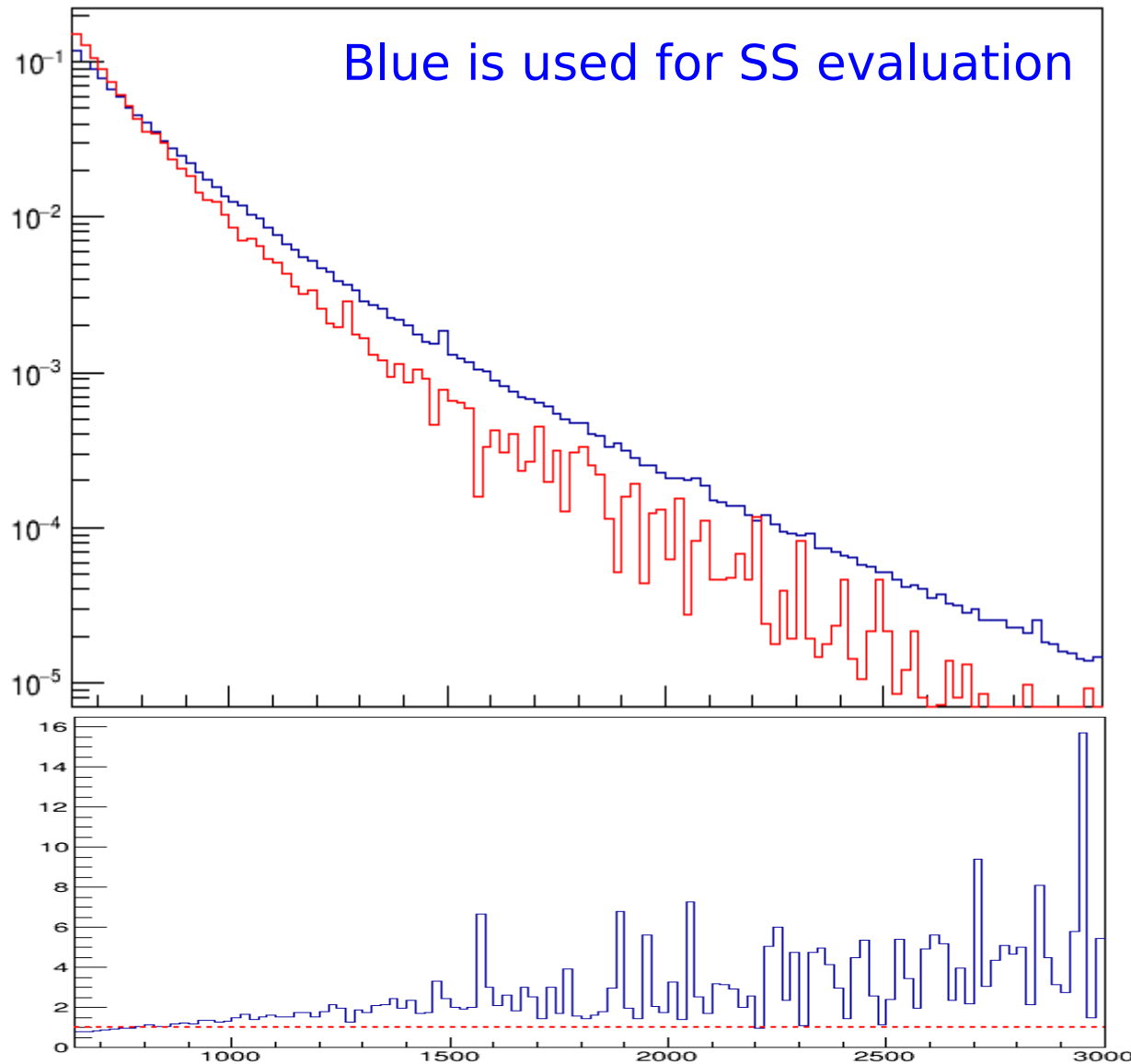


Unbinned fit in $Z\gamma$ boosted analysis

Xiaohu SUN
IHEP
2016-05-09

