8.22-8.28工作汇报

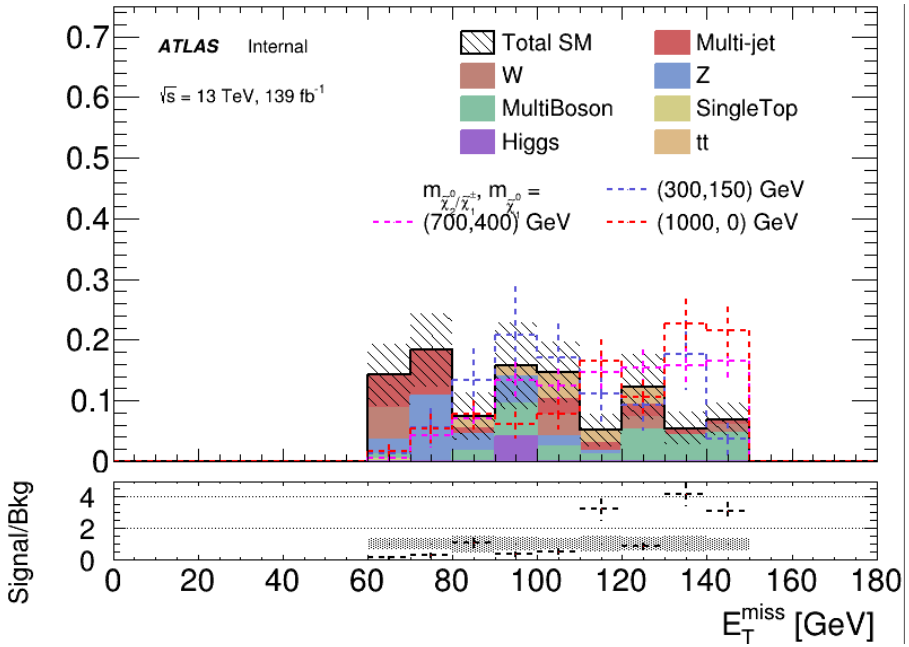
- Signal/Bkg图和绘制
- ZN图绘制

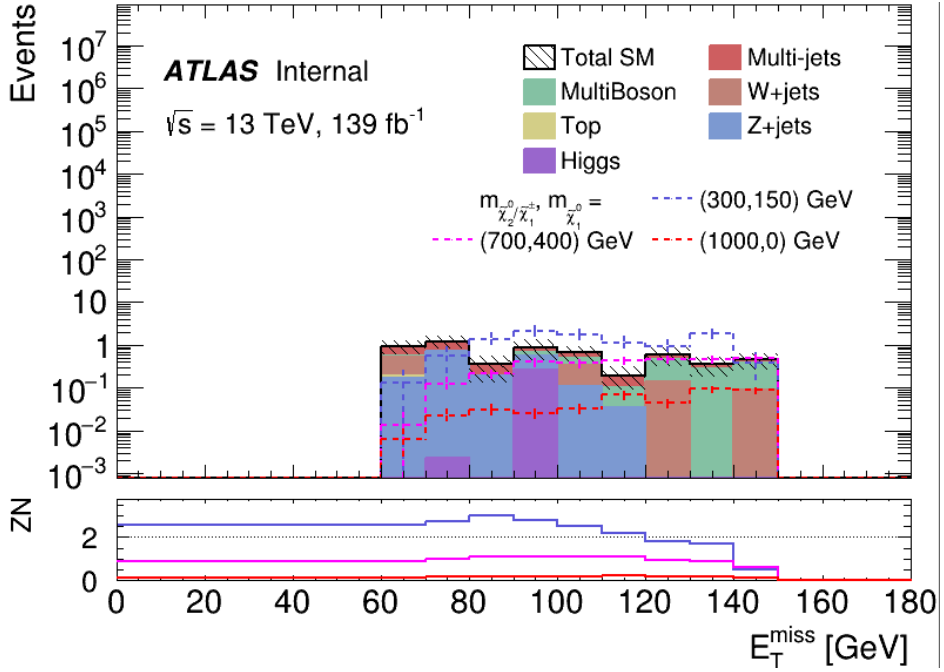
潘超钰　8.29

- cut

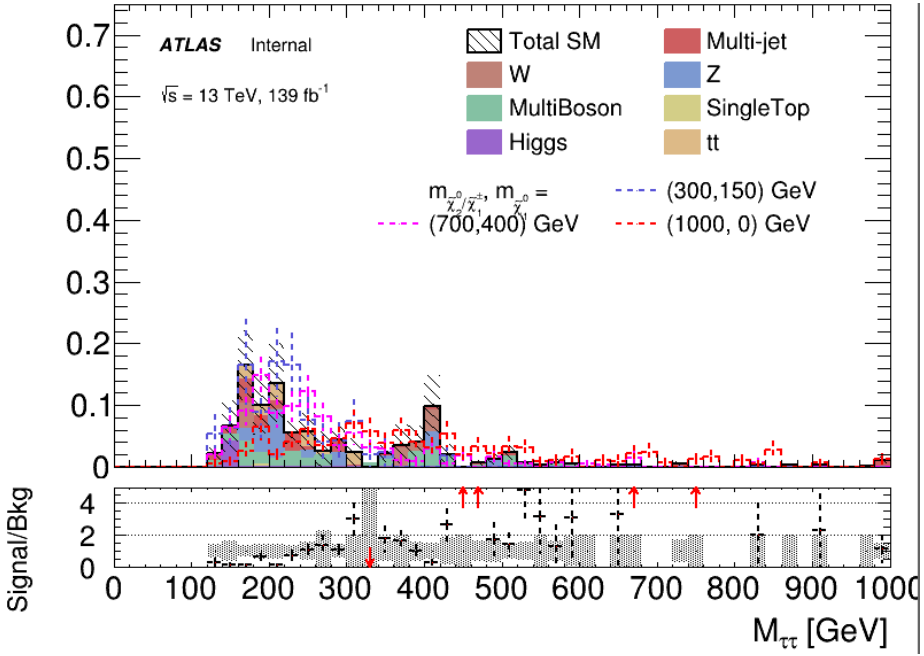
```
    auto mCutflow_low = addCutflow();
    mCutflow_low->setWeight([&]{return Var["totalWeight"];});
    mCutflow_low->setFillTree(oTree);
    mCutflow_low->registerCut("baseline",[&] {return fabs(Var["totalWeight"]) < 1000 ; });  //统计没有经过任何cut时的事例
数
    mCutflow_low->registerCut("==2 tau", [&] {return n_BaseTau == 2; } );
    mCutflow_low->registerCut(">= 2 medium tau", [&] {return nTaus >= 2 && nTightTau >=1; });
    mCutflow_low->registerCut("OS", [&] {return (OS2Tau); });
    mCutflow_low->registerCut("MET<150 GeV", [&] {return Var["MET"] < 150; } );
    mCutflow_low->registerCut("z/hVeto(120Gev)", [&] {return Var["Mtt_12"] > 120; } );
    mCutflow_low->registerCut("bVeto",[&] {return Var["bVeto"];},"bTag",2,0,2,[&]{return Var["bNumber"];});
    mCutflow_low->registerCut("dPhitt>1.6", [&] {return Var["dPhitt"] > 1.6; }, "dPhitt",15,0,3, [&] {return Var["dPhitt"
];}, Hist::USE_OVERFLOW);
    mCutflow_low->registerCut("MET>60 GeV",[&] {return Var["MET"] > 60 && Var["MET"] < 150; }, "MET",15,0,150, [&] {retur
n Var["MET"];}, Hist::USE_OVERFLOW);
    mCutflow_low->registerCut("MT2>80 GeV", [&] {return Var["MT2"] > 80; }, "MT2",12,30,150, [&] {return Var["MT2"];}, Hi
st::USE_OVERFLOW);
```

