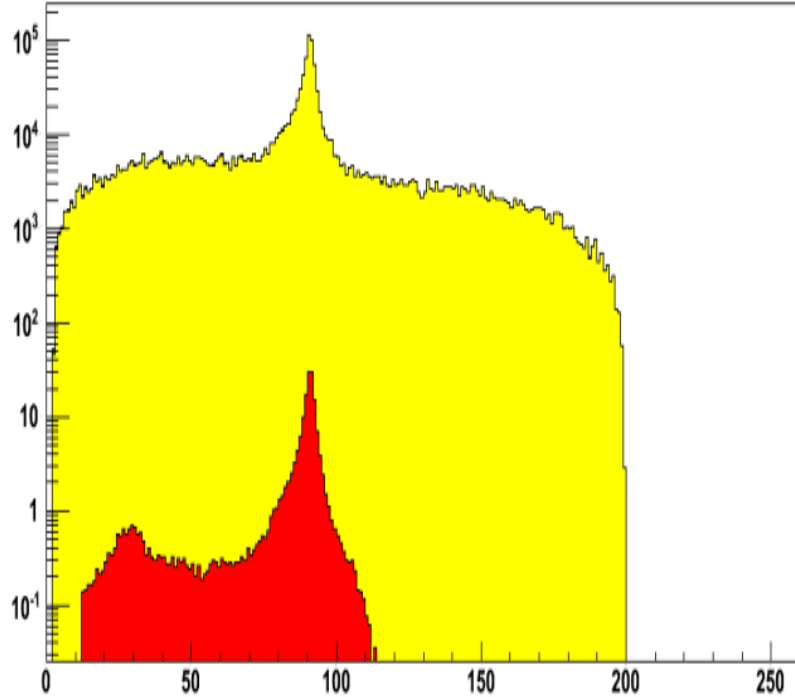


Weely Report

Kong Lingteng

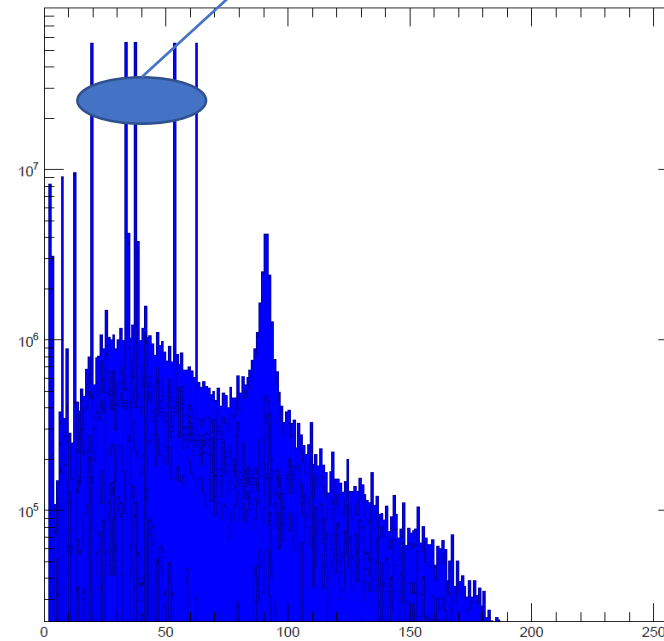
Background and signal on m_dimuon_raw(no cut)

