

General matrix parameterisation:  $\text{rank}(\mathcal{M}) = 5$ 

	$H \rightarrow \gamma\gamma$	$H \rightarrow ZZ$	$H \rightarrow WW$	$H \rightarrow \tau\tau$	$H \rightarrow bb$
ggF	$\mu_{ggF}^{\gamma\gamma}$	$\mu_{ggF}^{ZZ}$	$\mu_{ggF}^{WW}$	$\mu_{ggF}^{\tau\tau}$	$\mu_{ggF}^{bb}$
VBF	$\lambda_{VBF}^{\gamma\gamma} \mu_{ggF}^{\gamma\gamma}$	$\lambda_{VBF}^{ZZ} \mu_{ggF}^{ZZ}$	$\lambda_{VBF}^{WW} \mu_{ggF}^{WW}$	$\lambda_{VBF}^{\tau\tau} \mu_{ggF}^{\tau\tau}$	$\lambda_{VBF}^{bb} \mu_{ggF}^{bb}$
WH	$\lambda_{WH}^{\gamma\gamma} \mu_{ggF}^{\gamma\gamma}$	$\lambda_{WH}^{ZZ} \mu_{ggF}^{ZZ}$	$\lambda_{WH}^{WW} \mu_{ggF}^{WW}$	$\lambda_{WH}^{\tau\tau} \mu_{ggF}^{\tau\tau}$	$\lambda_{WH}^{bb} \mu_{ggF}^{bb}$
ZH	$\lambda_{ZH}^{\gamma\gamma} \mu_{ggF}^{\gamma\gamma}$	$\lambda_{ZH}^{ZZ} \mu_{ggF}^{ZZ}$	$\lambda_{ZH}^{WW} \mu_{ggF}^{WW}$	$\lambda_{ZH}^{\tau\tau} \mu_{ggF}^{\tau\tau}$	$\lambda_{ZH}^{bb} \mu_{ggF}^{bb}$
ttH	$\lambda_{ttH}^{\gamma\gamma} \mu_{ggF}^{\gamma\gamma}$	$\lambda_{ttH}^{ZZ} \mu_{ggF}^{ZZ}$	$\lambda_{ttH}^{WW} \mu_{ggF}^{WW}$	$\lambda_{ttH}^{\tau\tau} \mu_{ggF}^{\tau\tau}$	$\lambda_{ttH}^{bb} \mu_{ggF}^{bb}$

 Single-state matrix parameterisation:  $\text{rank}(\mathcal{M}) = 1$ 

	$H \rightarrow \gamma\gamma$	$H \rightarrow ZZ$	$H \rightarrow WW$	$H \rightarrow \tau\tau$	$H \rightarrow bb$
ggF	$\mu_{ggF}^{\gamma\gamma}$	$\mu_{ggF}^{ZZ}$	$\mu_{ggF}^{WW}$	$\mu_{ggF}^{\tau\tau}$	$\mu_{ggF}^{bb}$
VBF	$\lambda_{VBF} \mu_{ggF}^{\gamma\gamma}$	$\lambda_{VBF} \mu_{ggF}^{ZZ}$	$\lambda_{VBF} \mu_{ggF}^{WW}$	$\lambda_{VBF} \mu_{ggF}^{\tau\tau}$	$\lambda_{VBF} \mu_{ggF}^{bb}$
WH	$\lambda_{WH} \mu_{ggF}^{\gamma\gamma}$	$\lambda_{WH} \mu_{ggF}^{ZZ}$	$\lambda_{WH} \mu_{ggF}^{WW}$	$\lambda_{WH} \mu_{ggF}^{\tau\tau}$	$\lambda_{WH} \mu_{ggF}^{bb}$
ZH	$\lambda_{ZH} \mu_{ggF}^{\gamma\gamma}$	$\lambda_{ZH} \mu_{ggF}^{ZZ}$	$\lambda_{ZH} \mu_{ggF}^{WW}$	$\lambda_{ZH} \mu_{ggF}^{\tau\tau}$	$\lambda_{ZH} \mu_{ggF}^{bb}$
ttH	$\lambda_{ttH} \mu_{ggF}^{\gamma\gamma}$	$\lambda_{ttH} \mu_{ggF}^{ZZ}$	$\lambda_{ttH} \mu_{ggF}^{WW}$	$\lambda_{ttH} \mu_{ggF}^{\tau\tau}$	$\lambda_{ttH} \mu_{ggF}^{bb}$