



山东大学
SHANDONG UNIVERSITY

Department of Physics, Shandong University

Weekly meeting

Chengxin Liao

liaocx@ihep.ac.cn

Wed, Nov 20, 2024

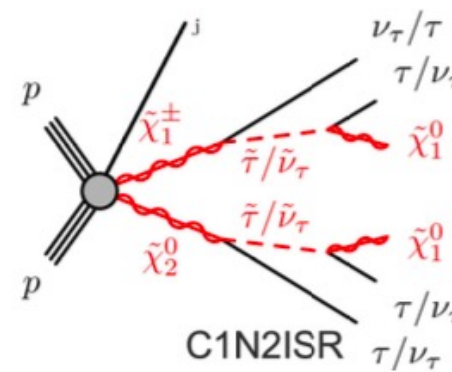


Pre-selection

Selection


- lep-had
channel: $n\text{Taus} \geq 1; n\text{Leps} \geq 1$
- had-had
channel: $n\text{Taus} \geq 2; n\text{Leps} = 0$
- $\text{MET} \geq 200$; pass MET trigger
- $1 \leq n\text{BaseJet} \leq 8$
- b-veto
- OS

Both data and bkg are sourced from run2(1516, 17, 18).



CutCount result

Highlight line is the var combination I choose



$Pt_lep \leq 32$

$Pt_tau \leq 48$

$METsig \geq 16$

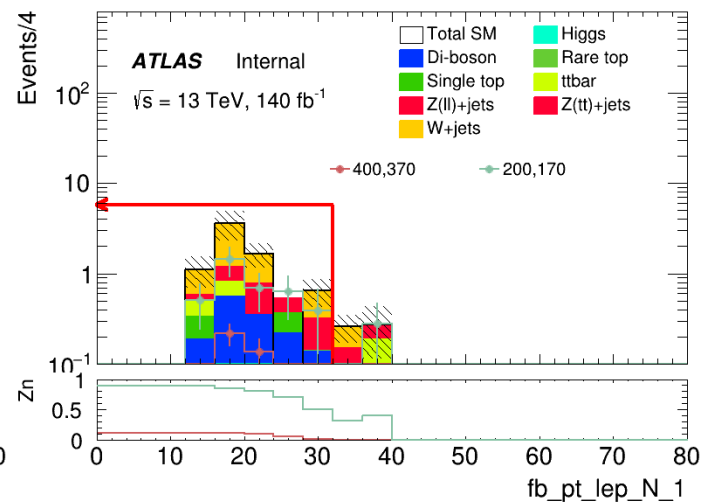
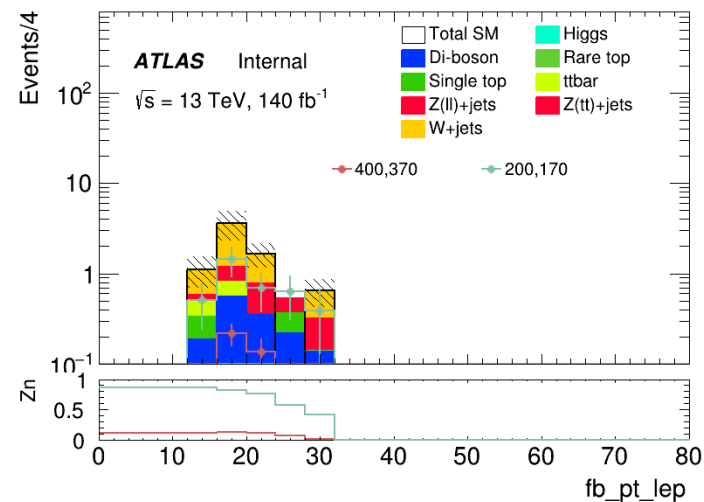
$Mll \leq 60$