m_dimuon

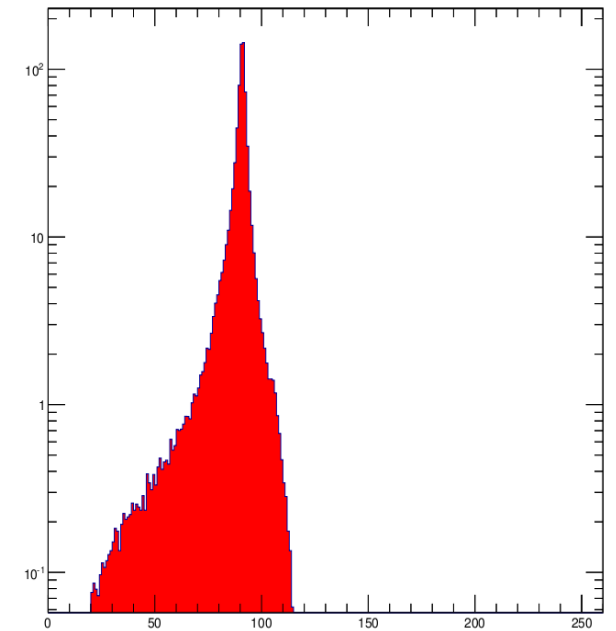


Pic from Ryuta

Don't know why these are very outstanding



Pic from me (Yaxis range is wrong so it didn't show signal)

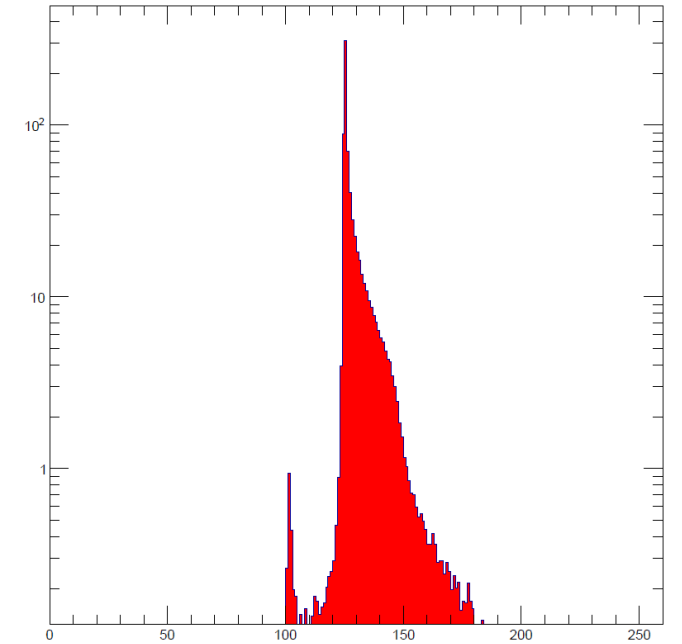
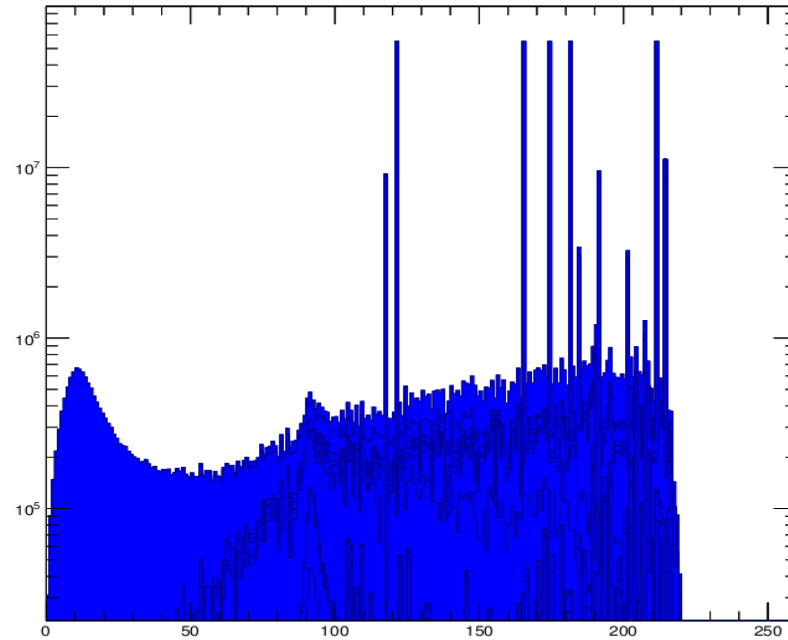
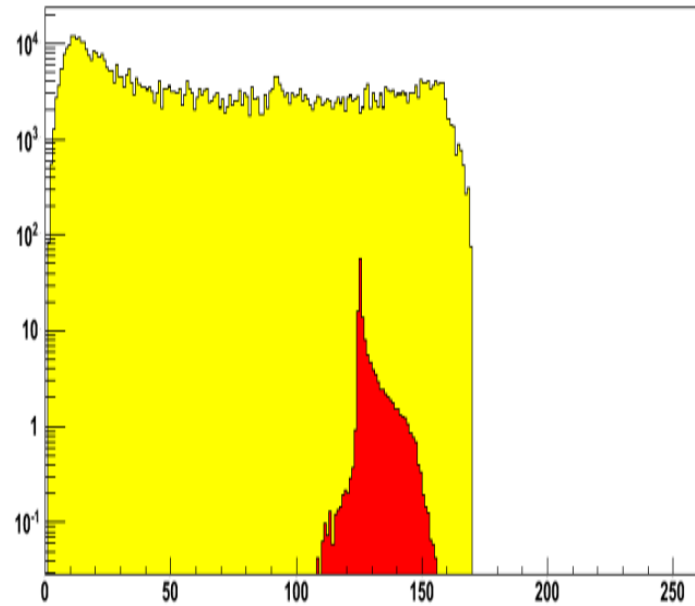