Yjet MC in inclusive vs SR

2



Blue is $m(Jy)$ from inclusive yjet MC

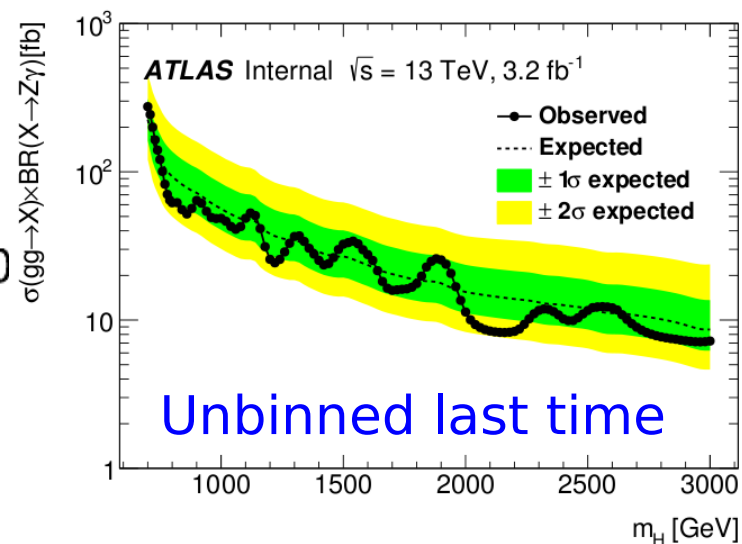
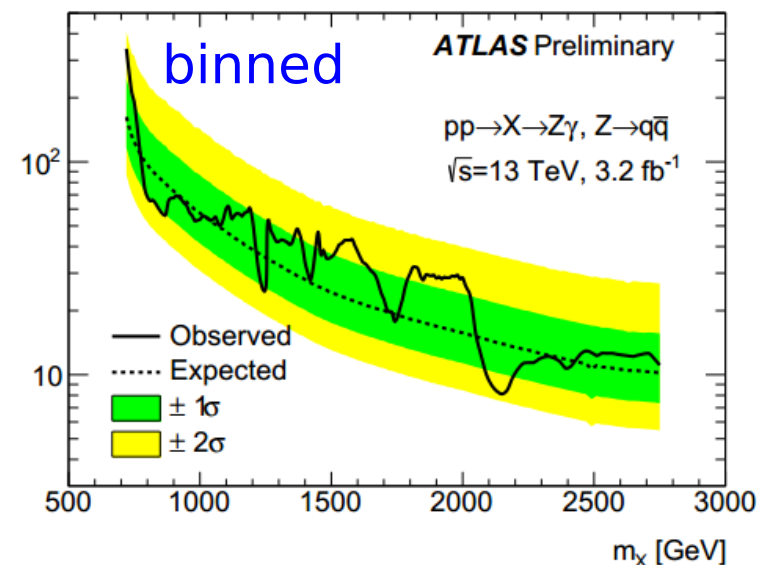
