

$$A_6^{\text{ans}} = \text{Diagram 1} + \text{Diagram 2} + \text{Diagram 3}$$

The image shows the sum of three Feynman diagrams representing the six-point amplitude  $A_6^{\text{ans}}$ . Each diagram consists of two shaded circular vertices connected by a horizontal line, with external lines extending from the vertices.

- Diagram 1:** The left vertex is labeled  $\mathcal{O}(p^2)$  and has four external lines (two on the left, two on the right). The right vertex is labeled  $\mathcal{O}(p^{10})$  and has four external lines (two on the left, two on the right).
- Diagram 2:** The left vertex is labeled  $\mathcal{O}(p^6)$  and has four external lines (two on the left, two on the right). The right vertex is labeled  $\mathcal{O}(p^6)$  and has four external lines (two on the left, two on the right).
- Diagram 3:** A single vertex labeled  $\mathcal{O}(p^{10})$  with six external lines (three on the left, three on the right).