



中国科学院高能物理研究所  
*Institute of High Energy Physics*  
*Chinese Academy of Sciences*



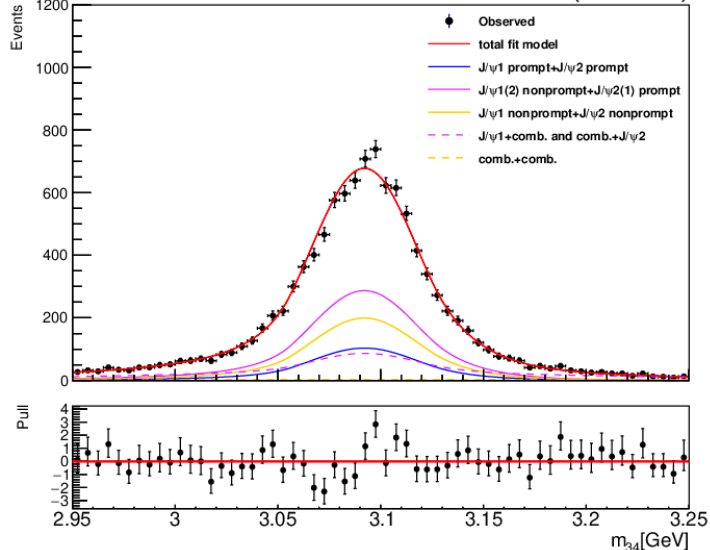
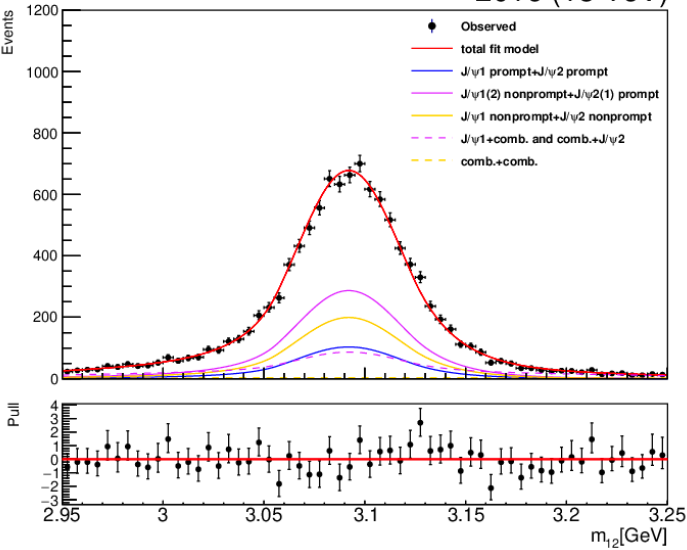
# Double Jpsi meeting

TaozheYu

2023.3.23

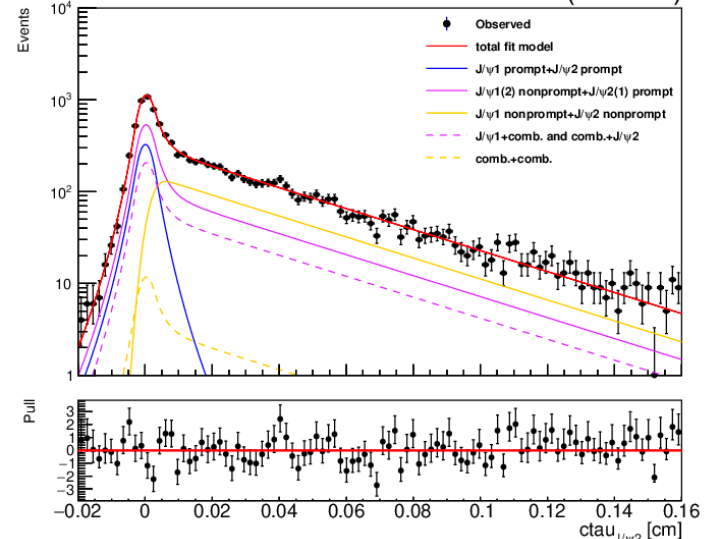
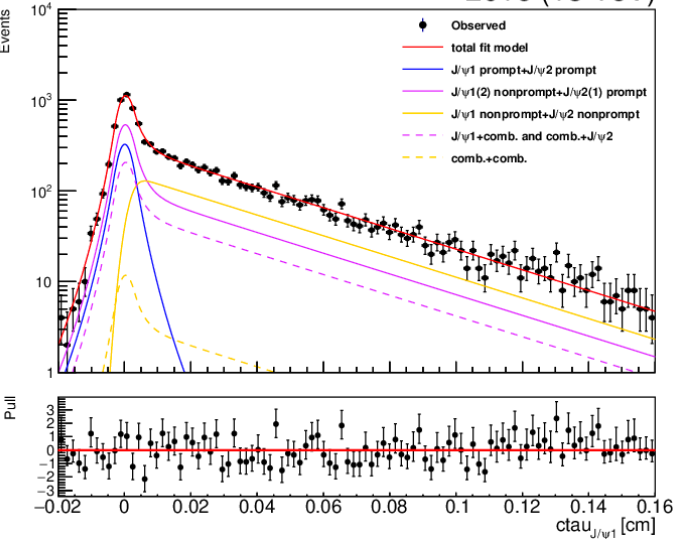
2016 (13 TeV)

