

ATLAS Preliminary

$H \rightarrow \mu\mu$ $\sqrt{s} = 13$ TeV, 139 fb $^{-1}$

● Total Stat. Syst. — SM

	Total	Stat.	Syst.
VBF High	0.5 $^{+1.6}_{-1.4}$	($^{+1.5}_{-1.4}$, $^{+0.3}_{-0.2}$)	
VBF Medium	4.1 $^{+2.5}_{-2.4}$	($^{+2.4}_{-2.3}$, $^{+0.8}_{-0.3}$)	
VBF Low	4.8 $^{+3.1}_{-2.9}$	(± 2.9 , $^{+1.1}_{-0.5}$)	
2-jet High	-2.7 $^{+2.0}_{-2.1}$	($^{+2.0}_{-1.9}$, $^{+0.3}_{-0.8}$)	
2-jet Medium	1.3 ± 2.6	(± 2.5 , $^{+0.8}_{-0.5}$)	
2-jet Low	-5.8 $^{+4.1}_{-4.8}$	(± 4.0 , $^{+1.0}_{-2.8}$)	
1-jet High	0.6 ± 2.1	(± 2.1 , $^{+0.4}_{-0.2}$)	
1-jet Medium	0.9 ± 2.1	(± 2.1 , ± 0.4)	
1-jet Low	-2.6 $^{+3.0}_{-3.1}$	(± 3.0 , $^{+0.5}_{-0.9}$)	
0-jet High	-0.9 ± 2.3	(± 2.2 , $^{+0.3}_{-0.5}$)	
0-jet Medium	1.3 $^{+2.7}_{-2.6}$	(± 2.6 , $^{+0.6}_{-0.4}$)	
0-jet Low	5.0 $^{+4.4}_{-4.2}$	($^{+4.2}_{-4.1}$, $^{+1.5}_{-0.9}$)	
Combined	0.5 ± 0.7	(± 0.7 , $^{+0.2}_{-0.1}$)	

-20

-10

0

10

20

30

Signal strength