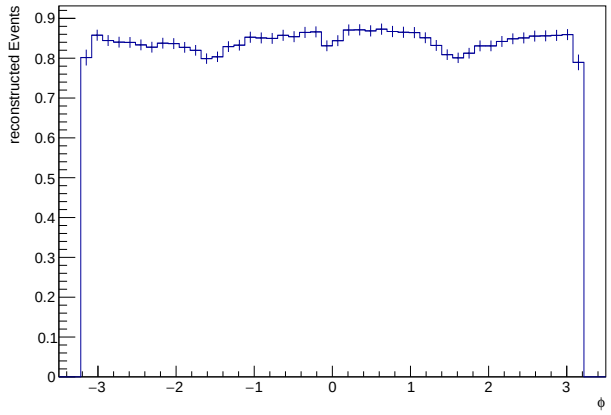


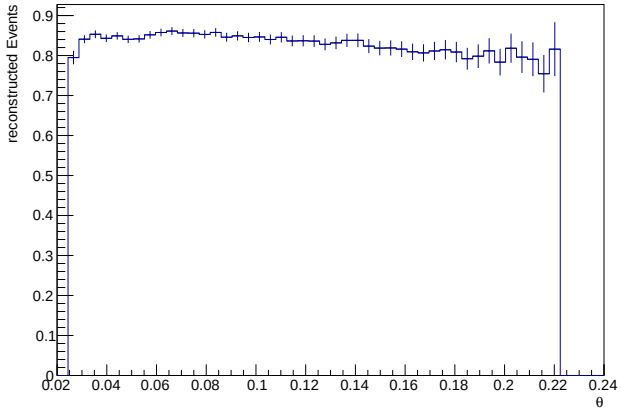


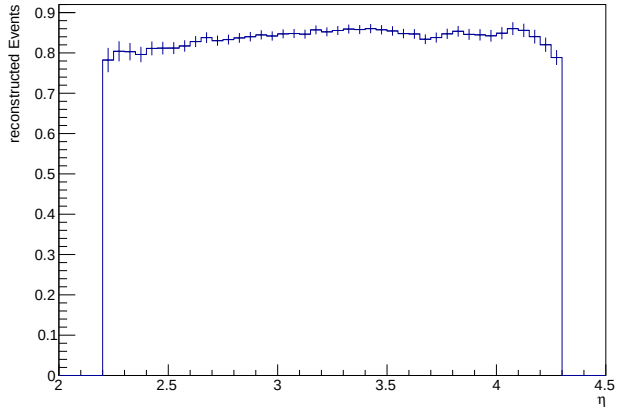


K-efficiency

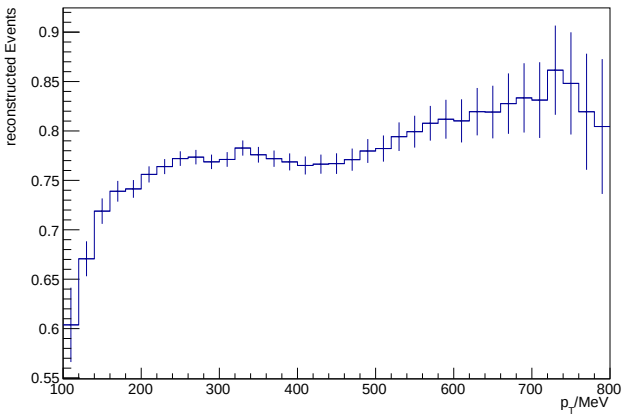


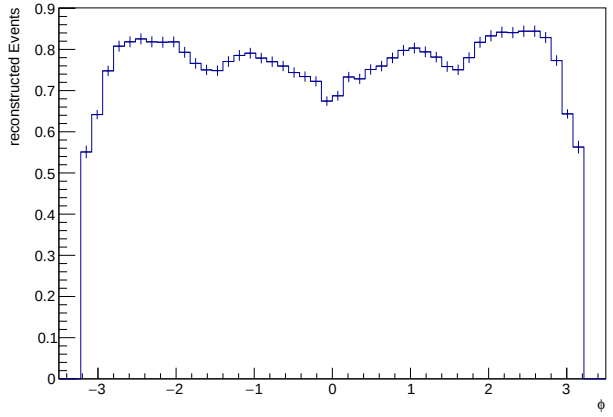


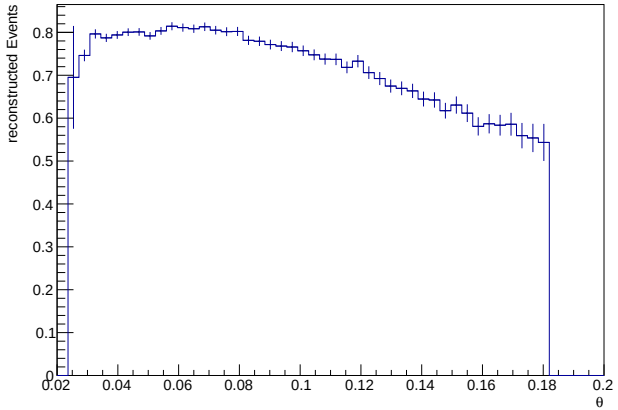


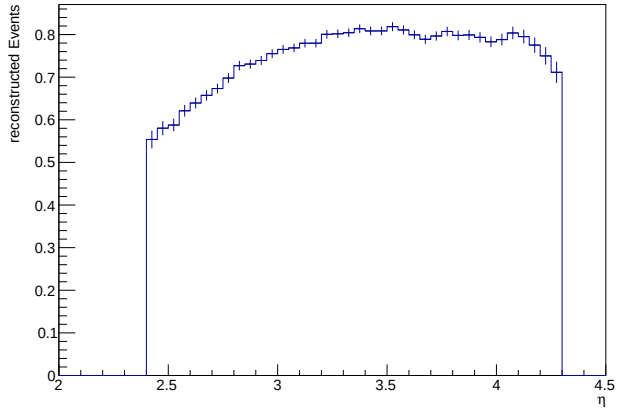


