

$$\dot{\Gamma}_k^{(2)} = -\frac{1}{2} \left[\text{Diagram 1} + \text{Diagram 2} \right]$$

The first diagram (Diagram 1) is a circle with a black vertex at the bottom and two light blue vertices at the left and right. A horizontal line with an arrow pointing right passes through the bottom vertex, with momentum p labeled on both the incoming and outgoing segments. The top arc of the circle has an arrow pointing clockwise and is labeled with momentum q .

The second diagram (Diagram 2) is a circle with two black vertices at the left and right and three light blue vertices at the top, bottom, and back-bottom. A horizontal line with an arrow pointing right passes through the left and right vertices, with momentum p labeled on both the incoming and outgoing segments. The bottom arc of the circle has an arrow pointing clockwise and is labeled with momentum $p+q$. The top arc has an arrow pointing clockwise and is labeled with momentum q .