

Diboson measurements vs. NNLO theory

CMS

(NLO $W\gamma$, $Z\gamma$ 7 TeV)

Theory

5.02,

7,

8,

13

TeV CMS measurements

H△H

H○H

H▲H

H●H

inner unc. (stat), outer (+sys)

				stat	sys
$\gamma\gamma$	EPJC 74 (2014) 3129			1.06 ± 0.01	± 0.12
$W\gamma$	PRD 89 (2014) 092005			1.16 ± 0.03	± 0.13
$W\gamma$	PRL 126 252002 (2021)			1.01 ± 0.00	± 0.05
$Z\gamma$	PRD 89 (2014) 092005			0.98 ± 0.01	± 0.05
$Z\gamma$	JHEP 04 (2015) 164			0.92 ± 0.01	± 0.05
WW	PRL 127 (2021) 191801			1.24 ± 0.18	± 0.09
WW	EPJC 73 (2013) 2610			1.04 ± 0.04	± 0.09
WW	EPJC 76 (2016) 401			0.98 ± 0.01	± 0.08
WW	PRD 102 092001 (2020)			0.96 ± 0.01	± 0.05
WZ	PRL 127 (2021) 191801			0.57 ± 0.20	± 0.04
WZ	EPJC 77 (2017) 236			1.02 ± 0.07	± 0.06
WZ	EPJC 77 (2017) 236			0.98 ± 0.04	± 0.07
WZ	JHEP 07 (2022) 032			1.00 ± 0.02	± 0.03
ZZ	PRL 127 (2021) 191801			1.52 ± 0.66	± 0.13
ZZ	JHEP 01 (2013) 063			1.00 ± 0.14	± 0.07
ZZ	PLB 740 (2015) 250			1.02 ± 0.07	± 0.08
ZZ	EPJC 81 (2021) 200			1.04 ± 0.02	± 0.04

-1 0 1 2 3
Production cross section ratio: $\sigma_{\text{exp}} / \sigma_{\text{theo}}$