soft π-efficiency

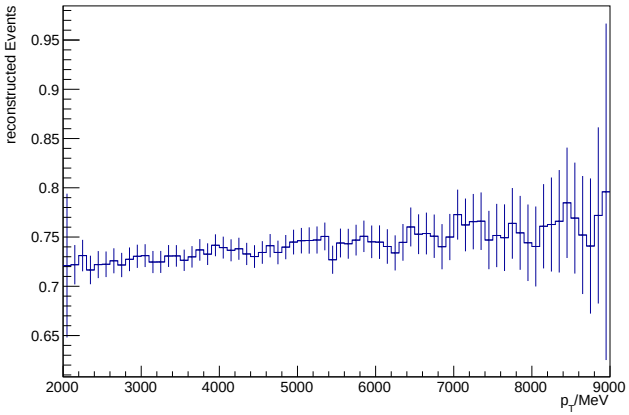


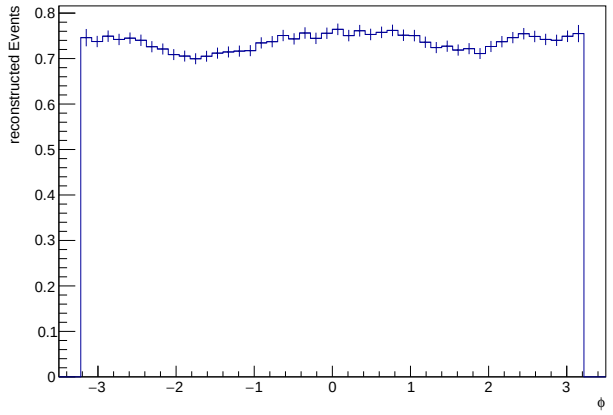


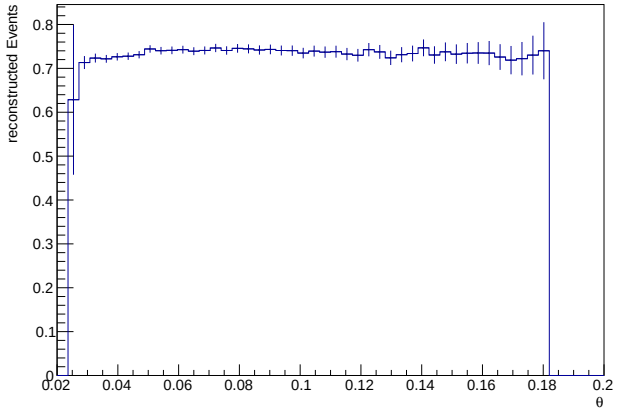


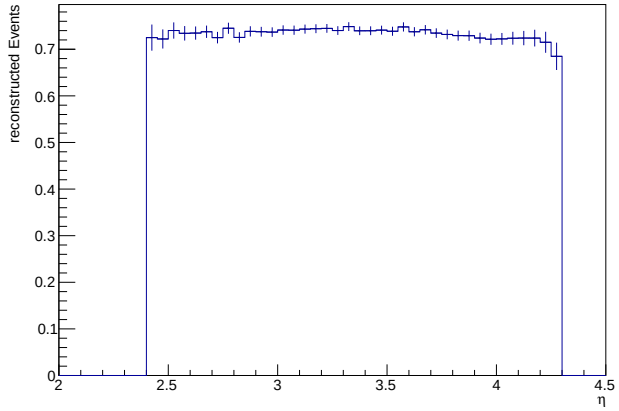


D^0-efficiency

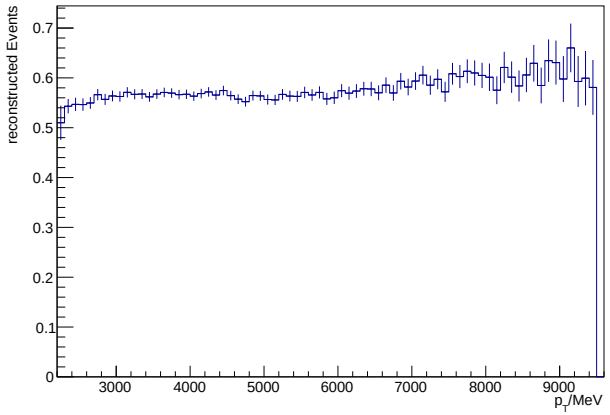


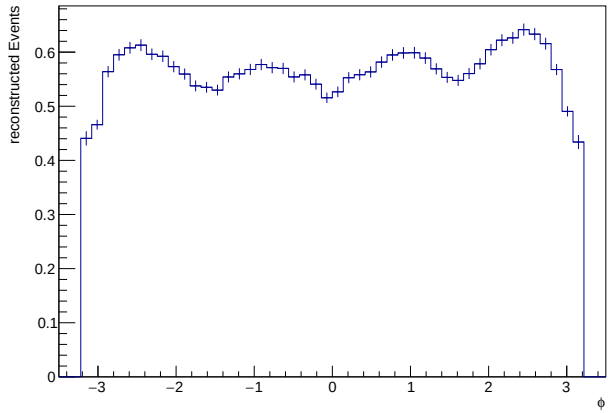


