

# Control Plots

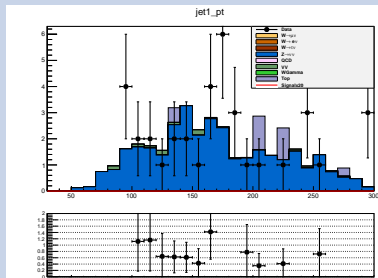
P. Dunne

## New Control Plots

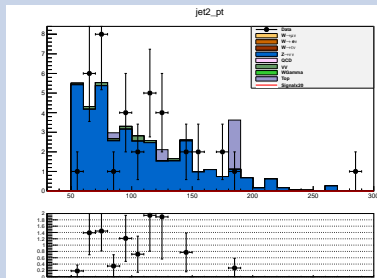
- ▶ Tighter version of cuts to look at region where trigger is 100% efficient
- ▶ Cuts are:
  - $\text{met} > 130$ ,  $\text{jet}_{1pT} > 50$ ,  $\text{dijet}_{d\eta} > 3.6$ ,  
 $\text{metnomu\_significance} > 3$ ,  $\text{jetmetnomu\_mindphi} > 1.5$ ,  
 $\text{jet}_{1,2\eta} < 4.7$ ,  $\text{jet}_{1\eta} \cdot \text{jet}_{2\eta} < 0$ ,  $m_{jj} \geq 1200$ ,  $\text{jet}_{2pT} > 50$
- ▶  $\text{met}$ ,  $\text{jet}_{2pT}$  and  $m_{jj}$  cuts chosen to be above highest trigger threshold and at at least 50% efficiency for run D trigger

