$$m_C = \left(m_H + m_C^{\text{offset}} + (m_H - 125)\, m_C^{\text{gradient}}\right) \cdot \Theta_{\text{ES}}(\boldsymbol{\theta^{sig}}) \cdot \Theta_{\text{Bkg}}(\boldsymbol{\theta^{sig}})$$

$$m_G = \left(m_H + m_G^{\text{offset}} + (m_H - 125)\, m_G^{\text{gradient}}\right) \cdot \Theta_{\text{ES}}(\boldsymbol{\theta^{sig}}) \cdot \Theta_{\text{Bkg}}(\boldsymbol{\theta^{sig}})$$

$$\sigma_C = \left(\sigma_C^{\text{offset}} + (m_H - 125)\, \sigma_C^{\text{gradient}}\right) \cdot \Theta_{\text{ER}}(\boldsymbol{\theta^{sig}})$$