



$$\mathcal{L} = (D_\mu \phi)^\dagger D^\mu \phi - V(\phi)$$

$$D_\mu \phi = \partial_\mu \phi - ie A_\mu \phi$$

$$F_{\mu\nu} = \partial_\mu A_\nu - \partial_\nu A_\mu$$

$$V(\phi) = \frac{1}{2} \phi^\dagger \phi + \frac{\lambda}{4} (\phi^\dagger \phi)^2$$

$$\lambda < 0, \quad \mu > 0$$