## New control plots - mumu

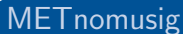
### Jet 1 pt



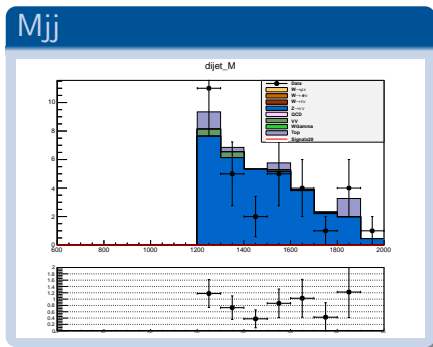
### Jet 2 pt



# METnomu

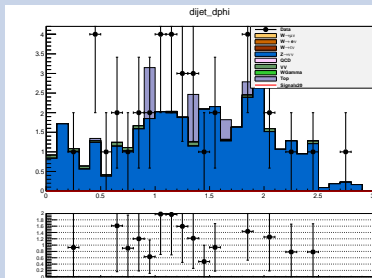


## New control plots - mumu

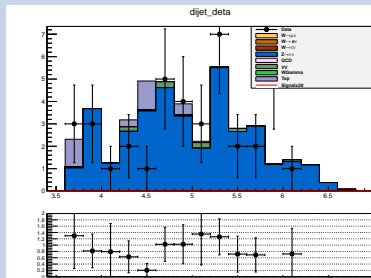


## New control plots -mumu

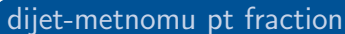
### Dphijj



### Detajj



## Jet-met mindphi



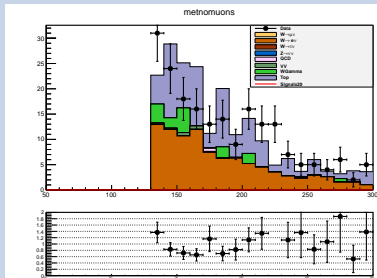
Jet 1 pt



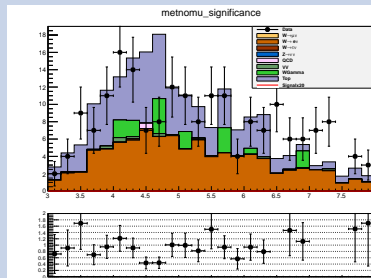


## New control plots -enu

### MET<sub>nomu</sub>

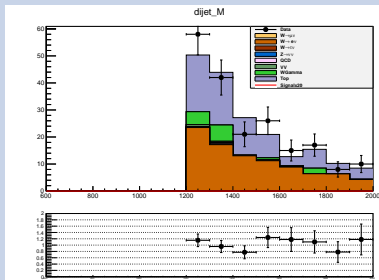


### MET<sub>nomusig</sub>

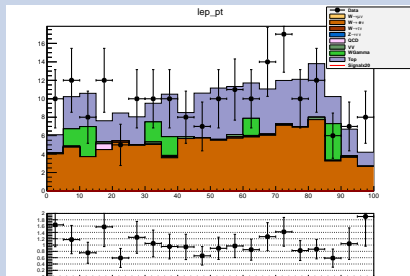


## New control plots - enu

Mjj

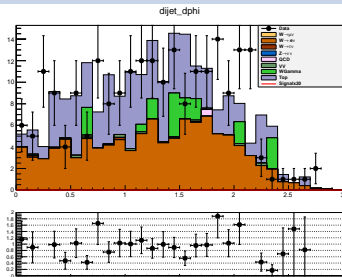


mt

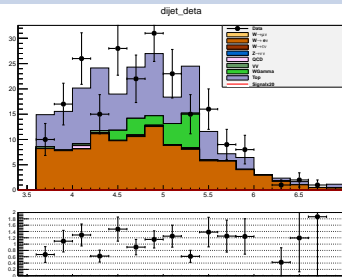


## New control plots - enu

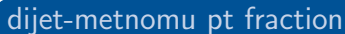
### Dphijj



### Detajj

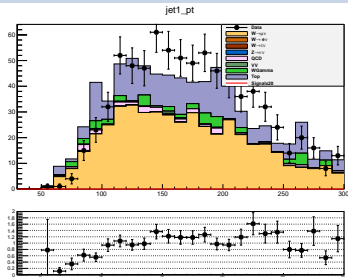


## Jet-met mindphi

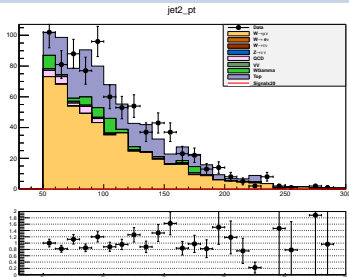


## New control plots - munu

### Jet 1 pt

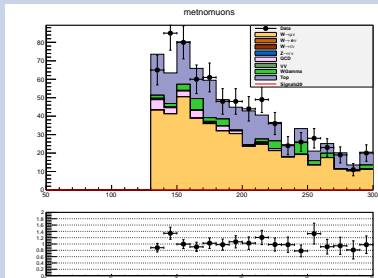


### Jet 2 pt

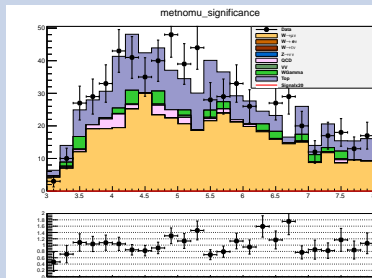


## New control plots - $\mu_{\text{nu}}$

### MET<sub>nomu</sub>

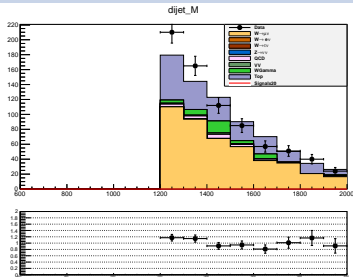


### MET<sub>nomusig</sub>

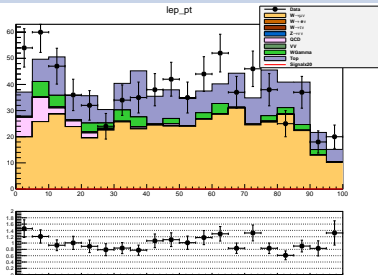


