

$$\begin{aligned}
& \left(\{\tilde{p}, \tilde{f}, \tilde{c}, \tilde{d}\}_m \middle| \mathcal{H}^\dagger(t) \middle| \{p, f, c, d\}_{m+1} \right) \\
&= \sum_{\substack{i,j \\ \text{pairs}}} \sum_{k \neq i,j} \frac{1}{2p_i \cdot p_j} \frac{\eta_a}{\tilde{\eta}_a} \frac{\eta_b}{\tilde{\eta}_b} \delta\left(t + \log(T_{ij,k}(p_i, p_j, p_k)/Q^2)\right) \\
&\quad \times \frac{\alpha_s(Q^2 e^{-t})}{2\pi} \left(\{\tilde{c}, \tilde{d}\}_m \middle| \mathbf{V}_{ij,k}(p_i, p_j, p_k, f_i, f_j) \middle| \{c, d\}_{m+1} \right) \\
&\quad \times \left(\{\tilde{p}, \tilde{f}\}_m \middle| \mathcal{Q}_{ij,k} \middle| \{p, f\}_{m+1} \right)
\end{aligned}$$