$20 \leq Mt_tau \leq 48$

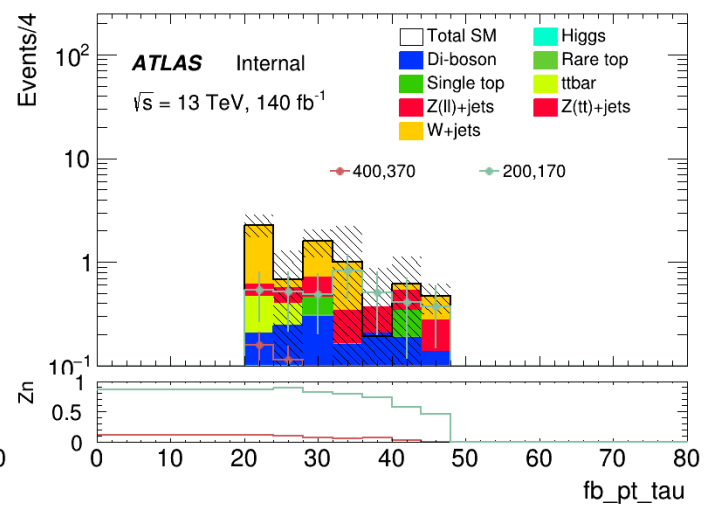
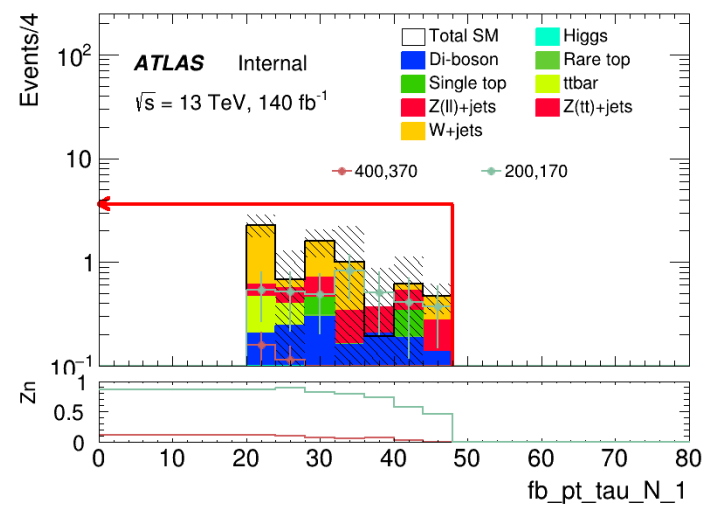
$MT2_50 \leq 60$

$0.2 \leq dPhit1x \leq 1.2$

CutCount: HH

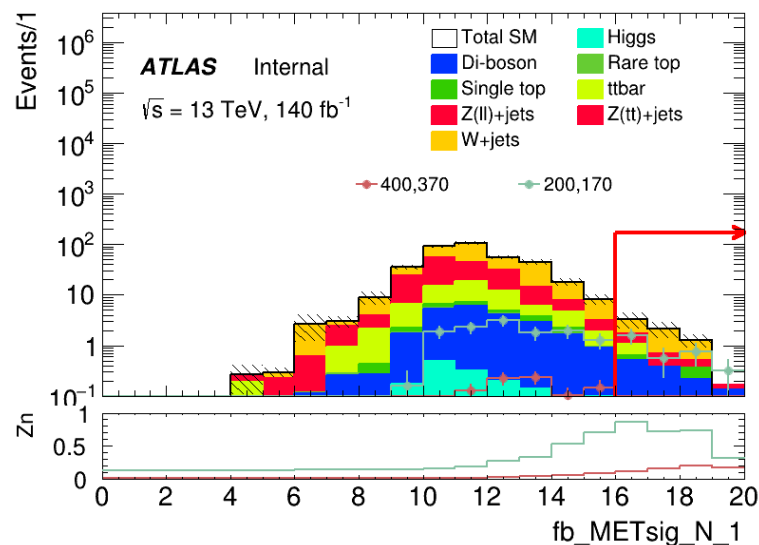
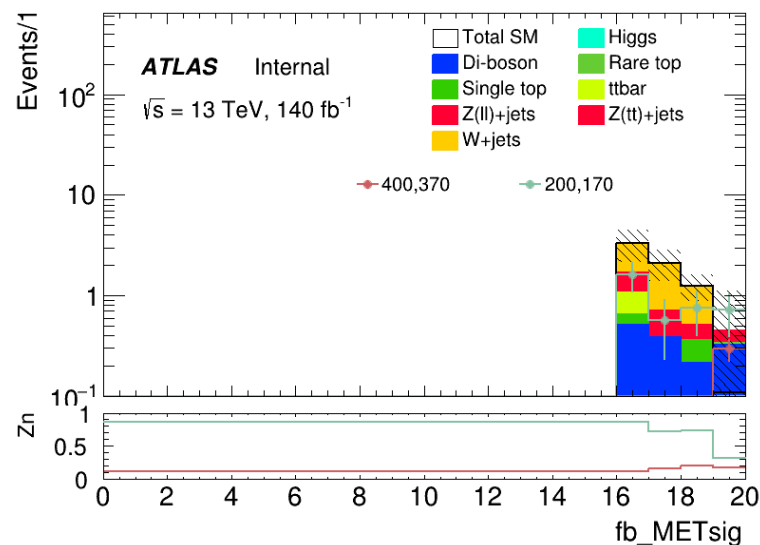