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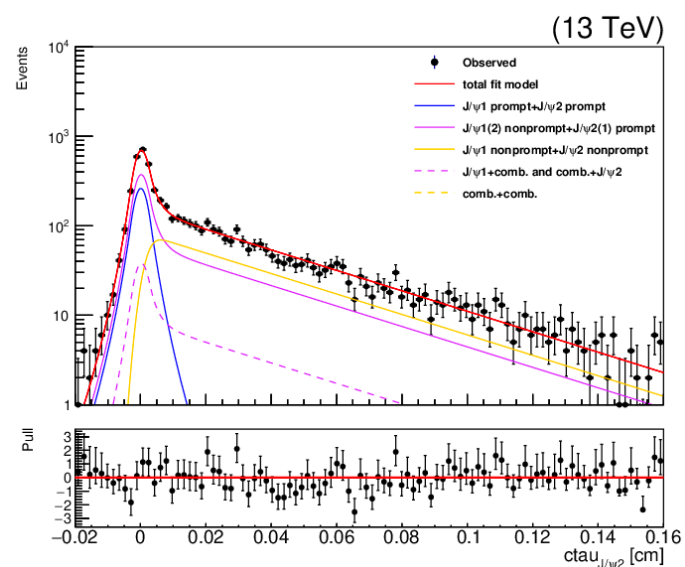
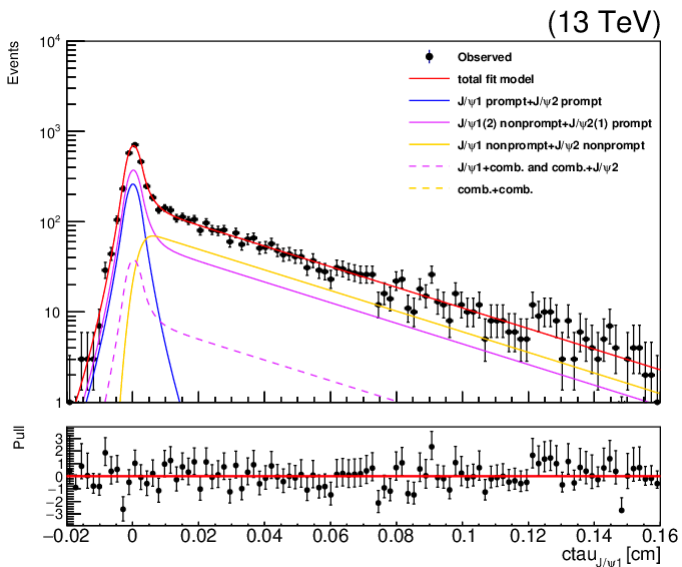
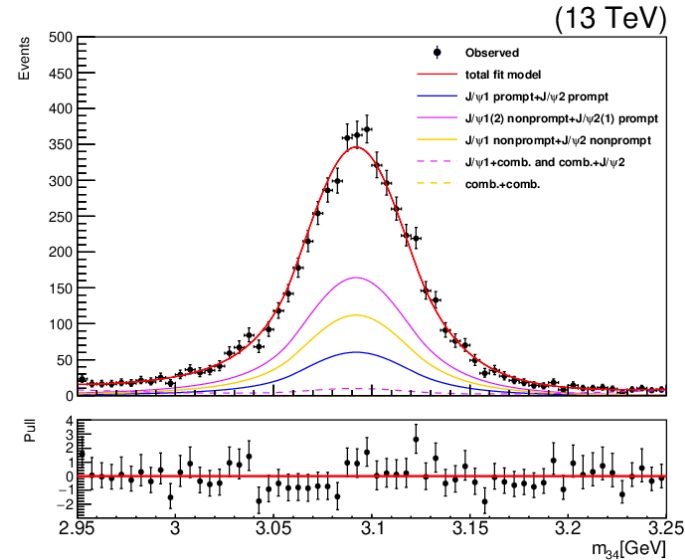
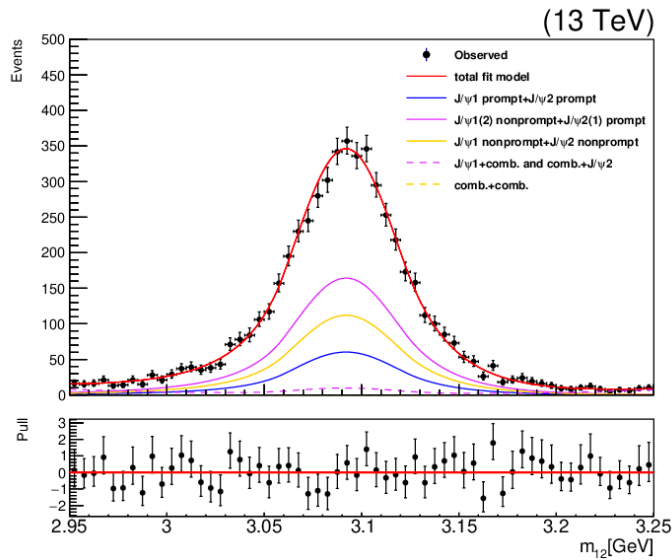
2016 (13 TeV)



- Total number of events in this region is 10387
- Double Jpsi fraction is  $0.81 \pm 0.03$
- Double prompt fraction is  $0.153 \pm 0.002$
- Prompt Jpsi pair frac is  $0.123 \pm 0.005$
- Prompt Jpsi pair events is  $1280 \pm 57$