signal

According to the pic, we use cut: $80 < M(\text{dimuon}) < 100$

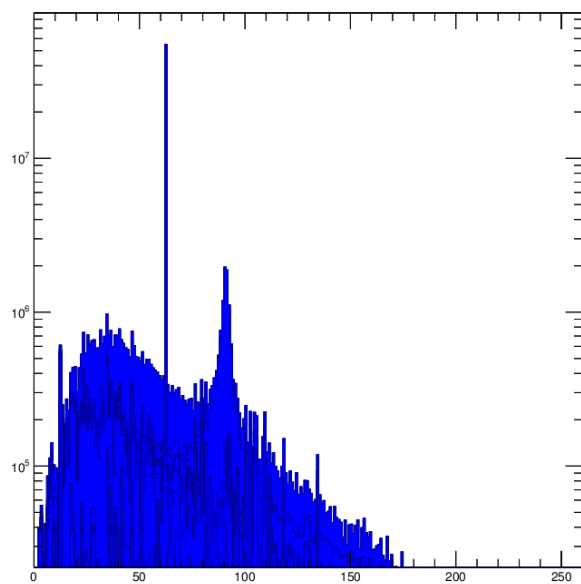
Background and signal on mrec_dimuon_raw(no cut)

mrec_dimuon

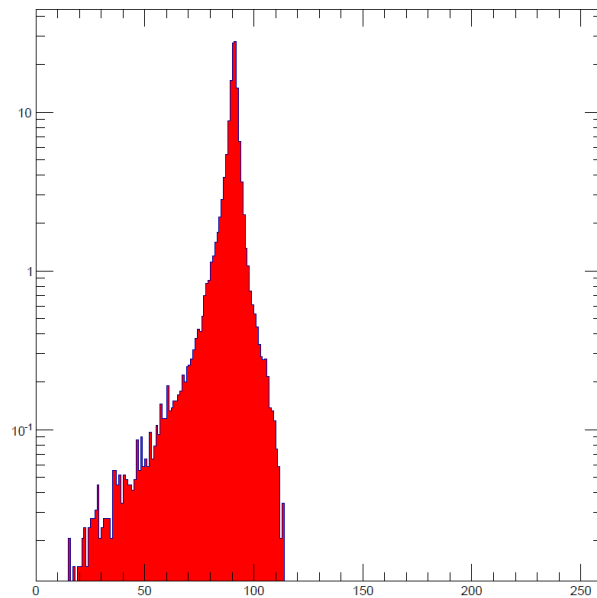


According to the pic, we use cut: $120 < \text{RecM}(\text{dimuon}) < 160$

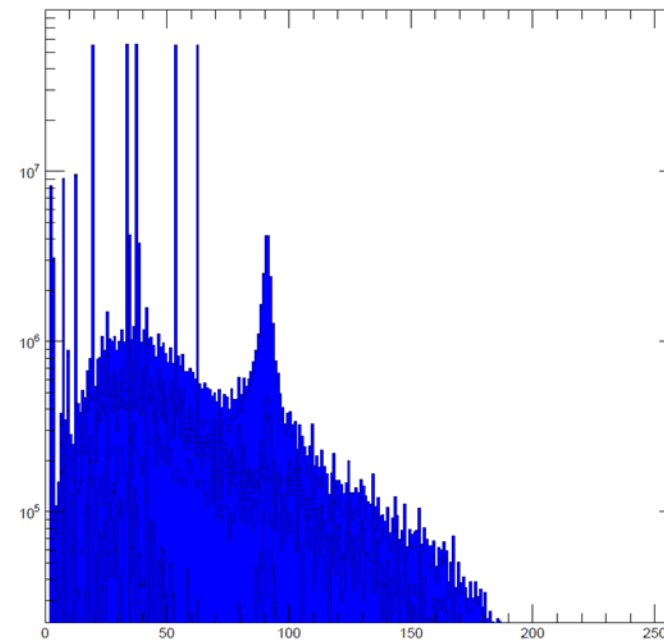
First cut: Missing mass $>$ $M(\text{di-jets})$, select $uuH \rightarrow uu\nu\nu jj$