Pt_lep <= 32

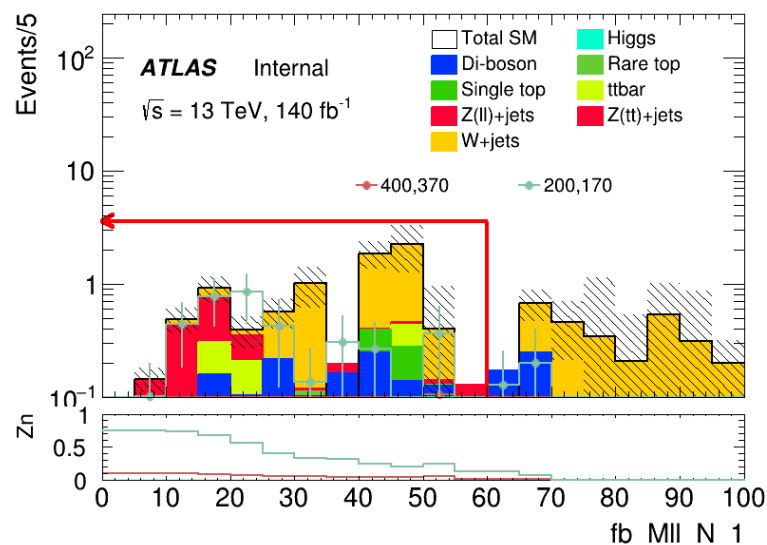
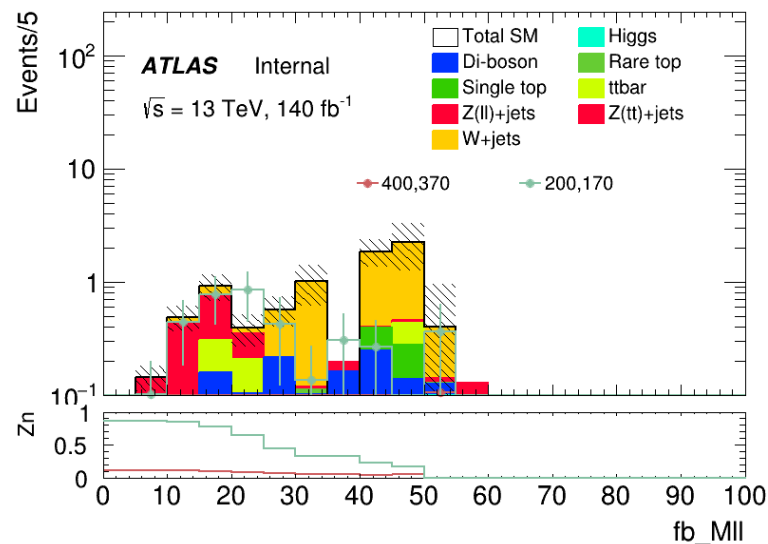


Pt_tau <= 48

CutCount: HH

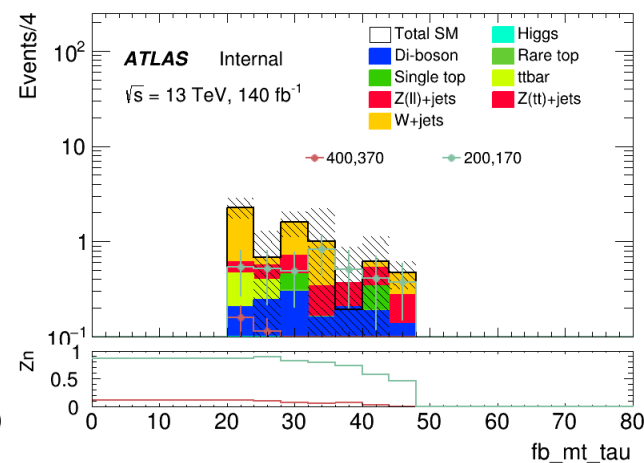
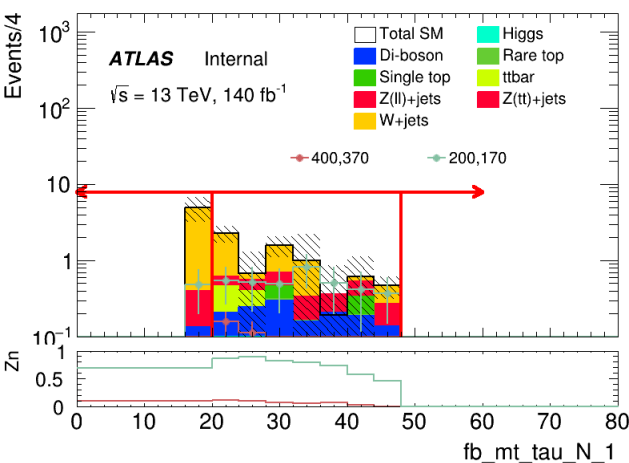