	2016	2018 – part	
Luminosity ( $fb^{-1}$ )	37.9	14.04	
$J/\psi_1 J/\psi_2$	P+P	$2630 \pm 60$	$1350 \pm 40$
	P+NP	$960 \pm 50$	$400 \pm 30$
	NP+P	$920 \pm 50$	$490 \pm 30$
	NP+NP	$5020 \pm 90$	$2140 \pm 70$
$J/\psi_1 \mu^+ \mu^-$	$410 \pm 40$	$510 \pm 50$	
$\mu^+ \mu^- J/\psi_2$	$510 \pm 50$	$450 \pm 50$	
$\mu^+ \mu^- \mu^+ \mu^-$	$26 \pm 14$	$36 \pm 15$	

- Mu:  $pt > 3.5 \text{ GeV}$   $|\eta| < 2.4$
- Jpsi:  $5 < pt < 40 \text{ GeV}$   $|\text{rapidity}| < 2$
- HLT

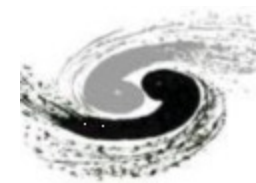


- Total number of events in this region is 5331
- Double Jpsi fraction is  $0.941 \pm 0.03$
- Double prompt fraction is  $0.180 \pm 0.003$
- Prompt Jpsi pair frac is  $0.170 \pm 0.005$
- Prompt Jpsi pair events is  $904 \pm 31$

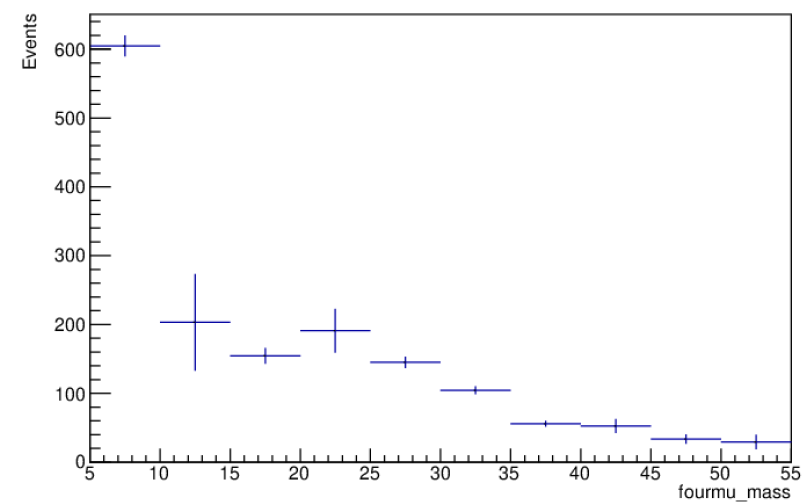
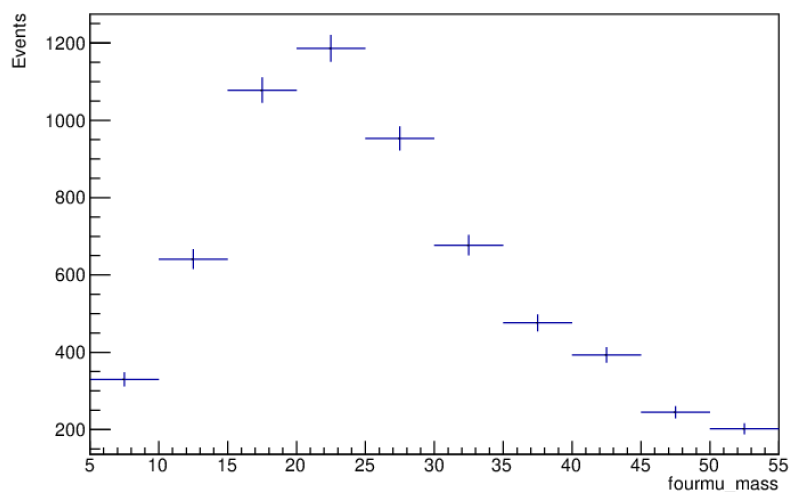
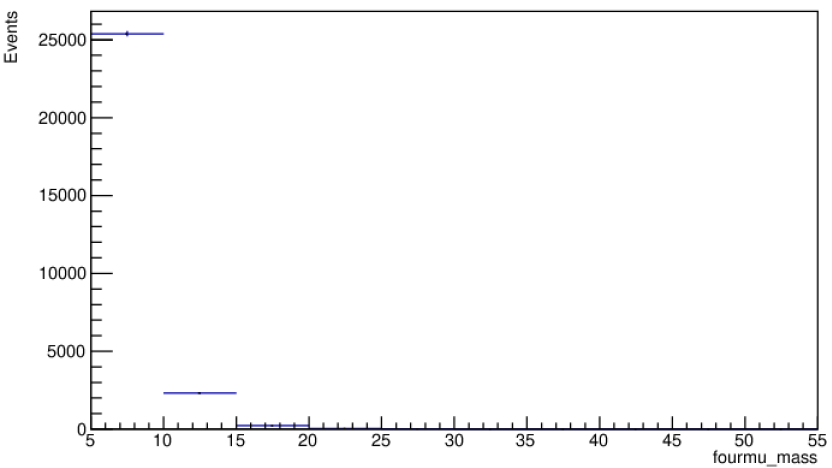
	2016	2018 – part	
Luminosity ( $fb^{-1}$ )			
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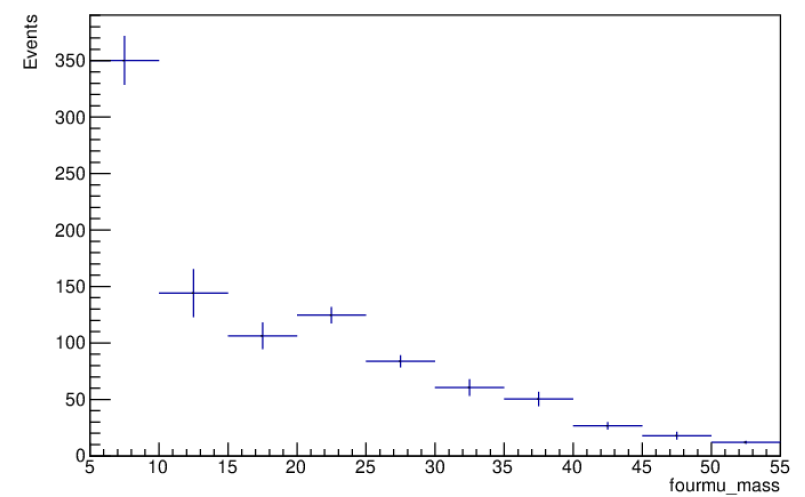
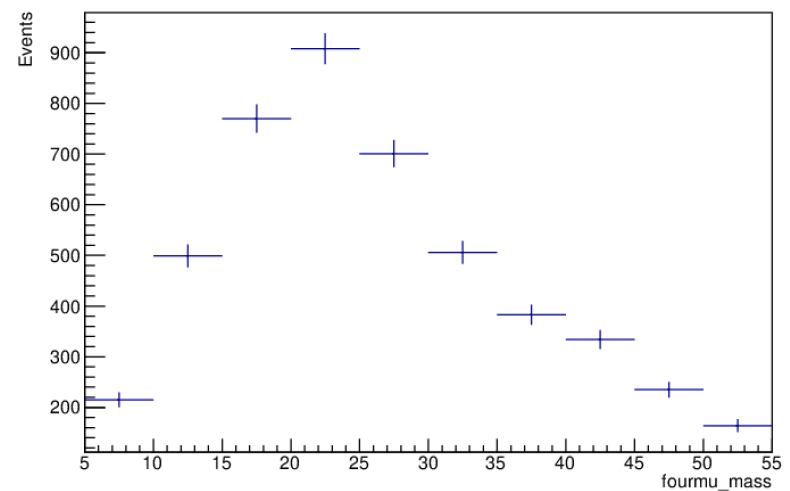
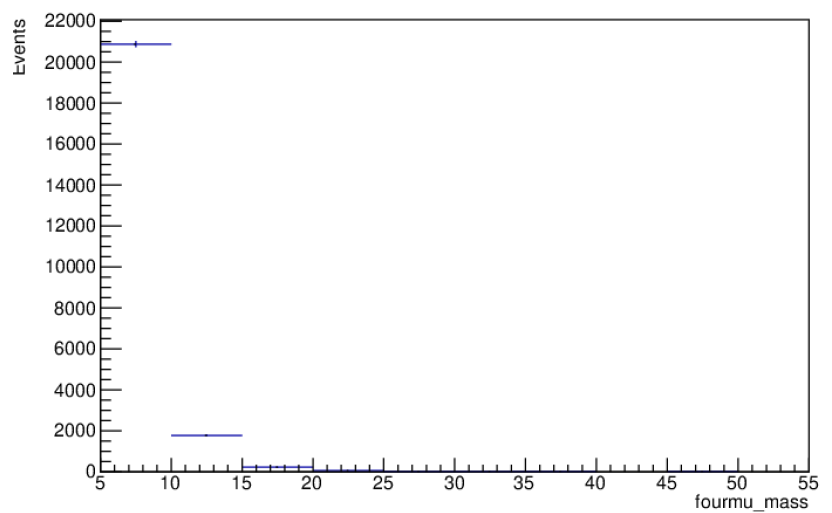
# Fourmu mass