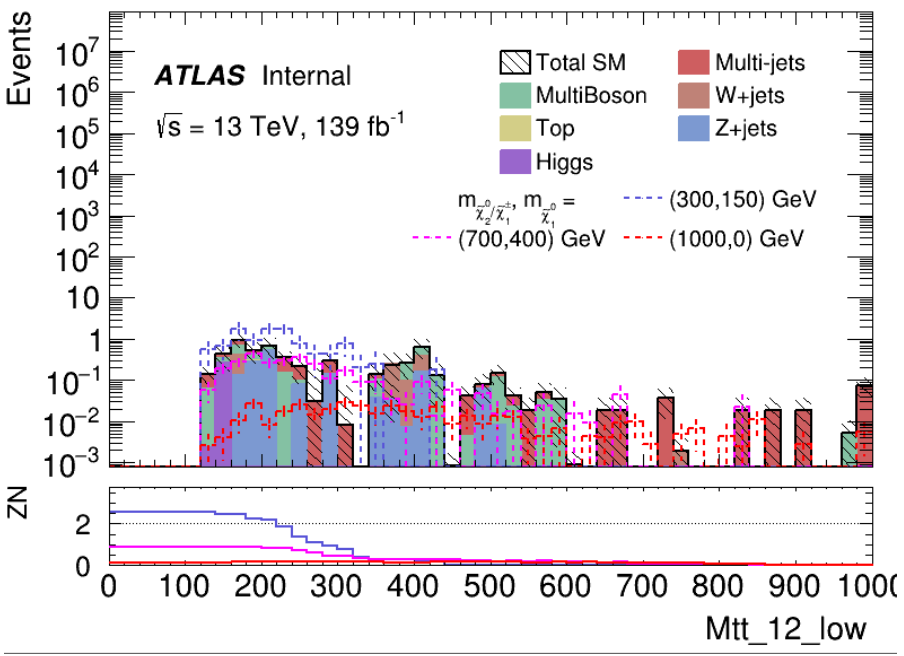
- MET<150GeV


ATLAS Internal
√s = 13 TeV, 139 fb-1
Total SM
Multi-jet
W
Z
MultiBoson
SingleTop
Higgs
tt
m(χ̃2⁰/χ̃1±), m(χ̃1⁰) =
(700,400) GeV
(300,150) GeV
(1000, 0) GeV
Signal/Bkg
E_T^miss [GeV]

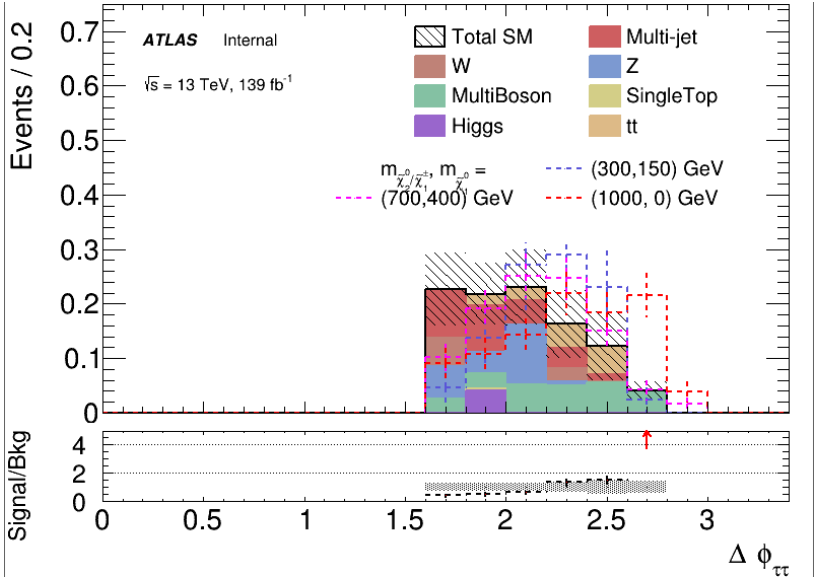

Events
ATLAS Internal
√s = 13 TeV, 139 fb-1
Total SM
Multi-jets
MultiBoson
W+jets
Top
Z+jets
Higgs
m(χ̃2⁰/χ̃1±), m(χ̃1⁰) =
(700,400) GeV
(300,150) GeV
(1000,0) GeV
ZN
E_T^miss [GeV]

