

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



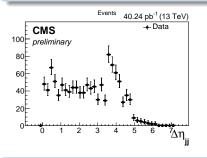
Reminder

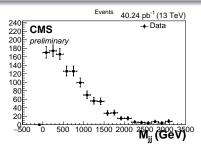
- ► We now have the full 40 pb⁻¹ of MET and SingleMuon PDs processed
- Two datasets for each due to first part of PromptReco missing Met Filters
- Will show plots of variables used in trigger



Trigger variables: pass trigger

► Start by requiring only HLT_DiPFJet40_DEta3p5_MJJ600_PFMETNoMu140_v



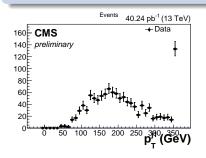


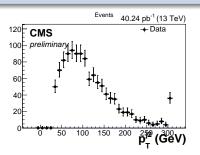
Clearly different jet pair offline



Trigger variables: pass trigger

► Start by requiring only HLT_DiPFJet40_DEta3p5_MJJ600_PFMETNoMu140_v

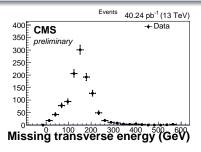






Trigger variables: pass trigger

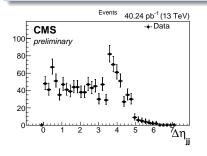
► Start by requiring only HLT_DiPFJet40_DEta3p5_MJJ600_PFMETNoMu140_v

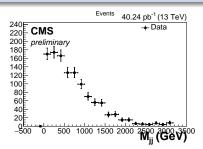




Trigger variables: tighten cuts

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



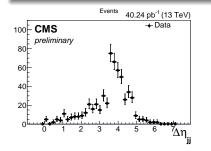


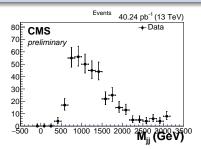
▶ No difference



Trigger variables: tighten cuts

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



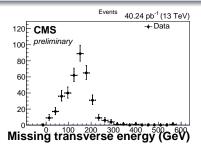


► Much better



Trigger variables: MET with tighter cuts

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

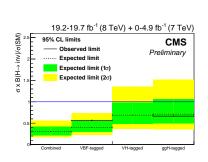


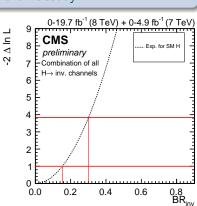
0 pb⁻¹ Data 8 / 10



Combination

- ► Expected limit 30%
- Preapproval in Higgs meeting next Tuesday







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 and updated Exo AN are in CADI
- Preapproval next Tuesday



Backup