

The diagram illustrates the decomposition of a self-energy loop into three terms:

- Left Term:** A self-energy loop diagram with a curved line labeled S above it.
- Equality Sign:** An equals sign ($=$) follows the first diagram.
- First Term on Right:** A tadpole diagram consisting of a horizontal line connected to a vertex, which then forms a loop. A solid black dot is placed below the horizontal line.
- Plus Sign:** A plus sign ($+$) follows the first term on the right.
- Second Term on Right:** A diagram with a horizontal line connecting two vertices. The left vertex is connected to a loop labeled \bar{M} above it. The right vertex is connected to a loop labeled S above it. The two vertices are connected by a horizontal line.
- Plus Sign:** A plus sign ($+$) follows the second term on the right.
- Third Term on Right:** A diagram with a horizontal line connecting two vertices. The left vertex is connected to a loop labeled S above it. The right vertex is connected to a loop labeled S above it. The two vertices are connected by a horizontal line labeled k above it.