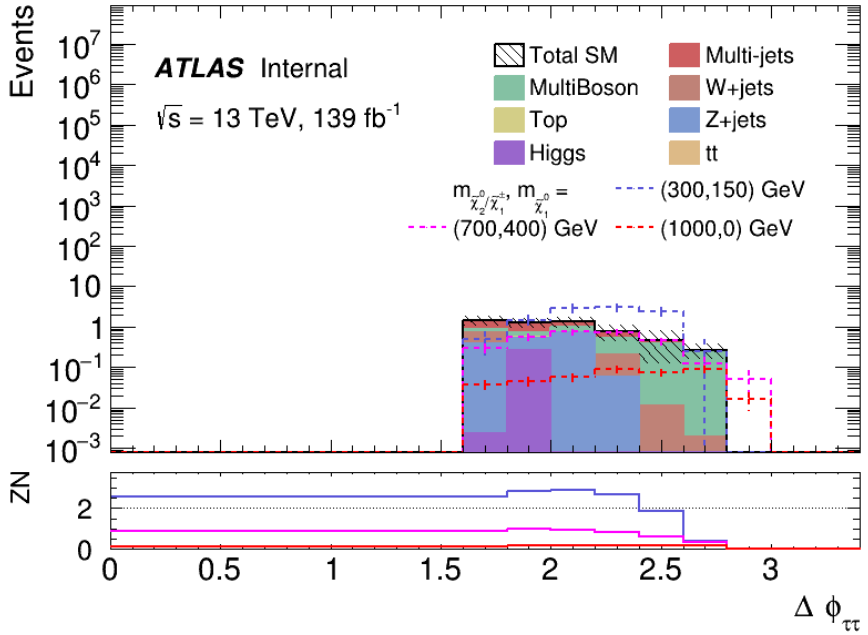
- Mtt_12>120


ATLAS Internal
√s = 13 TeV, 139 fb-1
Total SM
Multi-jet
W
Z
MultiBoson
SingleTop
Higgs
tt
m(χ̃20/χ̃1±, χ̃10) =
(700,400) GeV
(300,150) GeV
(1000, 0) GeV
Signal/Bkg
Mττ [GeV]

