Data selection

September 29, 2019

$$pp \rightarrow P_c + \dots$$

$$P_c \to J/\psi p$$

Candidate	Variable	Requirement
μ^\pm	track fit $\chi^2/$ ndf	< 4
	clone removal: Δ_{KL}^{min}	> 5000
	p_T	> 1 GeV/c
	p	> 10 GeV/c
	particle identification	identified as muon
$J/\psi \to \mu^+\mu^-$	vertex $\chi^2/$ ndf	< 20
	p_T	> 3.5 GeV/c
	$M_{\mu\mu}$	$\in [3040; 3140] \text{ MeV}/c^2$
p	track fit $\chi^2/$ ndf	< 5(?)
	clone removal: Δ_{KL}^{min}	> 5000(?)
	p_T	?
	p	?
	particle identification	identified as proton
$J/\psi p$	vertex $\chi^2/$ ndf	< 5
	$Q = M_{\mu\mu p} - M_{\mu\mu} - M_p$	$< 300 {\rm MeV}/c^2$
	$M_{J/\psi p}(\text{after }J/\psi \text{mass constraint})$	$\in [4000, 6000] \text{MeV}/c^2$
	impact parameter	< ?