

## Sheet1

index	name	ref. precision	ref. lumi	polfac	ECM	target lumi	frac(LR)	frac(RL)	pol factor	extrap. result
0	sigma(ZH)	2.0%	250	1	250	500	0.675	0.225	1.11	1.5%
1	sigma(ZH) x Br(bb)	1.2%	250	1	250	500	0.675	0.225	1.11	0.9%
2	sigma(ZH) x Br(cc)	8.3%	250	1	250	500	0.675	0.225	1.11	6.2%
3	sigma(ZH) x Br(gg)	7.0%	250	1	250	500	0.675	0.225	1.11	5.2%
4	sigma(ZH) x Br(WW)	6.4%	250	1	250	500	0.675	0.225	1.11	4.8%
5	sigma(ZH) x Br(tt)	3.2%	250	1	250	500	0.675	0.225	1.11	2.4%
6	sigma(ZH) x Br(ZZ)	19.0%	250	1	250	500	0.675	0.225	1.11	14.2%
7	sigma(ZH) x Br(aa)	33.5%	250	1	250	500	0.675	0.225	1.11	25.0%
8	sigma(vvH) x Br(bb)	10.5%	250	4	250	500	0.675	0.225	1.45	8.9%
9	sigma(ZH) x Br(bb)	1.8%	500	1	500	500	0.4	0.4	1.25	2.0%
10	sigma(ZH) x Br(cc)	12.8%	500	1	500	500	0.4	0.4	1.25	14.3%
11	sigma(ZH) x Br(gg)	10.8%	500	1	500	500	0.4	0.4	1.25	12.1%
12	sigma(ZH) x Br(WW)	9.2%	500	1	500	500	0.4	0.4	1.25	10.3%
13	sigma(ZH) x Br(tt)	5.4%	500	1	500	500	0.4	0.4	1.25	6.0%
14	sigma(ZH) x Br(ZZ)	25.0%	500	1	500	500	0.4	0.4	1.25	28.0%
15	sigma(ZH) x Br(aa)	33.5%	500	1	500	500	0.4	0.4	1.25	37.5%
16	sigma(vvH) x Br(bb)	0.7%	500	4	500	500	0.4	0.4	2.35	1.0%
17	sigma(vvH) x Br(cc)	6.2%	500	4	500	500	0.4	0.4	2.35	9.5%
18	sigma(vvH) x Br(gg)	4.1%	500	4	500	500	0.4	0.4	2.35	6.3%
19	sigma(vvH) x Br(WW)	2.4%	500	4	500	500	0.4	0.4	2.35	3.7%
20	sigma(vvH) x Br(tt)	9.0%	500	4	500	500	0.4	0.4	2.35	13.8%
21	sigma(vvH) x Br(ZZ)	8.2%	500	4	500	500	0.4	0.4	2.35	12.6%
22	sigma(vvH) x Br(aa)	18.9%	500	4	500	500	0.4	0.4	2.35	29.0%
23										
24										
25										
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28										
29										
30	sigma(ttH) x Br(bb)	28.0%	500	1.36	500	500	0.4	0.4	1.62	35.7%
31										
32										
33	sigma(ZH)	3.0%	500	1	500	500	0.4	0.4	1.25	3.4%
34	invisible, 95% C.L. upper limit	0.9%	250	0.71	250	500	0.675	0.225	0.89	0.6%
35	sigma(ZH) x Br(bb)	1.3%	330	1	350	200	0.675	0.225	1.11	1.8%
36	sigma(ZH) x Br(cc)	9.9%	330	1	350	200	0.675	0.225	1.11	13.4%
37	sigma(ZH) x Br(gg)	7.3%	330	1	350	200	0.675	0.225	1.11	9.9%

38 sigma(ZH) x Br(WW)	6.8%	330	1	350	200	0.675	0.225	1.11	9.2%
39 sigma(ZH) x Br(tt)	3.5%	330	1	350	200	0.675	0.225	1.11	4.7%
40 sigma(ZH) x Br(ZZ)	21.5%	330	1	350	200	0.675	0.225	1.11	29.1%
41 sigma(ZH) x Br(aa)	33.5%	330	1	350	200	0.675	0.225	1.11	45.4%
42 sigma(vvH) x Br(bb)	1.3%	330	4	350	200	0.675	0.225	1.45	2.0%
43 sigma(vvH) x Br(cc)	1.3%	330	4	350	200	0.675	0.225	1.45	2.0%
44 sigma(vvH) x Br(gg)	8.6%	330	4	350	200	0.675	0.225	1.45	13.3%
45 sigma(vvH) x Br(WW)	5.0%	330	4	350	200	0.675	0.225	1.45	7.7%
46 sigma(vvH) x Br(tt)	18.9%	330	4	350	200	0.675	0.225	1.45	29.2%
47 sigma(vvH) x Br(ZZ)	17.2%	330	4	350	200	0.675	0.225	1.45	26.6%
48 sigma(vvH) x Br(aa)	39.4%	330	4	350	200	0.675	0.225	1.45	61.0%
49 sigma(ZH)	1.6%	330	1	350	200	0.675	0.225	1.11	2.2%
50 invisible, 95% C.L. upper limit	1.2%	330	0.71	350	200	0.675	0.225	0.89	1.5%
51 invisible, 95% C.L. upper limit	2.4%	500	0.71	500	500	0.4	0.4	0.84	2.2%
52 sigma(vvH) x Br(mm)	72.0%	500	4	500	500	0.4	0.4	2.35	110.4%
53 sigma(ZH) x Br(mm)	88.0%	500	1	500	500	0.4	0.4	1.25	98.4%
54 sigma(vvH) x Br(mm)	142.0%	330	4	350	200	0.675	0.225	1.45	219.7%
55 sigma(ZH) x Br(mm)	76.0%	330	1	350	200	0.675	0.225	1.11	102.9%
56 sigma(ZH) x Br(mm)	72.0%	250	1	250	500	0.675	0.225	1.11	53.7%

last update  
including hadronic recoil mass

updated results by S.Kawada @ ALCW15

new results after WP by C.Calancha

including  $Z \rightarrow qq$   
full simulation by A.Ishikawa @ LCWS14, add new results from  $Z \rightarrow ll$  mode by J.Tian @ ALCW14

updated extrapolation based on updated results at 250 GeV by S.Kawada

new results after WP by C.Calancha  
combine 1.75% from Mark (Oshu, ALCW 1.76%) and 3.5% from Jacqueline  
full simulation @ ALCW15  
full simulation with  $Z \rightarrow qq$  and  $Z \rightarrow ll$  @ ALCW15