

Parameterization	p -value (q_{SM})	DOF	Parameters of interest
Global signal strength	6.28% (3.46)	1	μ
Production processes	9.87% (9.27)	5	$\mu_{\text{ggH}}, \mu_{\text{VBF}}, \mu_{\text{WH}}, \mu_{\text{ZH}}, \mu_{\text{ttH}}$
Decay modes	53.8% (5.05)	6	$\mu^{\gamma\gamma}, \mu^{\text{ZZ}}, \mu^{\text{WW}}, \mu^{\tau\tau}, \mu^{\text{bb}}, \mu^{\mu\mu}$
$\sigma_i \mathcal{B}^f$ products	61.2% (21.5)	24	$\sigma_{\text{ggH}} \mathcal{B}^{\text{bb}}, \sigma_{\text{ggH}} \mathcal{B}^{\tau\tau}, \sigma_{\text{ggH}} \mathcal{B}^{\mu\mu}, \sigma_{\text{ggH}} \mathcal{B}^{\text{WW}}, \sigma_{\text{ggH}} \mathcal{B}^{\text{ZZ}}, \sigma_{\text{ggH}} \mathcal{B}^{\gamma\gamma}, \sigma_{\text{VBF}} \mathcal{B}^{\tau\tau}, \sigma_{\text{VBF}} \mathcal{B}^{\mu\mu}, \sigma_{\text{VBF}} \mathcal{B}^{\text{WW}}, \sigma_{\text{VBF}} \mathcal{B}^{\text{ZZ}}, \sigma_{\text{VBF}} \mathcal{B}^{\gamma\gamma}, \sigma_{\text{WH}} \mathcal{B}^{\text{bb}}, \sigma_{\text{WH}} \mathcal{B}^{\text{WW}}, \sigma_{\text{WH}} \mathcal{B}^{\text{ZZ}}, \sigma_{\text{WH}} \mathcal{B}^{\gamma\gamma}, \sigma_{\text{ZH}} \mathcal{B}^{\text{bb}}, \sigma_{\text{ZH}} \mathcal{B}^{\text{WW}}, \sigma_{\text{ZH}} \mathcal{B}^{\text{ZZ}}, \sigma_{\text{ZH}} \mathcal{B}^{\gamma\gamma}, \sigma_{\text{ttH}} \mathcal{B}^{\tau\tau}, \sigma_{\text{ttH}} \mathcal{B}^{\text{WW}}, \sigma_{\text{ttH}} \mathcal{B}^{\text{ZZ}}, \sigma_{\text{ttH}} \mathcal{B}^{\gamma\gamma}, \sigma_{\text{ttH}} \mathcal{B}^{\text{bb}}$
Ratios of σ and \mathcal{B} relative to $\text{gg} \rightarrow \text{H} \rightarrow \text{ZZ}$	32.3% (11.5)	10	$\mu_{\text{ggH}}^{\text{ZZ}} / \mu_{\text{VBF}} / \mu_{\text{ggH}}, \mu_{\text{WH}} / \mu_{\text{ggH}}, \mu_{\text{ZH}} / \mu_{\text{ggH}}, \mu_{\text{ttH}} / \mu_{\text{ggH}}, \mu^{\text{WW}} / \mu^{\text{ZZ}}, \mu^{\gamma\gamma} / \mu^{\text{ZZ}}, \mu^{\tau\tau} / \mu^{\text{ZZ}}, \mu^{\text{bb}} / \mu^{\text{ZZ}}, \mu^{\text{bb}} / \mu^{\mu\mu}$
Simplified template cross sections with branching fractions relative to \mathcal{B}^{ZZ}	21.2% (14.4)	11	$\sigma_{\text{ggH}} \mathcal{B}^{\text{ZZ}}, \sigma_{\text{VBF}} \mathcal{B}^{\text{ZZ}}, \sigma_{\text{H}+\text{V}(\text{qq})} \mathcal{B}^{\text{ZZ}}, \sigma_{\text{H}+\text{W}(\ell\nu)} \mathcal{B}^{\text{ZZ}}, \sigma_{\text{H}+\text{Z}(\ell\ell/\nu\nu)} \mathcal{B}^{\text{ZZ}}, \sigma_{\text{ttH}} \mathcal{B}^{\text{ZZ}}, \mathcal{B}^{\text{bb}} / \mathcal{B}^{\text{ZZ}}, \mathcal{B}^{\tau\tau} / \mathcal{B}^{\text{ZZ}}, \mathcal{B}^{\mu\mu} / \mathcal{B}^{\text{ZZ}}, \mathcal{B}^{\text{WW}} / \mathcal{B}^{\text{ZZ}}, \mathcal{B}^{\gamma\gamma} / \mathcal{B}^{\text{ZZ}}$
Couplings, SM loops	45.6% (5.71)	6	$\kappa_{\text{Z}}, \kappa_{\text{W}}, \kappa_{\text{t}}, \kappa_{\tau}, \kappa_{\text{b}}, \kappa_{\mu}$
Couplings vs. mass	16.8% (3.57)	2	M, ϵ
Couplings, BSM loops	18.5% (11.3)	8	$\kappa_{\text{Z}}, \kappa_{\text{W}}, \kappa_{\text{t}}, \kappa_{\tau}, \kappa_{\text{b}}, \kappa_{\mu}, \kappa_{\gamma}, \kappa_{\text{g}}$
Couplings, BSM loops and decays including $\text{H} \rightarrow$ invisible channels	32.4% (11.5)	10	$\kappa_{\text{Z}}, \kappa_{\text{W}}, \kappa_{\text{t}}, \kappa_{\tau}, \kappa_{\text{b}}, \kappa_{\mu}, \kappa_{\gamma}, \kappa_{\text{g}}, \mathcal{B}_{\text{inv}}, \mathcal{B}_{\text{undet}}$
Ratios of coupling modifiers	18.1% (11.4)	8	$\kappa_{\text{gZ}}, \lambda_{\text{WZ}}, \lambda_{\gamma\text{Z}}, \lambda_{\text{tg}}, \lambda_{\text{bZ}}, \lambda_{\tau\text{Z}}, \lambda_{\mu\text{Z}}, \lambda_{\text{Zg}}$
Fermion and vector couplings	16.9% (3.55)	2	$\kappa_{\text{F}}, \kappa_{\text{V}}$
Fermion and vector couplings, per decay mode	76.7% (8.2)	12	$\kappa_{\text{F}}^{\text{bb}}, \kappa_{\text{F}}^{\tau\tau}, \kappa_{\text{F}}^{\mu\mu}, \kappa_{\text{F}}^{\text{WW}}, \kappa_{\text{F}}^{\text{ZZ}}, \kappa_{\text{F}}^{\gamma\gamma}, \kappa_{\text{V}}^{\text{bb}}, \kappa_{\text{V}}^{\tau\tau}, \kappa_{\text{V}}^{\mu\mu}, \kappa_{\text{V}}^{\text{WW}}, \kappa_{\text{V}}^{\text{ZZ}}, \kappa_{\text{V}}^{\gamma\gamma}$
Up vs. down-type couplings	25.5% (4.06)	3	$\lambda_{\text{Vu}}, \lambda_{\text{du}}, \kappa_{\text{uu}}$
Lepton vs. quark couplings	27.2% (3.91)	3	$\lambda_{\text{lq}}, \lambda_{\text{Vq}}, \kappa_{\text{qq}}$