

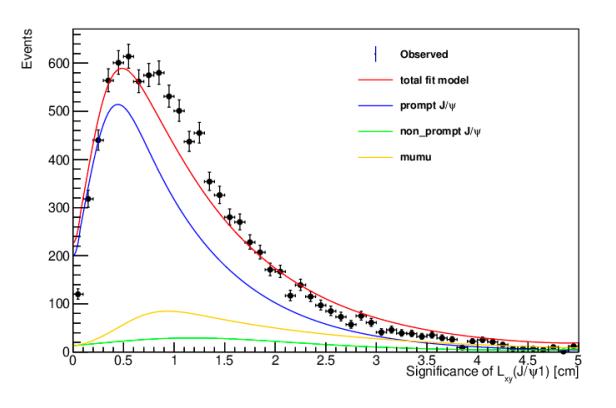
# Double Jpsi

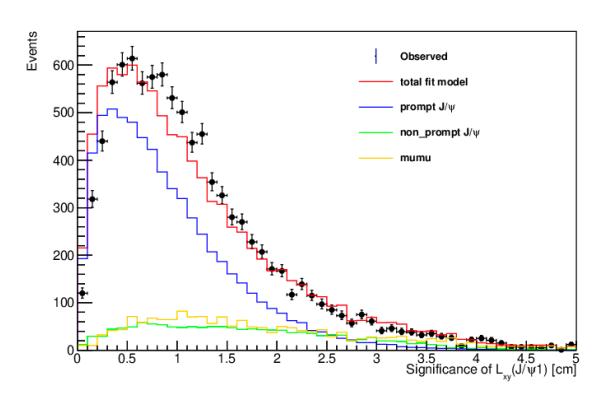
Taozhe Yu



# Analysis review





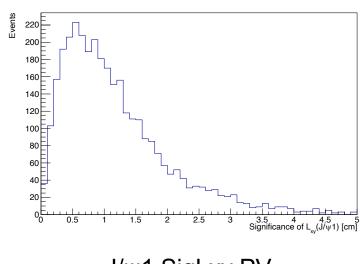


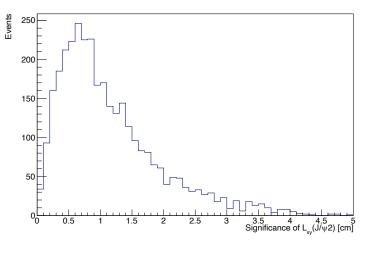
- I expect the signal region have three components: prompt Jpsi, non-prompt Jpsi, mumu
- Use function and histogram PDF to fit
- The fit result still seems not good

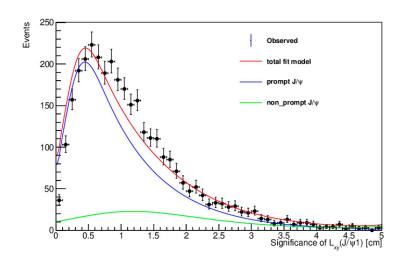


#### 2016 data









J/ψ1 SigLxy PV

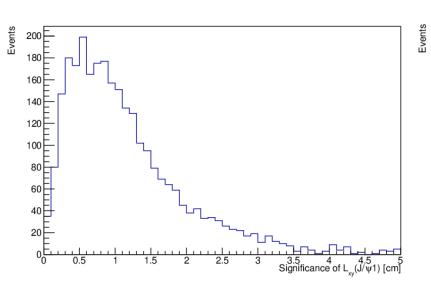
J/ψ1 SigLxy PV

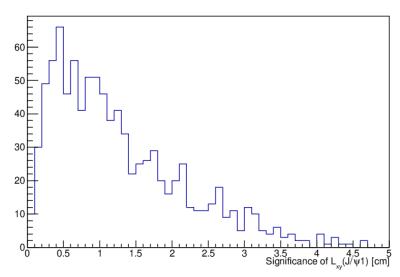
2016 data have the same situation as 2018 data

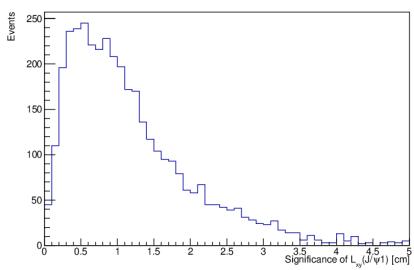


### Run 2018BC









**Trigger Matched** 

**Trigger Not Matched** 

total

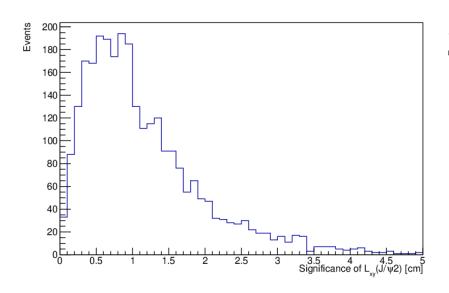
• J/ψ1 SigLxyPV

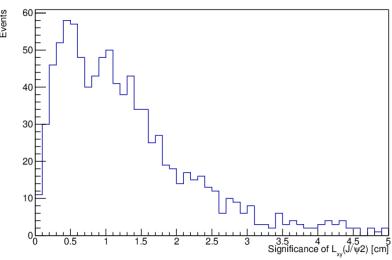
If we add trigger matched, the distribution still have unexpected peak