cut



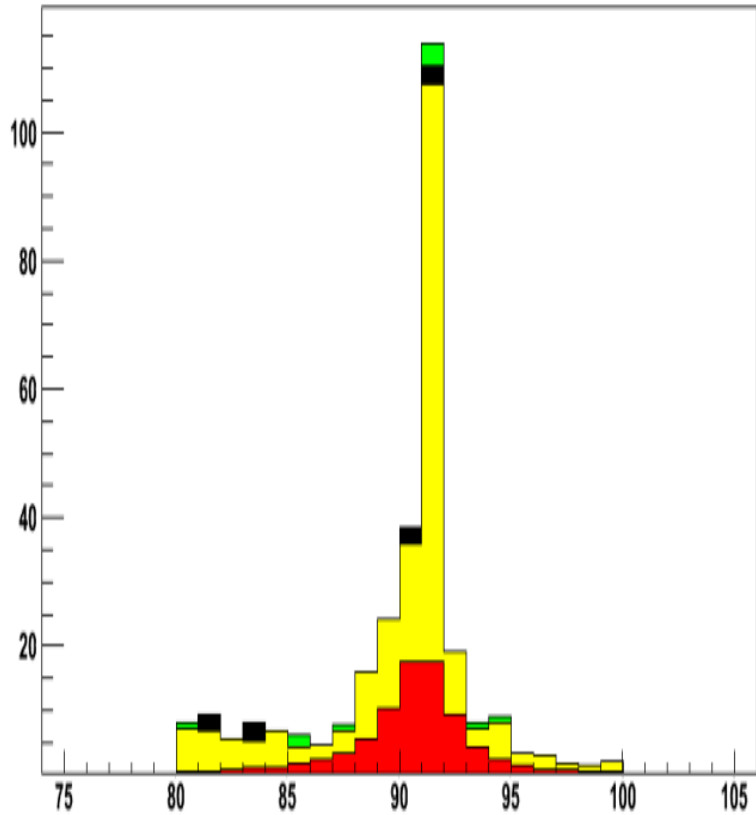
No cut



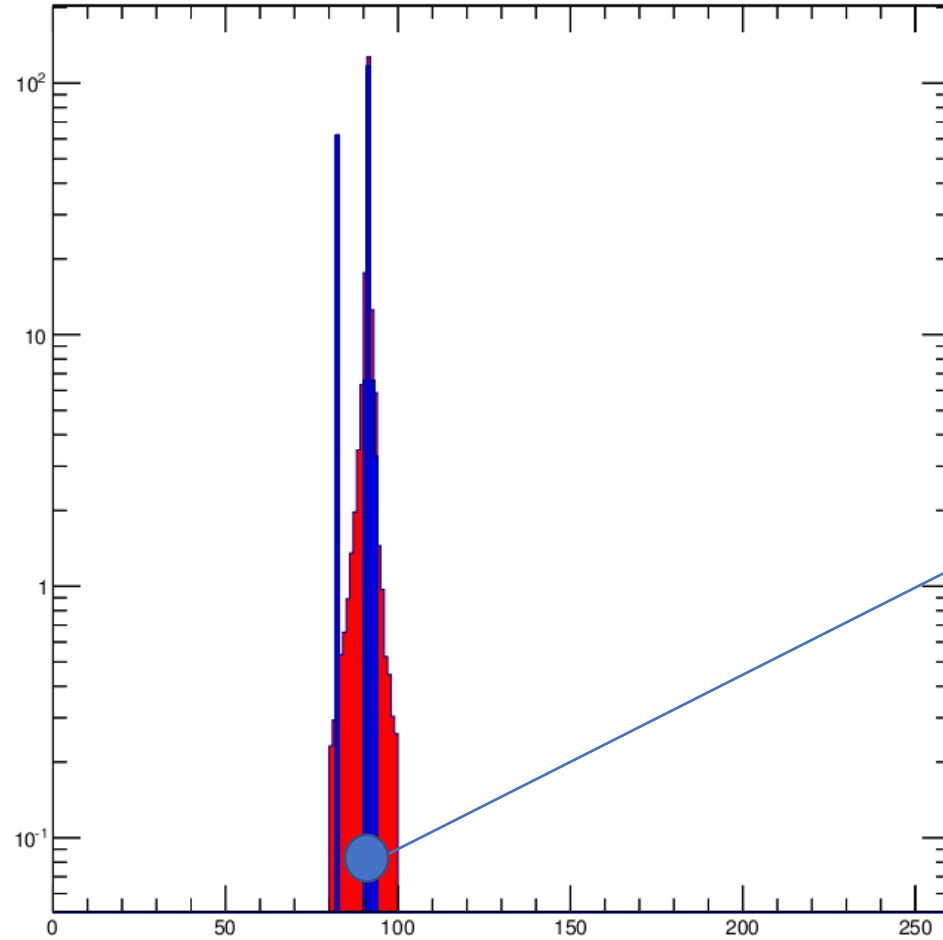
Almost the same shape with no cut

Final cut

m_dimuon



Ryuta's



Mine

Shouldn't have blue parts upon red part cause I use THStack, don't know why.

Differences may be because my samples are not complete, maybe run again

Cut table

Missing mass > M(di-jets)

$80 < M(\text{dimuon}) < 100$

$120 < \text{RecM}(\text{dimuon}) < 160$

$N(\text{pfo}) > 15$

$P_t(\text{total visible}) > 15$

Min angle > 0.3

Missing Mass & M(dijets)

The codes I write

```
exec ("sample%s = ROOT.TFile('./run/bg/hist' +
exec ("h%s=sample%s.Get('hevtflw_sel')"%(i,i))
exec ("event_ana = h%s.GetBinContent(1)"%i)
if event_ana != 0:
    sc = event_exp / event_ana
    exec ("tem%s=sample%s.Get(pic)"%(i,i))
    exec ("a%s=conv.conv(tem%s)"%(i,i))
    exec (" event_tem: str i)
    exec ("event_tem=a%s.GetBinContent(1)"%i)
    exec ("a%s.SetFillColor(ROOT.kBlue)"%i)
    print (sc)
    exec ("hc.Add(a%s)"%i)
```

For: hc = THStack("hc","signal_bg")

...

hc.Add(h)

If I use the same h in loop, output will be blank, so I use exec ("h%s"...) %i to change h in the loop, I think it should be easier ways.

Also, I didn't find proper way to set y range so the signal can't be seen in my plots