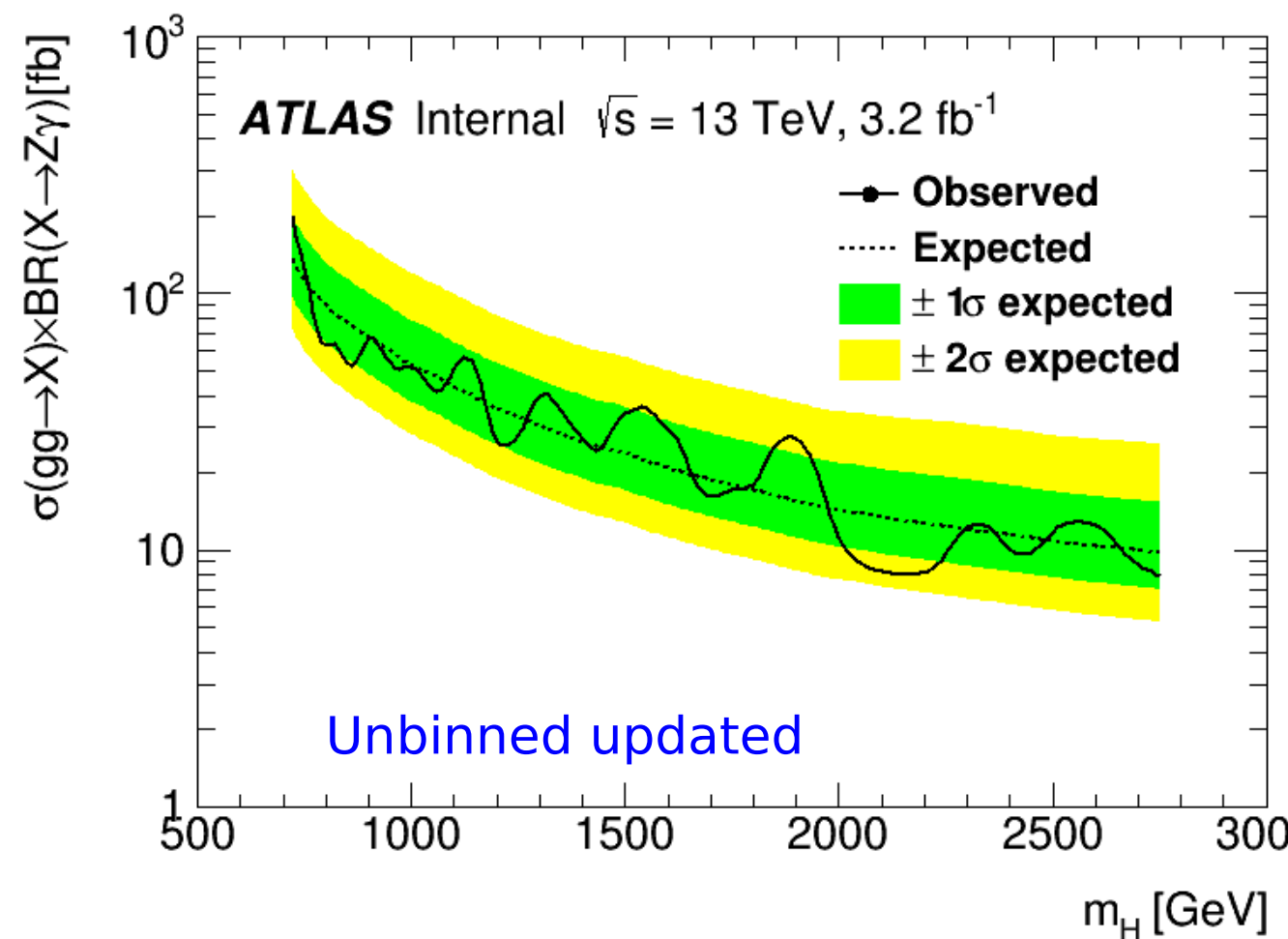
Red is $m(Jy)$ from yjet MC in SR, where lots of fluctuates show up