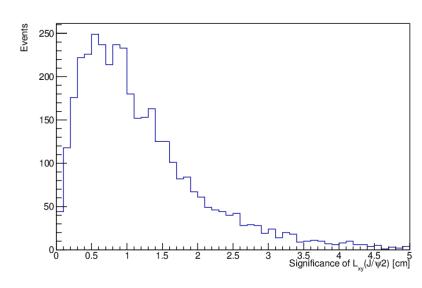


#### Run 2018BC









**Trigger Matched** 

**Trigger Not Matched** 

total

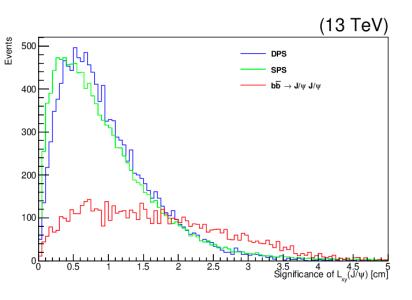
• J/ψ2 SigLxyPV

If we add trigger matched, the distribution still have unexpected peak

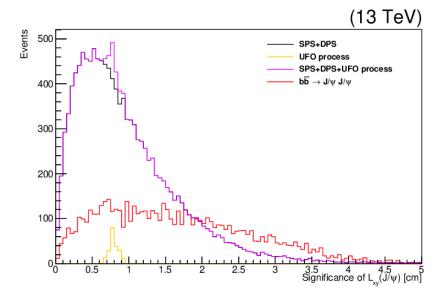


#### **Simulation**





(13 TeV)  $= \frac{\sqrt{200}}{400}$   $= \sqrt{200}$   $= \sqrt{200}$ 



DPS normalized to SPS

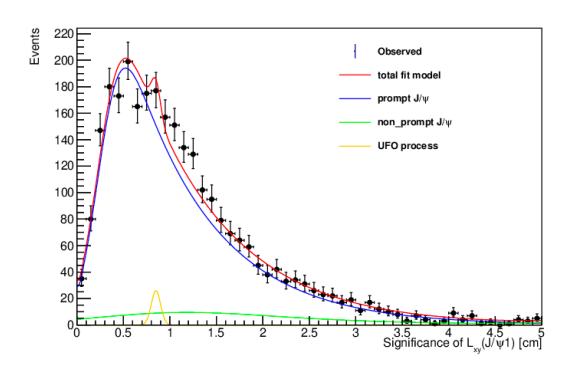
**DPS+SPS** 

Add a gauss distribution Mean: 0.8 Width: 0.06 number: 200

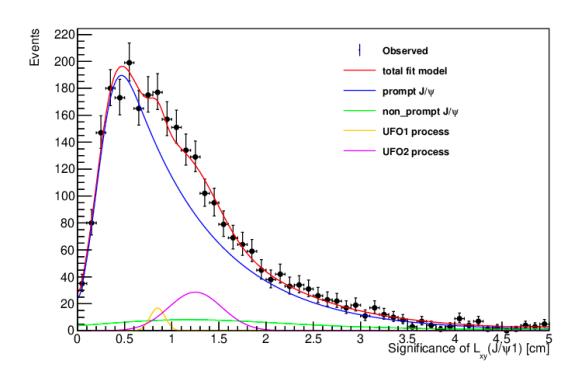


### Add UFO process





If I add a gauss distribution in 0.85, there are still some misfit in around 1.25



If I add another gauss distribution in 1.25





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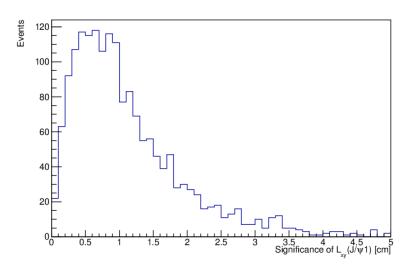


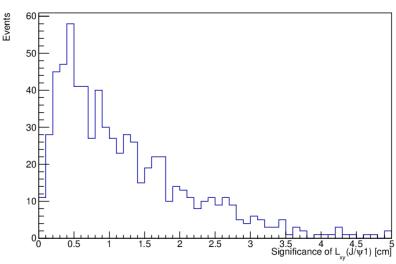
# backup

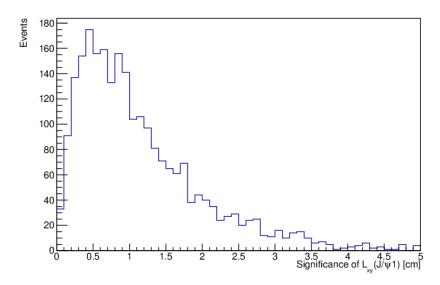


# **Run2018B**









**Trigger Matched** 

**Trigger Not Matched** 

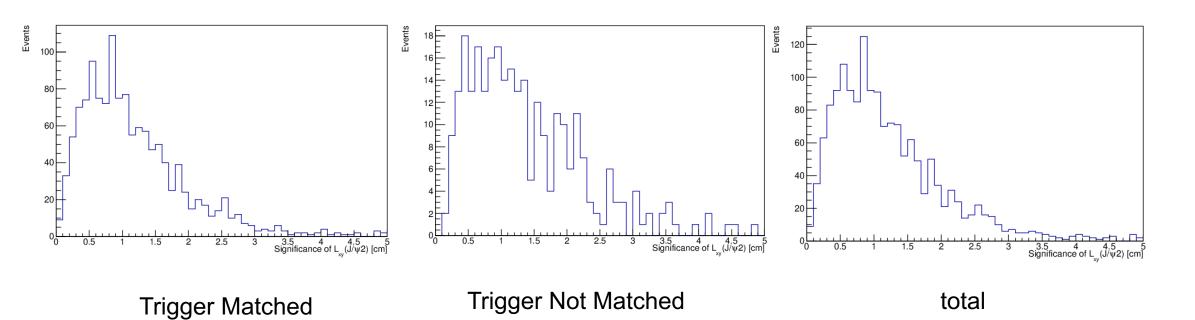
total

• J/ψ1 distribution



# **Run2018B**





Jpsi 2