

$$\begin{aligned}
& \Gamma(p+\tfrac{1}{2}q, p-\tfrac{1}{2}q) \\
&= \frac{2ig_0}{(2\pi)^4} \gamma_5 \int \text{Tr}[\gamma_5 S_F^{(m)}(p'+\tfrac{1}{2}q) \\
&\quad \times \Gamma(p'+\tfrac{1}{2}q, p'-\tfrac{1}{2}q) S_F^{(m)}(p'-\tfrac{1}{2}q)] d^4p' \\
&\quad - \frac{ig_0}{(2\pi)^4} \gamma_5 \gamma_\mu \int \text{Tr}[\gamma_5 \gamma_\mu S^{(m)}(p'+\tfrac{1}{2}q) \\
&\quad \times \Gamma(p'+\tfrac{1}{2}q, p'-\tfrac{1}{2}q) S_F^{(m)}(p'-\tfrac{1}{2}q)] d^4p'.
\end{aligned}$$