

$$\chi_{14}^q = 1 \text{ (loop)} - 1 \text{ (box)} = 4$$

The diagram illustrates the calculation of the quantity χ_{14}^q using Feynman diagrams. It consists of two parts: a loop diagram and a box diagram, both contributing to the final result of 4.

Loop Diagram: A diagram with two vertices connected by two curved lines. The top line has an arrow pointing right, and the bottom line has an arrow pointing left. This diagram is multiplied by 1.

Box Diagram: A diagram with four vertices forming a square. The top edge is labeled a , the bottom edge is labeled b , the left edge is labeled c , and the right edge is labeled d . The interior of the box is labeled $F_{abcd}^{qkk'}$. This diagram is multiplied by 1.

The final result is the difference of these two contributions, which equals 4.