METsig ≥ 16

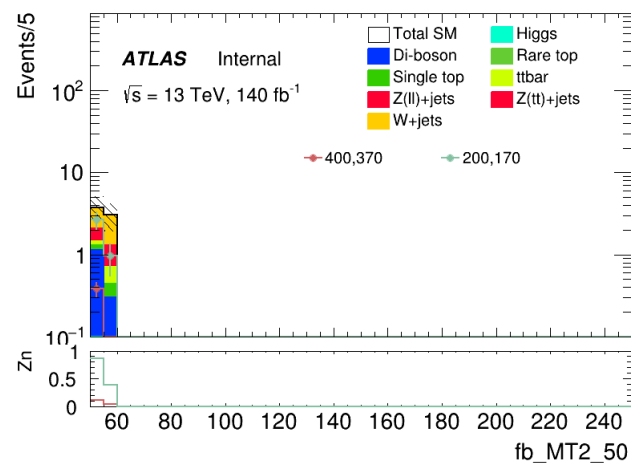
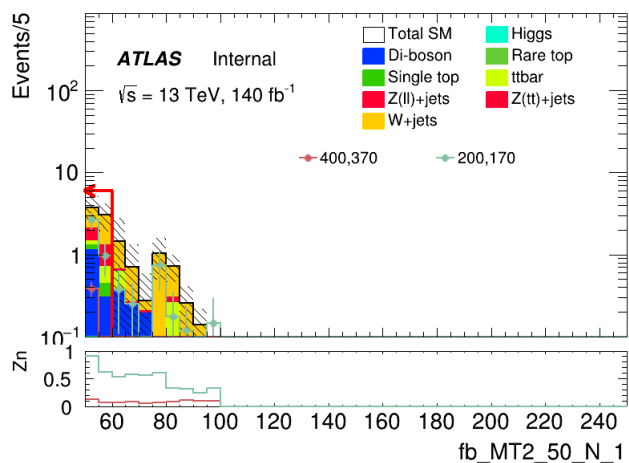
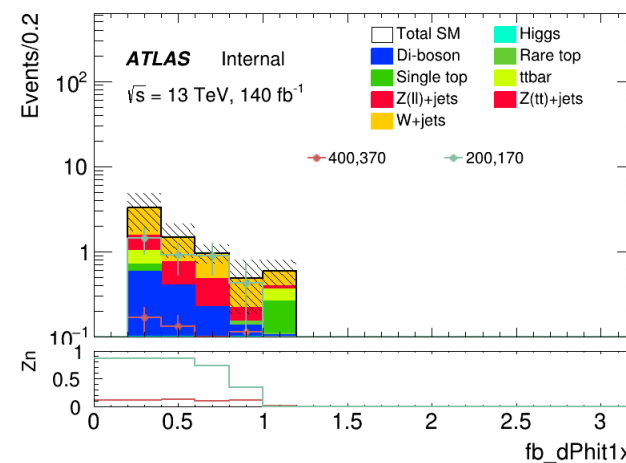


Pt_tau ≤ 60

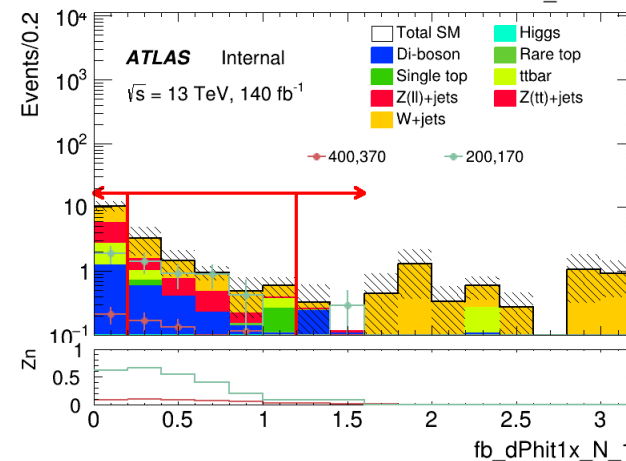
CutCount: HH



$20 \leq M_{t\tau} \leq 50$



$M_{T2_50} \leq 60$



$0.2 \leq d_{\text{Phit1x}} \leq 1.2$

t1x: Tau1 & MET