

$$\partial_t \Gamma_k[\bar{g}, 0] = \frac{1}{2} \left(\text{Diagram 1} \right) - \frac{1}{2} \left(\text{Diagram 2} \right) + \frac{1}{2} \left(\text{Diagram 3} \right) - \frac{1}{2} \left(\text{Diagram 4} \right) + \frac{1}{2} \left(\text{Diagram 5} \right)$$

The equation shows the time derivative of the effective action Γ_k at zero source, expressed as a sum of five Feynman diagrams, each multiplied by a coefficient of $\frac{1}{2}$.

- Diagram 1:** A circle with two parallel solid lines and a vertex at the top represented by a circle with an 'X' inside.
- Diagram 2:** A circle with a dotted line and a vertex at the top represented by a circle with an 'X' inside.
- Diagram 3:** A circle with a dashed line and a vertex at the top represented by a circle with an 'X' inside.
- Diagram 4:** A circle with a solid line and a vertex at the top represented by a circle with an 'X' inside.
- Diagram 5:** A circle with a wavy line and a vertex at the top represented by a circle with an 'X' inside.