## New control plots - munu

Mjj

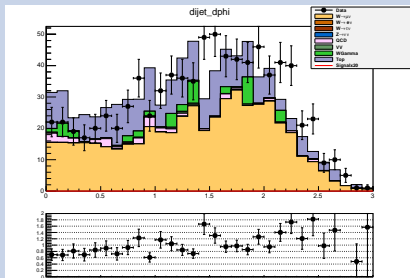


mt

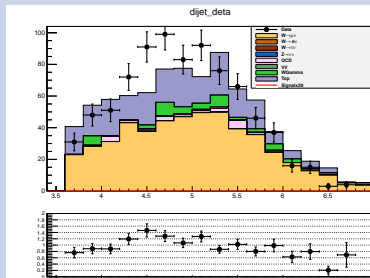


## New control plots - munu

### Dphijj

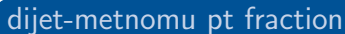


### Detajj



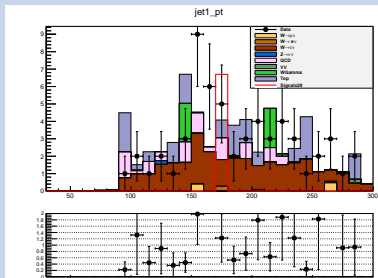


## Jet-met mindphi

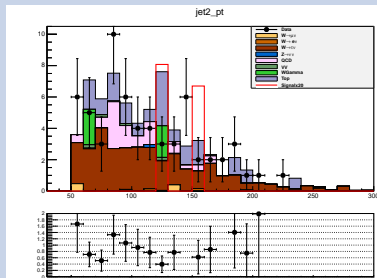


## New control plots - taunu

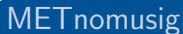
### Jet 1 pt



### Jet 2 pt

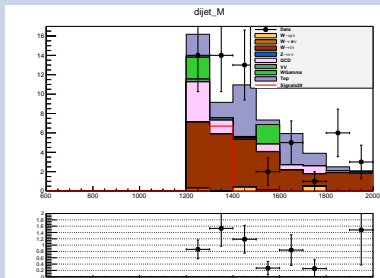


# METnomu

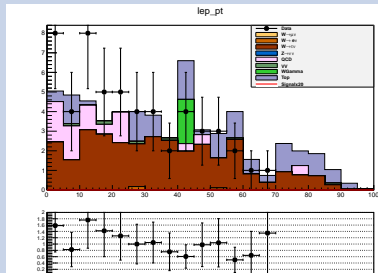


## New control plots - taunu

Mjj



mt

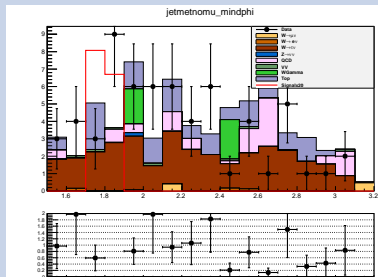


Dphijj

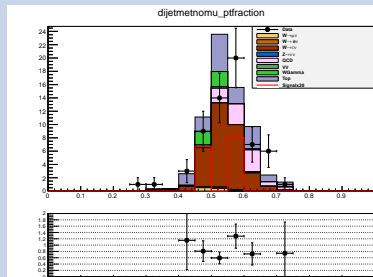


## New control plots - taunu

### Jet-met mindphi

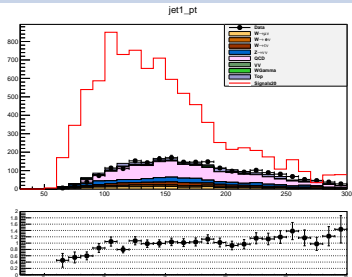


### dijet-metnomu pt fraction

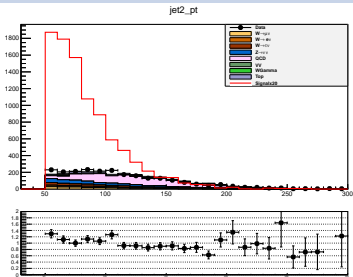


## New control plots - sig

Jet 1 pt

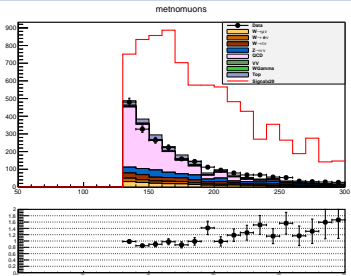


Jet 2 pt

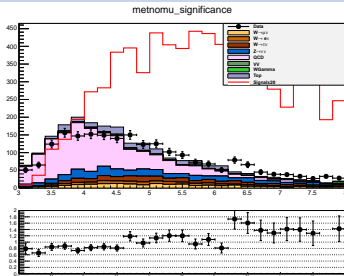


## New control plots - sig

# METnomu

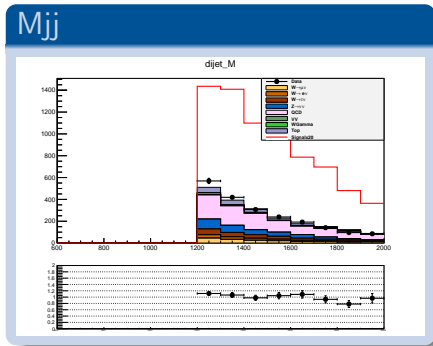


METnomusig



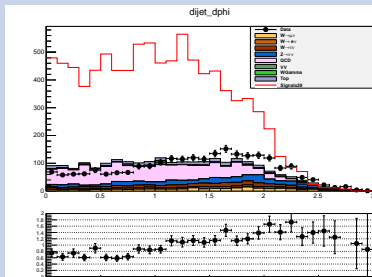


## New control plots - sig

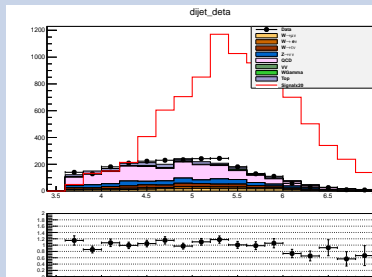


## New control plots - sig

### Dphi<sub>ij</sub>



### Delta<sub>ij</sub>



# Jet-met mindphi



## Conclusions

► test

## Backup