➤ 2016



➤ 2018



SPS

DPS

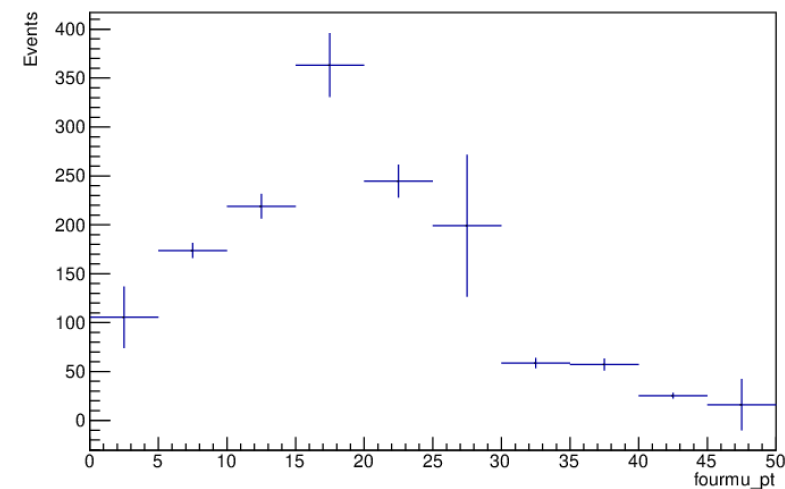
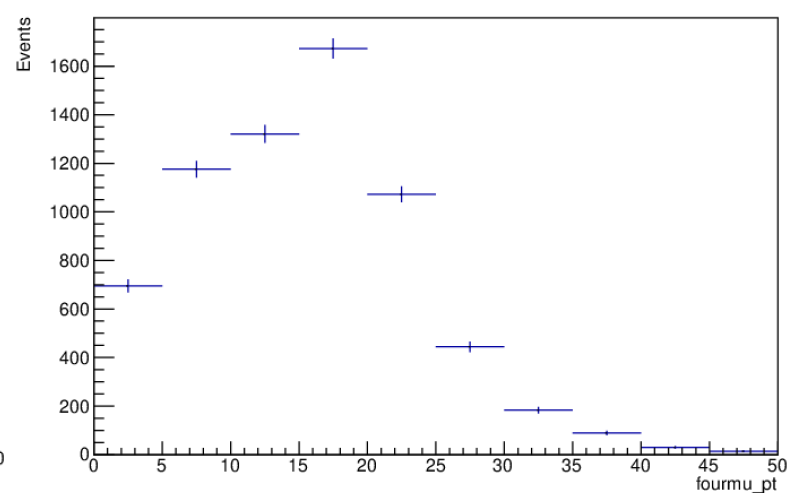
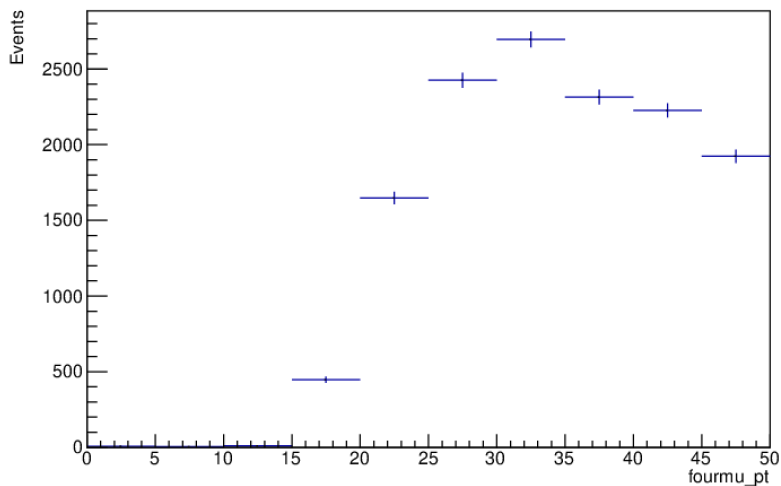
Data



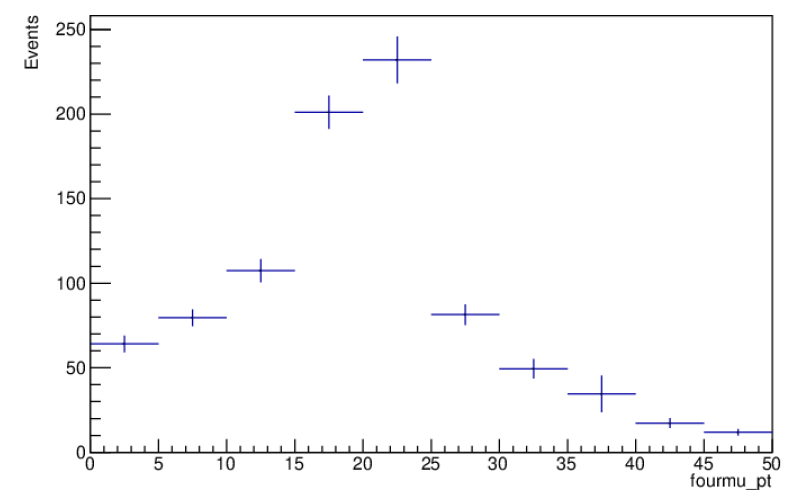
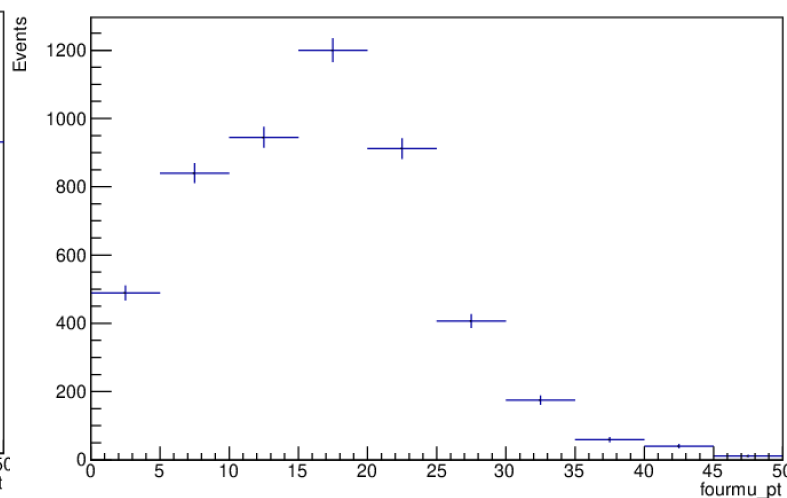
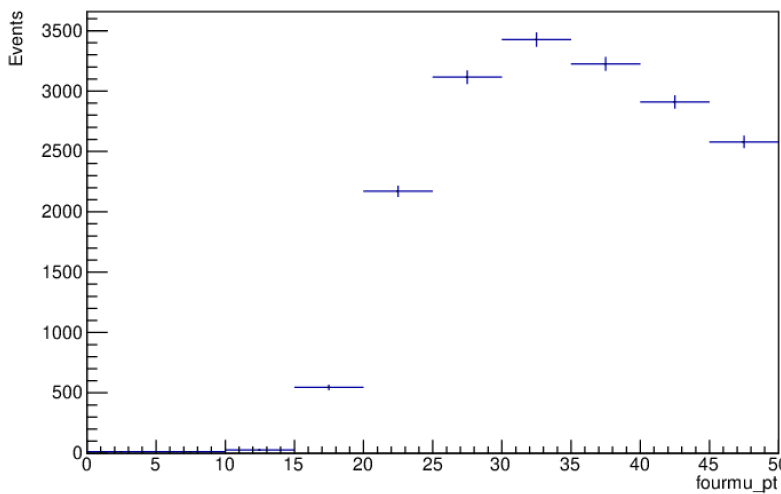
# Fourmu pt



