

$$\begin{aligned}
|\sigma_M(t_f)) &= |\sigma_\Delta(t_f)) \equiv N(t_f, t_2)|\sigma_2) \\
&+ \sum_{m=3}^{n-1} \int_{t_2}^{t_f} dt_m N(t_f, t_m) W_\Delta(t_f, t_m, t_2)|\sigma_m) \\
&+ \int_{t_2}^{t_f} dt_n U(t_f, t_n) W_\Delta(t_f, t_n, t_2)|\sigma_n)
\end{aligned}$$