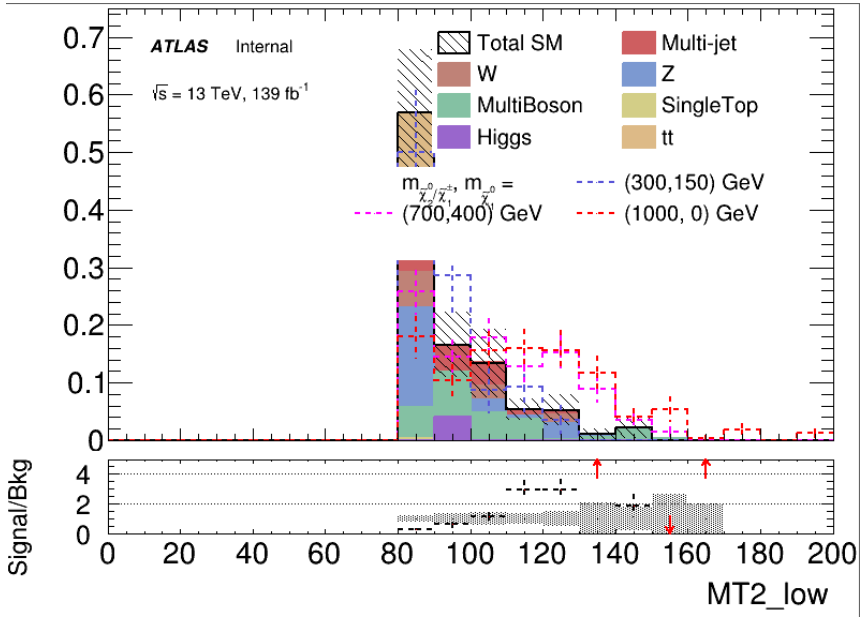

ATLAS Internal
√s = 13 TeV, 139 fb-1
Total SM
Multi-jets
MultiBoson
W+jets
Top
Z+jets
Higgs
m(χ̃20/χ̃1±, χ̃10) =
(700,400) GeV
(300,150) GeV
(1000,0) GeV
Events
ZN
Mtt_12_low

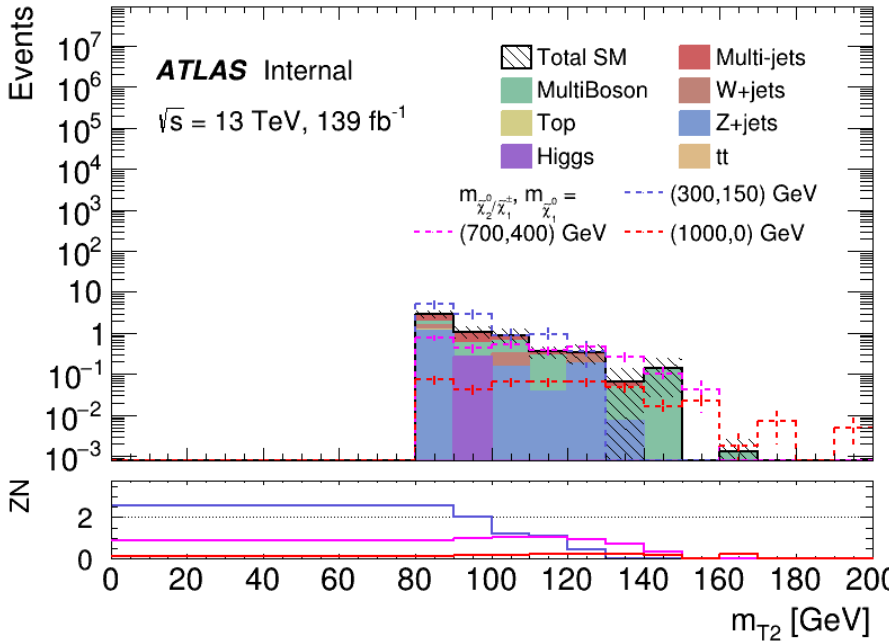
- DPhitt>1.6


ATLAS Internal
√s = 13 TeV, 139 fb-1
Total SM
Multi-jet
W
Z
MultiBoson
SingleTop
Higgs
tt
m(χ̃2/χ̃1±), m(χ̃1) =
(700,400) GeV
(300,150) GeV
(1000, 0) GeV
Events / 0.2
Signal/Bkg
Δ φττ


ATLAS Internal
√s = 13 TeV, 139 fb-1
Total SM
Multi-jets
MultiBoson
W+jets
Top
Z+jets
Higgs
tt
m(χ̃2/χ̃1±), m(χ̃1) =
(700,400) GeV
(300,150) GeV
(1000,0) GeV
Events
ZN
Δ φττ

- MT2>80


ATLAS Internal
√s = 13 TeV, 139 fb-1
Total SM
W
MultiBoson
Higgs
Multi-jet
Z
SingleTop
tt
m(χ̃2⁰/χ̃1±), m(χ̃1⁰) =
(700,400) GeV
(300,150) GeV
(1000, 0) GeV
Signal/Bkg
MT2_low


Events
ATLAS Internal
√s = 13 TeV, 139 fb-1
Total SM
MultiBoson
Top
Higgs
Multi-jets
W+jets
Z+jets
tt
m(χ̃2⁰/χ̃1±), m(χ̃1⁰) =
(700,400) GeV
(300,150) GeV
(1000,0) GeV
ZN
mT2 [GeV]

Thanks!