

$$\frac{1}{2\lambda f^2} \int d^4x \frac{d^4q}{(2\pi)^4} (\varphi(X))^2 \tilde{\pi}_0(q) \left[\partial_q^2 + \frac{4i\lambda}{q^2 - \Sigma^2(q)} \right] \tilde{\pi}_0(q),$$