Ratio in bottom is blue over red

Not good matching shape

But our pdf should be robust to describe both, given the fact that SS is randomly walk around 0 as we see (SS independent of mass)

Limits



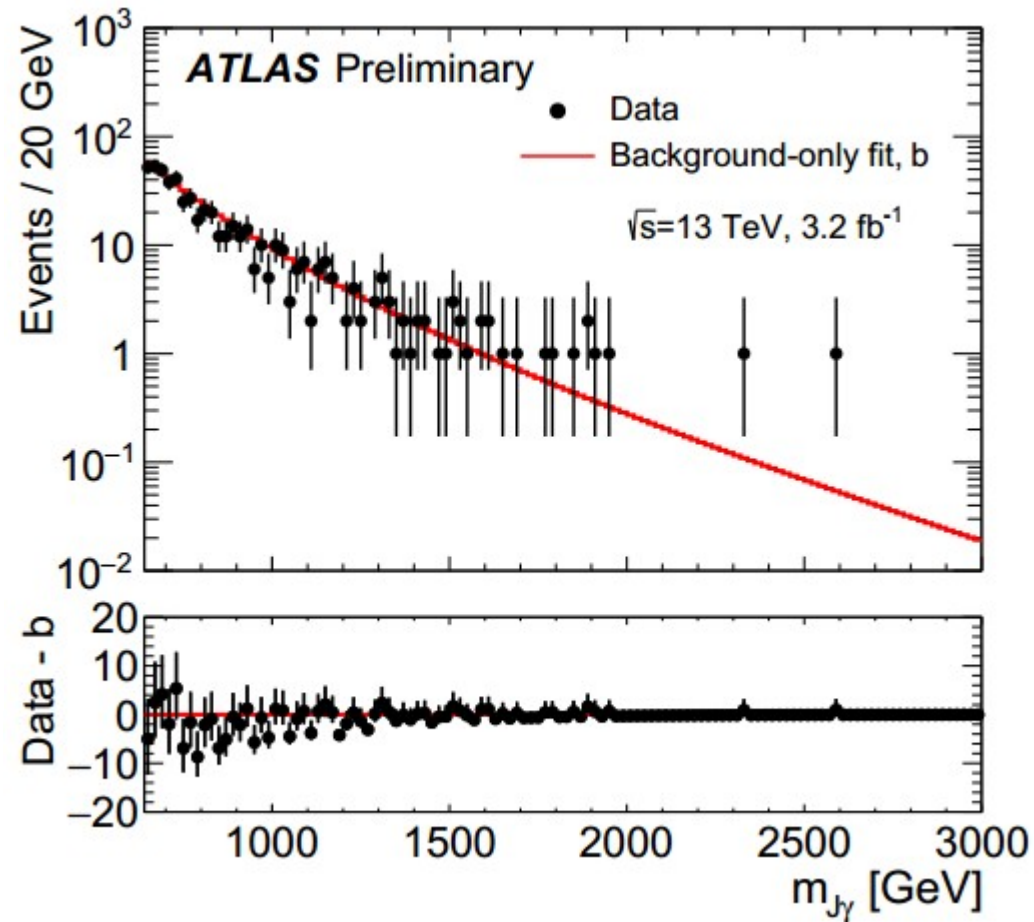
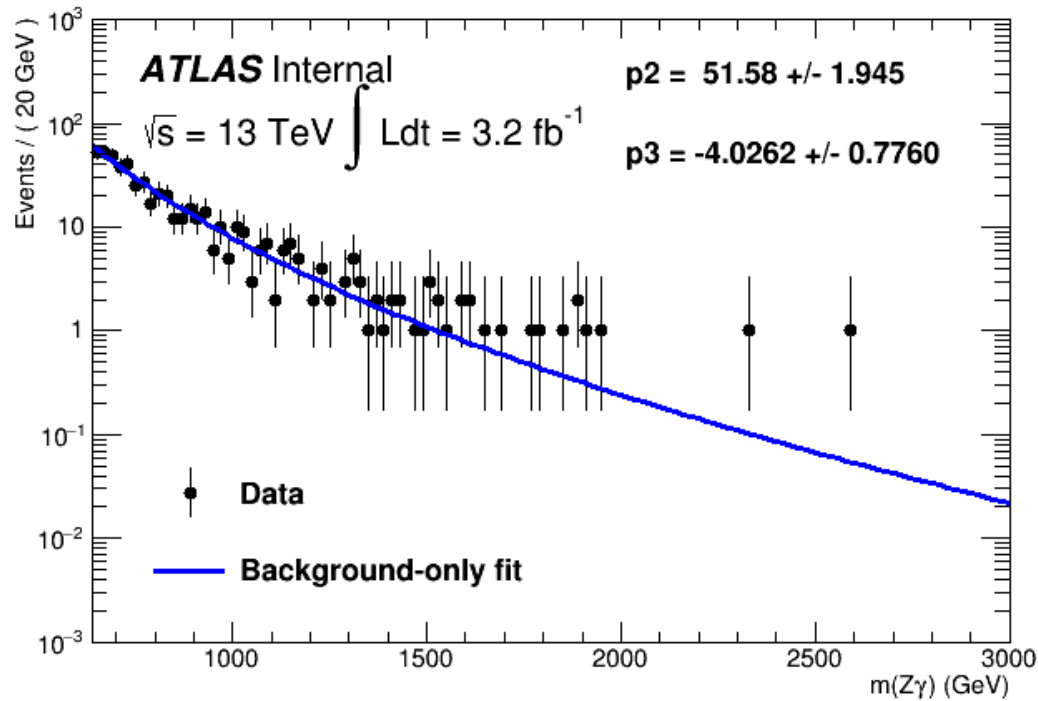
Updates: mass range 720-2750, step=10;

SS from inclusive MC sample

With the SS got from a large-stats yjet MC sample, the median and bands do not have visible fluctuates any more.

Bkg-only fit to data

4



Summary

The way of estimating and introducing SS is double checked by leptonic side and we use the same

For the sake of combination, I converted all RooBifurGaussian terms into RooGaussian terms; but the limits tend to more jumpy and there are nan limits ... still investigating

Comparison with binned limits would go on after the above conversion is validated