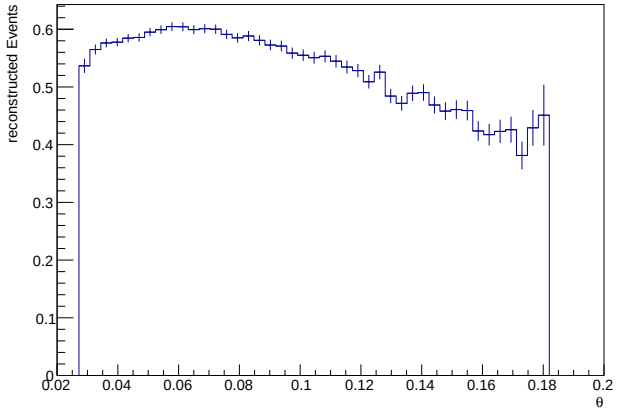


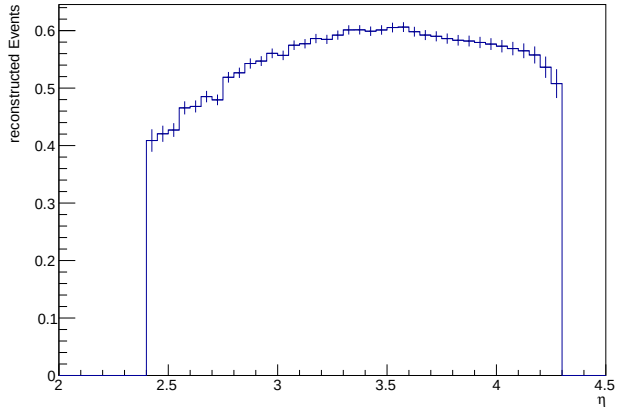


D^*-efficiency









Deviation

Table: The deviation $\frac{\epsilon_+ - \epsilon_-}{\epsilon_+ + \epsilon_-} / 10^{-3}$

Polarity	π	K	$soft\pi$	D^0	D^*
UP	0.2(29)	4(3)	−5(3)	−4(3)	−10(2)
DOWN	−0.4(33)	8(3)	2.3(30)	−6(3)	−2.5(24)