➤ 2016



➤ 2018



SPS

DPS

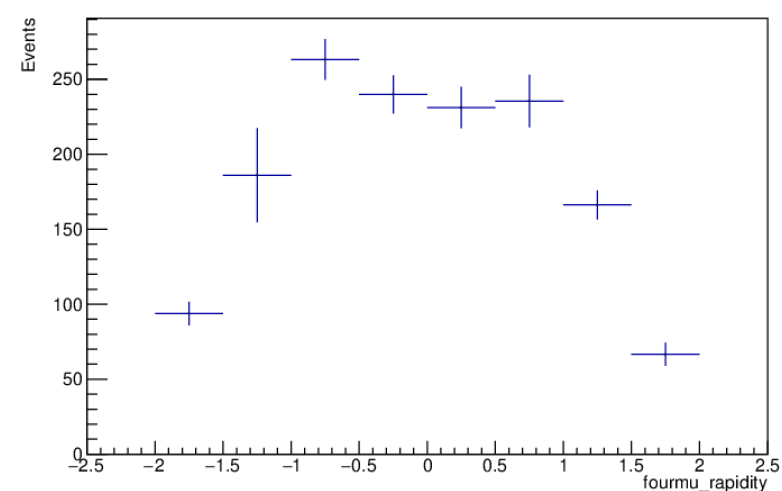
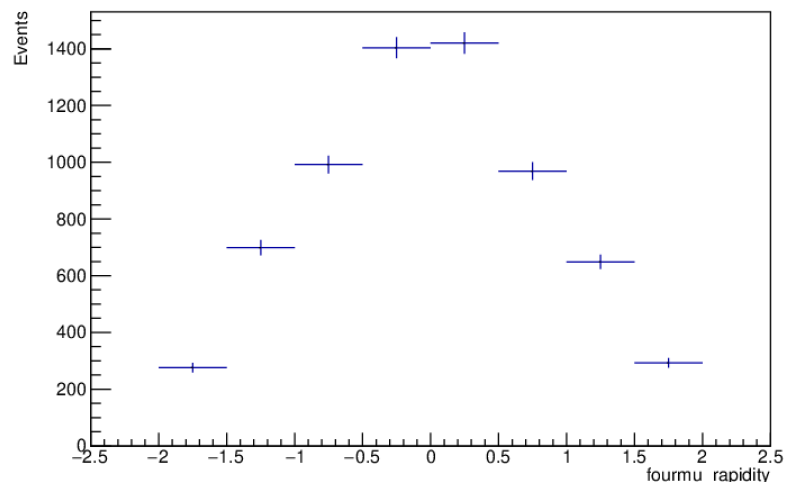
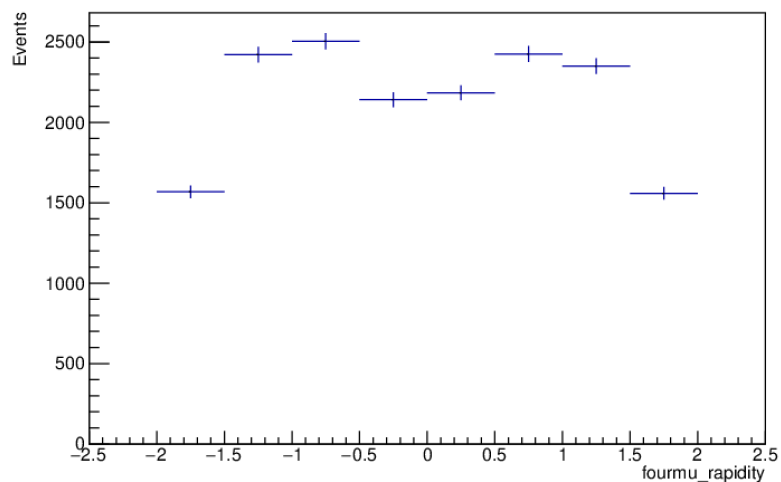
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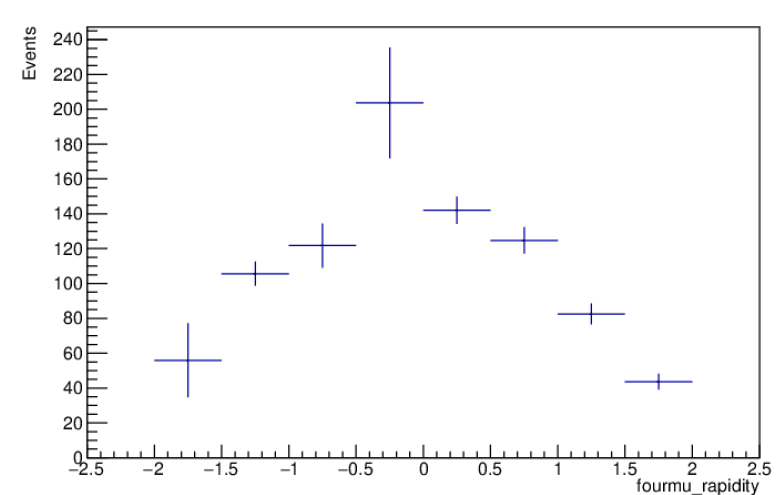
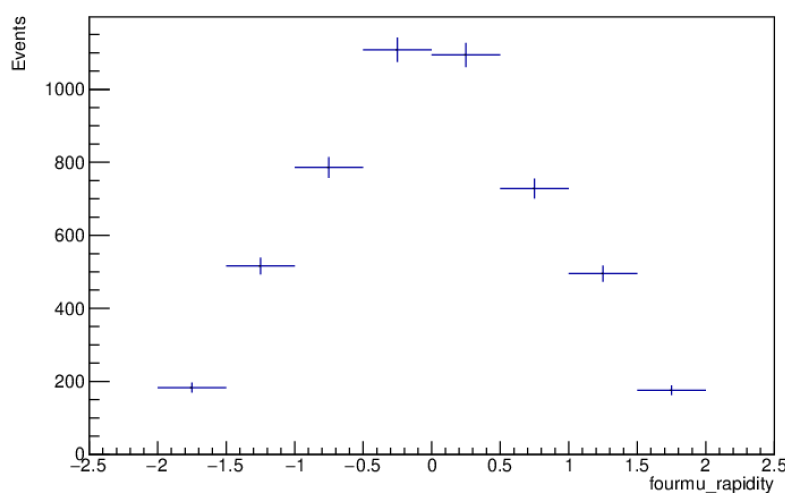
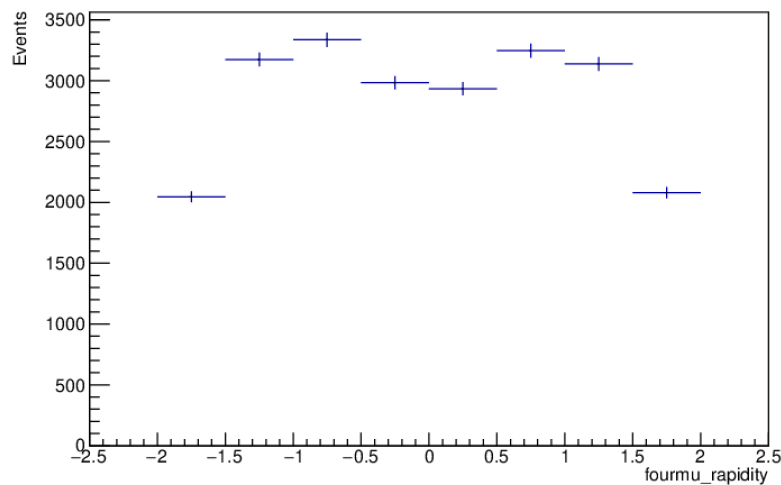
# Fourmu rapidity



