

Diagrammatic equation showing the decomposition of a shaded loop into an empty loop and a loop with an internal shaded loop, plus a legend for the symbols.

Legend:

- $i \bullet = 2^\phi \Gamma_i$
- $L \bullet = 2^L \Gamma_l$
- $R \bullet = 2^R \Gamma_N$

Diagrammatic equation:

$$\begin{array}{c} i \\ \bullet \end{array} \begin{array}{c} \bullet \\ \bullet \end{array} = \begin{array}{c} \bullet \\ \bullet \end{array} + \begin{array}{c} \bullet \\ \bullet \end{array} \begin{array}{c} i \\ \bullet \end{array} \begin{array}{c} \bullet \\ \bullet \end{array}$$

Diagrammatic equation:

$$\begin{array}{c} i \\ \bullet \end{array} \begin{array}{c} \bullet \\ \bullet \end{array} = g_i = \tau_\phi / (2\pi \hbar N_i)$$