

$$\Delta(m_{h^0}^2) = \text{---} \overset{h^0}{\text{---}} \text{---} \text{---} \text{---} \text{---} \text{---} + \text{---} \overset{h^0}{\text{---}} \text{---} \text{---} \text{---} \text{---} \text{---} + \text{---} \overset{h^0}{\text{---}} \text{---} \text{---} \text{---} \text{---} \text{---}$$

The image shows the Feynman diagrams for the self-energy correction  $\Delta(m_{h^0}^2)$  to the mass of the Higgs boson  $h^0$ . The diagrams are arranged in a sum, separated by plus signs. Each diagram consists of a horizontal line representing the Higgs boson  $h^0$ , with a self-energy loop attached to it. The first diagram has a solid circle loop with a top quark line ( $t$ ) and a top quark line ( $\bar{t}$ ). The second diagram has a dashed circle loop with a top quark line ( $t$ ) and a top quark line ( $\bar{t}$ ). The third diagram has a dashed circle loop with a top quark line ( $t$ ) and a top quark line ( $\bar{t}$ ).