

Consider the following Lagrangian

$$\mathcal{L} = \frac{1}{2}(\partial_\mu\phi)^2 - \frac{1}{2}m_L^2\phi^2 + \bar{\lambda}(i\not{\partial} - m_H)\lambda + y\bar{\lambda}\lambda\phi + \alpha\phi^4$$

Convince yourself that

1. The Yukawa coupling is a natural parameter.
2. α is not a natural parameter.