➤ 2016



➤ 2018



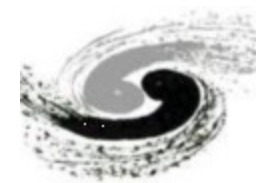
SPS

DPS

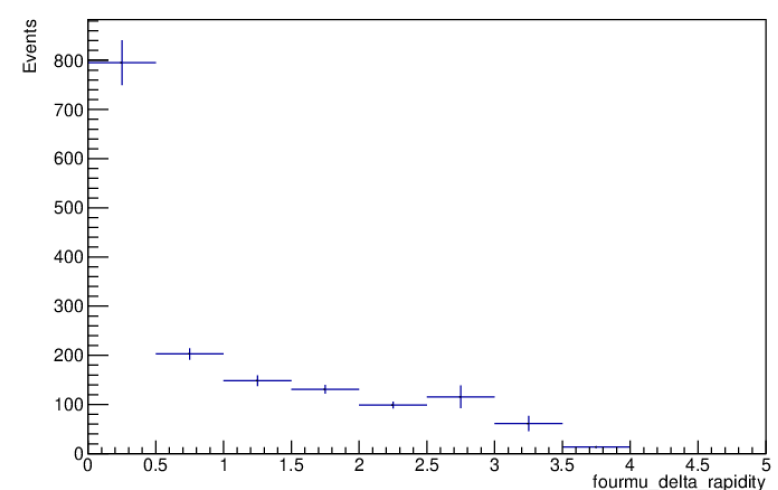
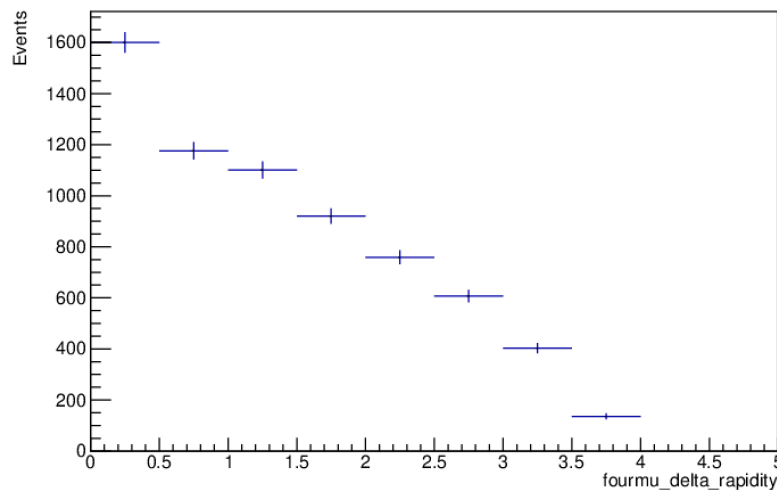
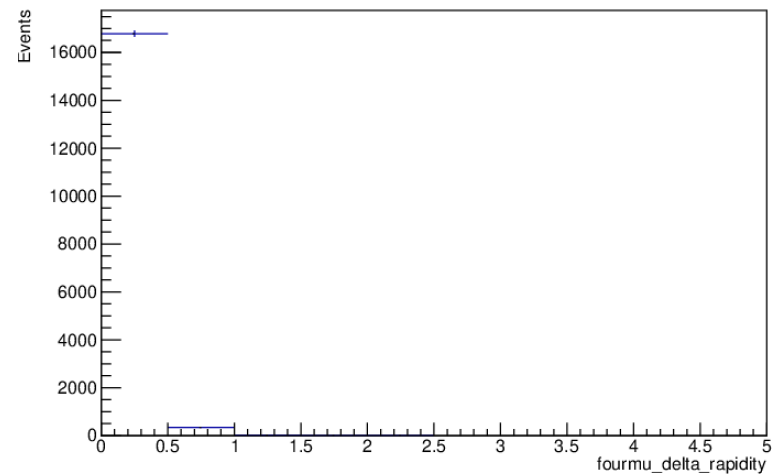
Data



