

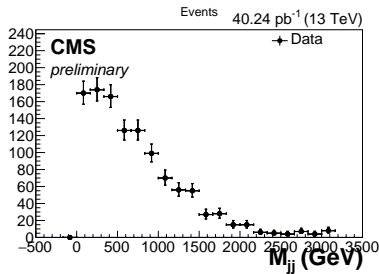
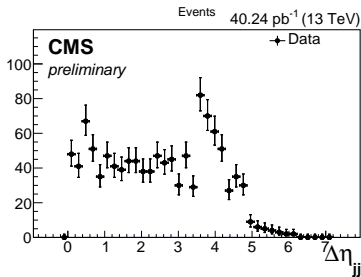
40  $\text{pb}^{-1}$  Data

## Reminder

- ▶ We now have the full  $40 \text{ pb}^{-1}$  of MET and SingleMuon PDs processed
- ▶ Two datasets for each due to first part of PromptReco missing Met Filters
- ▶ Will show plots of variables used in trigger

## Trigger variables: pass trigger

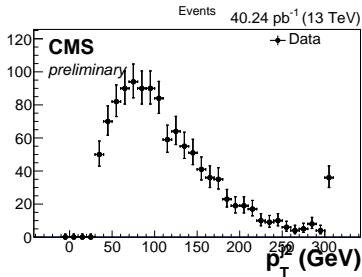
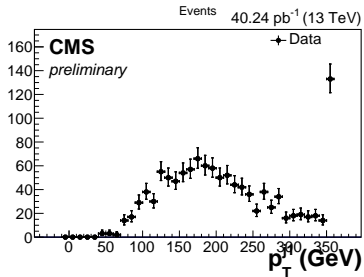
- Start by requiring only  
HLT\_DiPFJet40\_DEta3p5\_MJJ600\_PFMETNoMu140\_v



- Clearly different jet pair offline

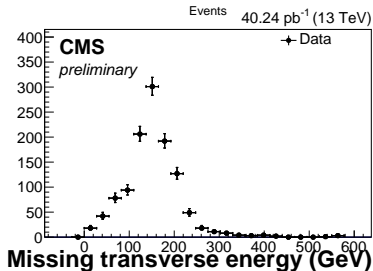
## Trigger variables: pass trigger

- Start by requiring only  
HLT\_DiPFJet40\_DEta3p5\_MJJ600\_PFMETNoMu140\_v



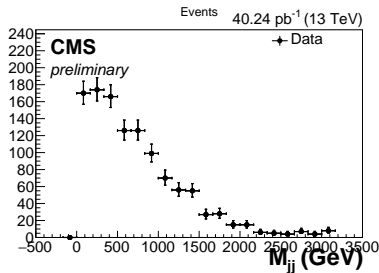
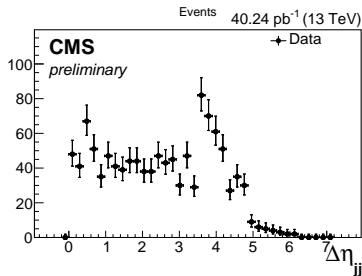
## Trigger variables: pass trigger

- Start by requiring only  
HLT\_DiPFJet40\_DEta3p5\_MJJ600\_PFMETNoMu140\_v



## Trigger variables: tighten cuts

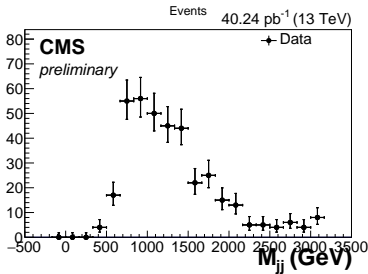
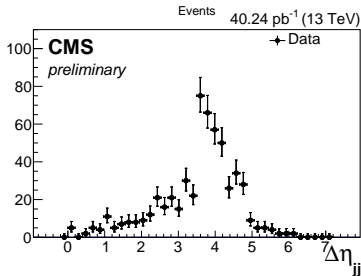
- Check  $\Delta\eta_{jj}$  and  $M_{jj}$  for events with:
  - 2 jets  $p_T > 40$  GeV



- No difference

## Trigger variables: tighten cuts

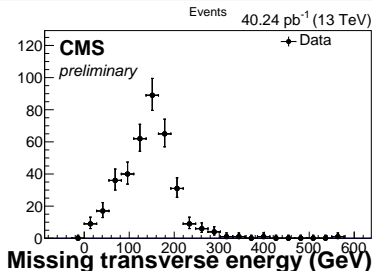
- For  $\Delta\eta_{jj}$  also require  $M_{jj} > 600$  GeV
- For  $M_{jj}$  also require  $\Delta\eta_{jj} > 3.5$



- Much better

## Trigger variables: MET with tighter cuts

- Require 2 jets  $p_T > 40$  GeV,  $M_{jj} > 600$  GeV,  $\Delta\eta_{jj} > 3.5$





## Summary

- ▶ Trigger variables look roughly as expected
- ▶ Next steps:
  - Turn on curves from single mu
  - Get MC expectations for comparison
- ▶ Combination progress:
  - First draft of PAS in CADI
  - Nick is updating EXO note
  - Aiming for preapproval next Monday

## Backup