

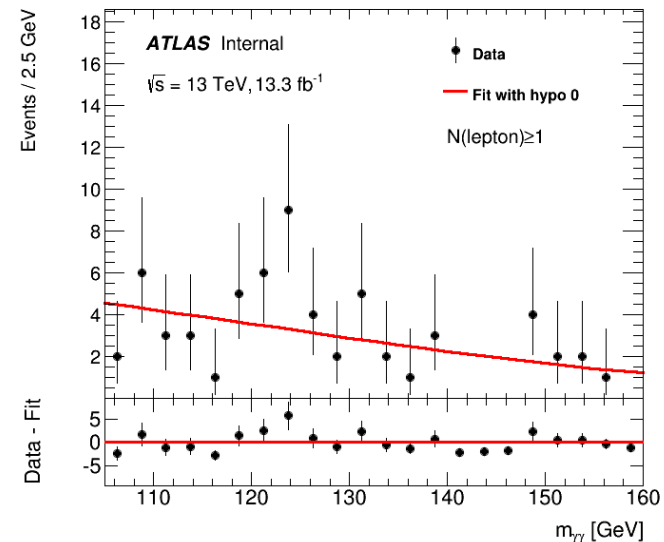
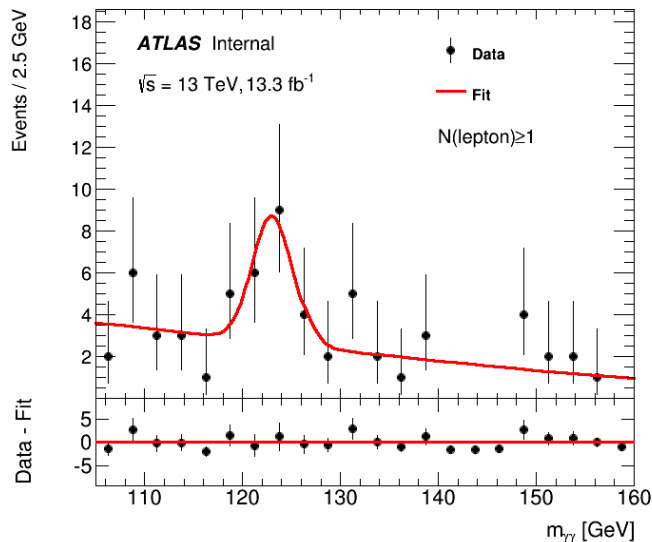
$$hh \rightarrow WW\gamma\gamma$$

Qi Li

Monday, August 08, 2016

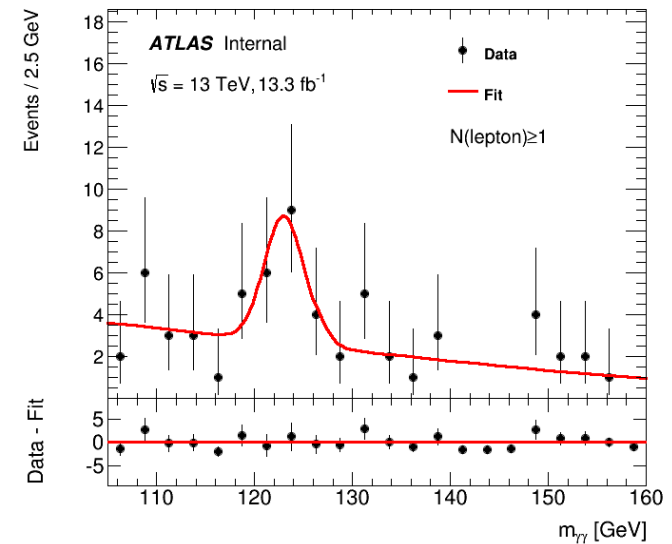
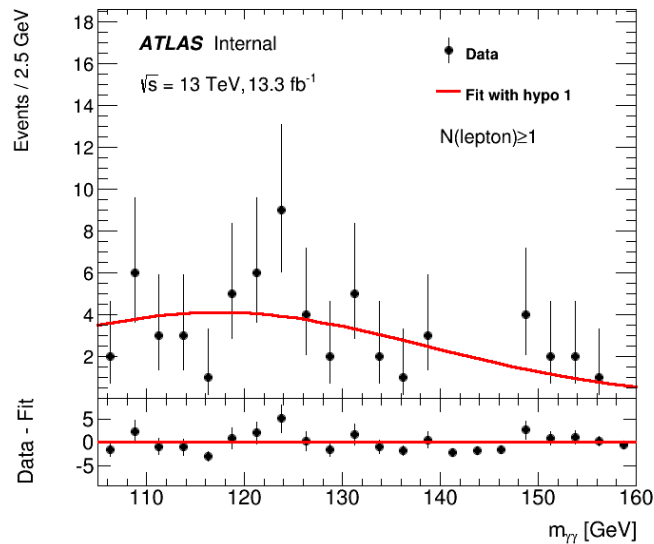
Significance (1)

- $NLL(S+B)$: 44.0298
- $NLL(B)$: 49.0799 (fixed the shape)
- $S = \sqrt{2 * (\ln L_m(s + b) - \ln L_m b))}$
- $S = 3.18$



Significance (2)

- $NLL(S+B)$: 44.0298
- $NLL(B)$: 48.004 (not fixed the shape)
- $S = 2.82$



Expected upper limits

	mh260	mh300	mh400	mh500
$+2\sigma$	0.0512164	0.0430683	0.0310365	0.0259751
$+1\sigma$	0.0348336	0.0294341	0.0213647	0.0180088
-1σ	0.017116	0.0145077	0.0105698	0.00895058
-2σ	0.0127493	0.0108065	0.00787315	0.00666708
Median	0.0237538	0.0201341	0.0146689	0.0124218
Observed	0.0465994	0.0394011	0.0286152	0.0241536

	mh260	mh300	mh400	mh500
$+2\sigma$	0.0508575	0.0427043	0.0307513	0.0257752
$+1\sigma$	0.0346327	0.0292226	0.0211961	0.0178946
-1σ	0.0170535	0.0144319	0.0105054	0.00890779
-2σ	0.0127028	0.01075	0.0078252	0.00663521
Median	0.0236672	0.0200288	0.0145795	0.0123624
Observed	0.0463356	0.0391217	0.028392	0.0240019

Upper limits

