

$$\mathcal{A}_{\text{EFT}} = \text{[Tree diagram]} + \text{[1-loop diagram]} + \text{[2-loop diagram]} + \text{[3-loop diagram]} + \dots$$

The image shows a series of Feynman diagrams representing the effective action  $\mathcal{A}_{\text{EFT}}$ . The diagrams are arranged in a horizontal sequence, separated by plus signs, and followed by an ellipsis indicating an infinite series. Each diagram consists of black vertices connected by blue and red lines. The first diagram is a tree-level vertex with two incoming blue lines and two outgoing red lines. The second diagram is a one-loop diagram with two internal blue lines and two internal red lines. The third diagram is a two-loop diagram with three internal blue lines and three internal red lines. The fourth diagram is a three-loop diagram with four internal blue lines and four internal red lines. The diagrams are summed together to represent the effective action  $\mathcal{A}_{\text{EFT}}$ .