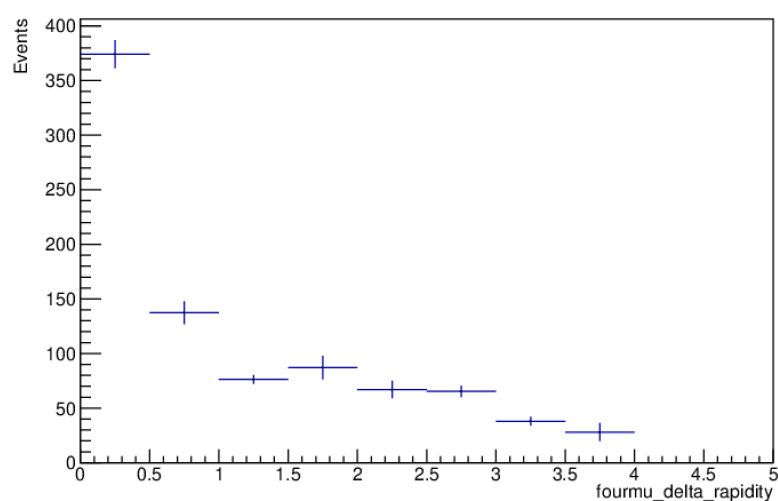
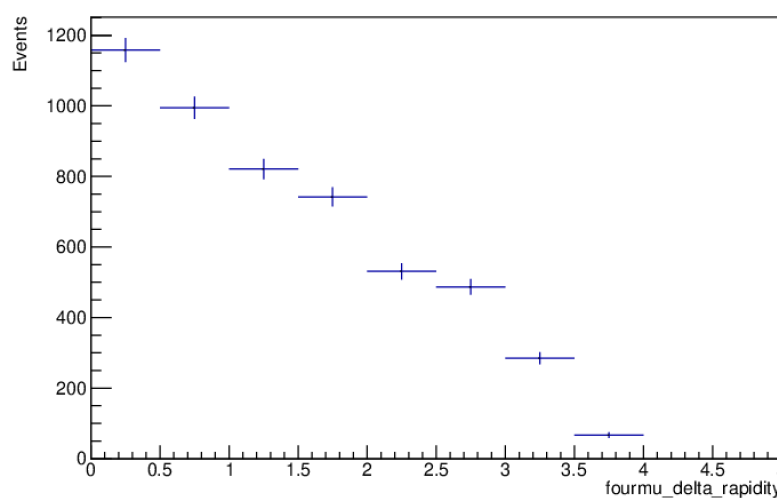
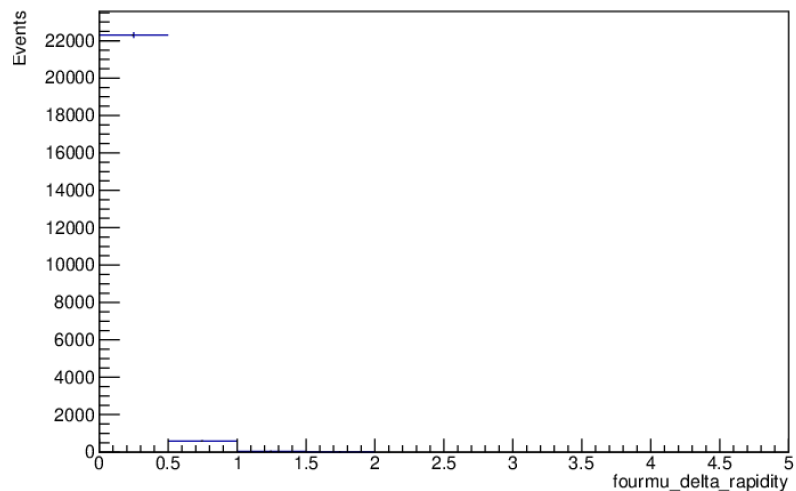
# Fourmu delta rapidity



➤ 2016



➤ 2018



SPS

DPS

Data