

Weekly Meeting

Yaquan Fang, Qi Li, Xiaohu Sun, Huijun Zhang

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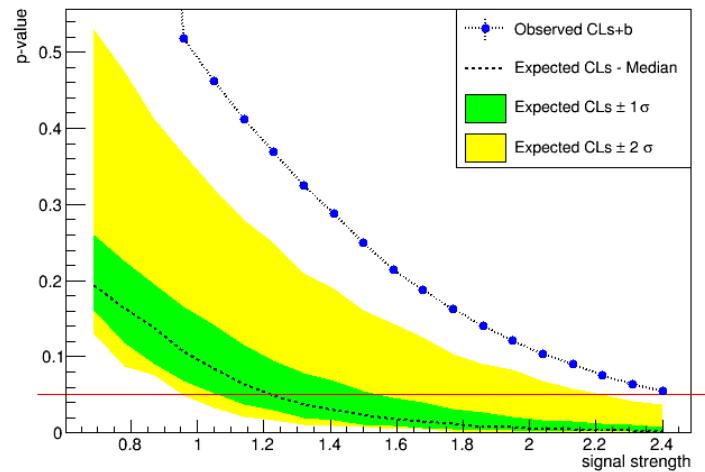
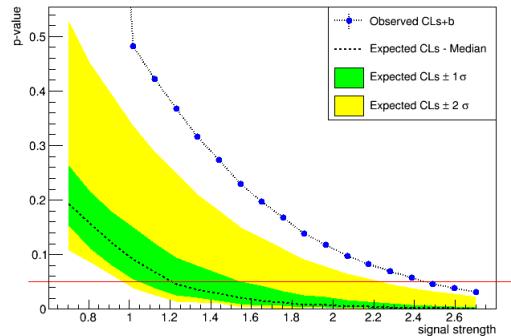
IHEP

outline

- HH Combination
 - combination with bbbb, bbtautau, wwyy, bbyy
- Tracking validation
- Develop the dual-use tool
 - InDetTrackSmearingTool

the error of mH260 at last week

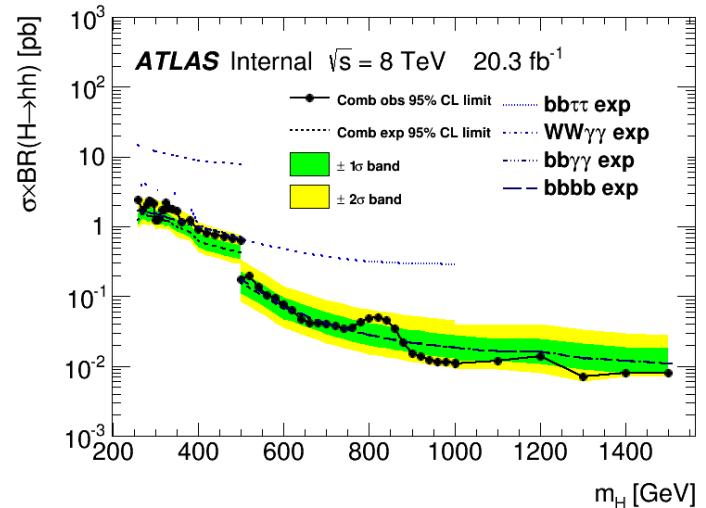
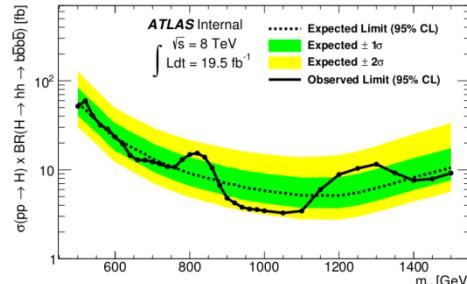
- The bug happened at setting of the signal strength
 - Previous is [0.6,2.4]
 - Now is [0.6,2.7]



mass	observed	median	p2s	p1s	m1s	m2s
260	$2.45231 \pm 1e+30$	1.22254	2.22904	1.55539	1.0638	0.957396
mH260	2.46233 ± 0.383078	1.2139	2.24271	1.54896	1.05328	0.96993

extend the mass points of bbbb to 1500

David(David Wardrobe)
gave us these numbers
but they do NOT match
their result in their note
ATL-COM-PHYS-2014-1248



mass	500	600	700	800	900	1000	1100	1200	1300	1400	1500
observed	0.159	0.072	0.038	0.046	0.015	0.011	0.012	0.014	0.007	0.008	0.008
expected	0.172	0.069	0.041	0.028	0.021	0.018	0.016	0.016	0.013	0.012	0.011
p2s	0.397	0.151	0.092	0.066	0.053	0.041	0.039	0.041	0.034	0.03	0.028
p1s	0.258	0.102	0.061	0.042	0.033	0.028	0.025	0.025	0.021	0.019	0.018
n1s	0.125	0.05	0.029	0.02	0.15	0.012	0.012	0.011	0.009	0.008	0.008
n2s	0.093	0.037	0.022	0.015	0.011	0.009	0.009	0.008	0.006	0.007	0.007

new limits

-with the correction about branching ratio from hMSSM

mass	observed	median	p2s	p1s	m1s	m2s
260	2.36101 +/- 0.0102662	1.20645	2.50511	1.64894	0.999074	0.929347
mH260	2.35952 +/- 0.00988223	1.20946	2.50463	1.65308	0.997718	0.923855
300	2.03873 +/- 0.00828771	1.337	2.58879	1.82291	1.03075	0.843328
350	1.48989 +/- 0.00840389	0.889105	1.75129	1.19327	0.727441	0.594832
mH350						
400	0.861578 +/- 0.00363978	0.59354	1.15986	0.795389	0.460659	0.392362
500	0.571987 +/- 0.00660999	0.383062	0.711884	0.492393	0.307411	0.252629

Qualification task

- Report our (with Bill Murray & Susana Cabrera Urban) results at the validation meeting on May 22th
- Update the codes in the InDetTrackSmearingTool