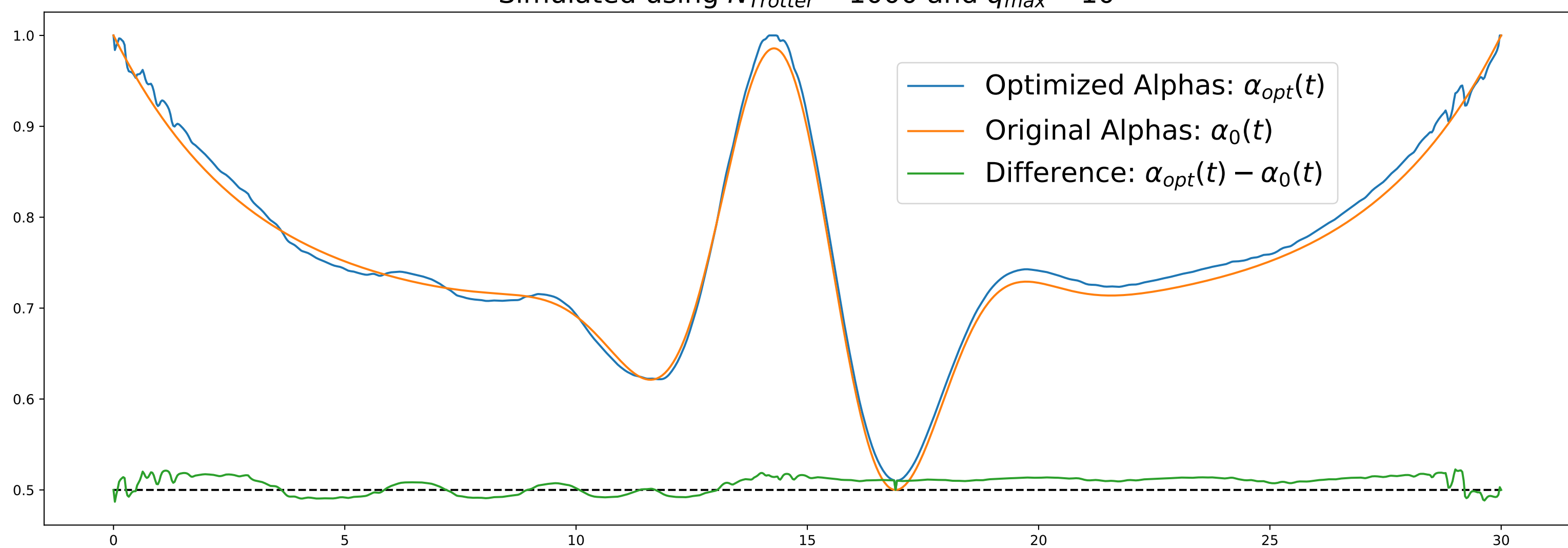
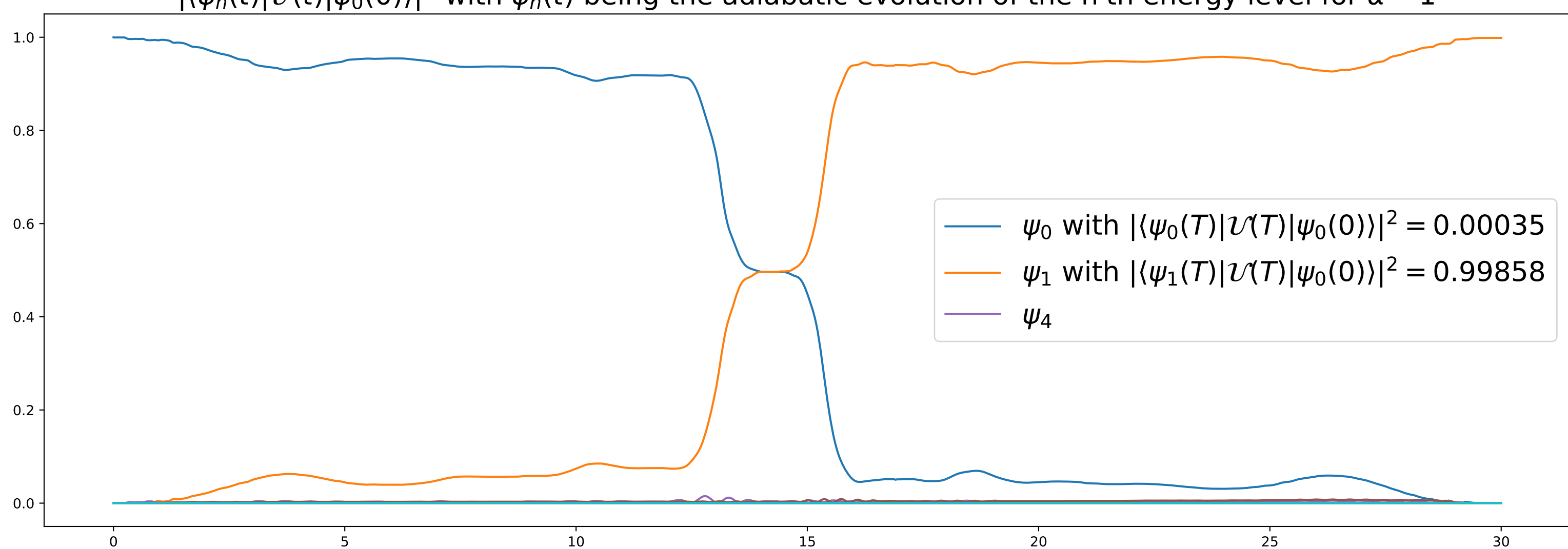


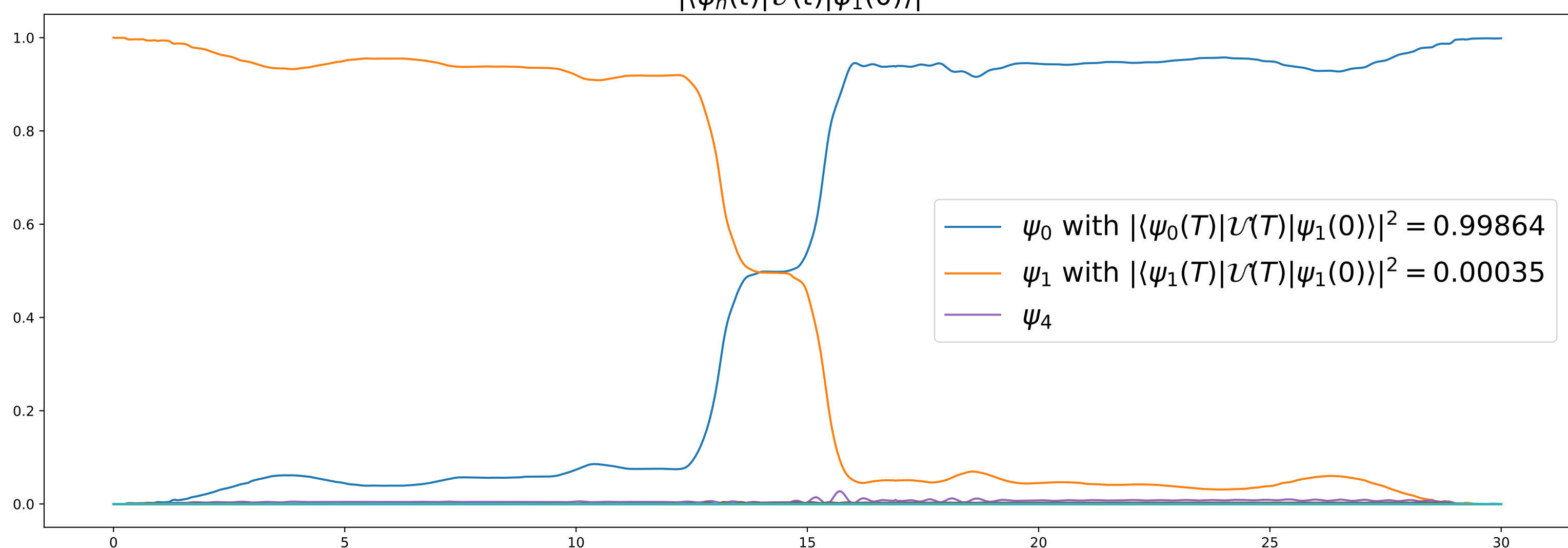
The time dependent α from $t = 0ns$ to $t = T = 30ns$
 Simulated using $N_{Trotter} = 1000$ and $q_{max} = 10$



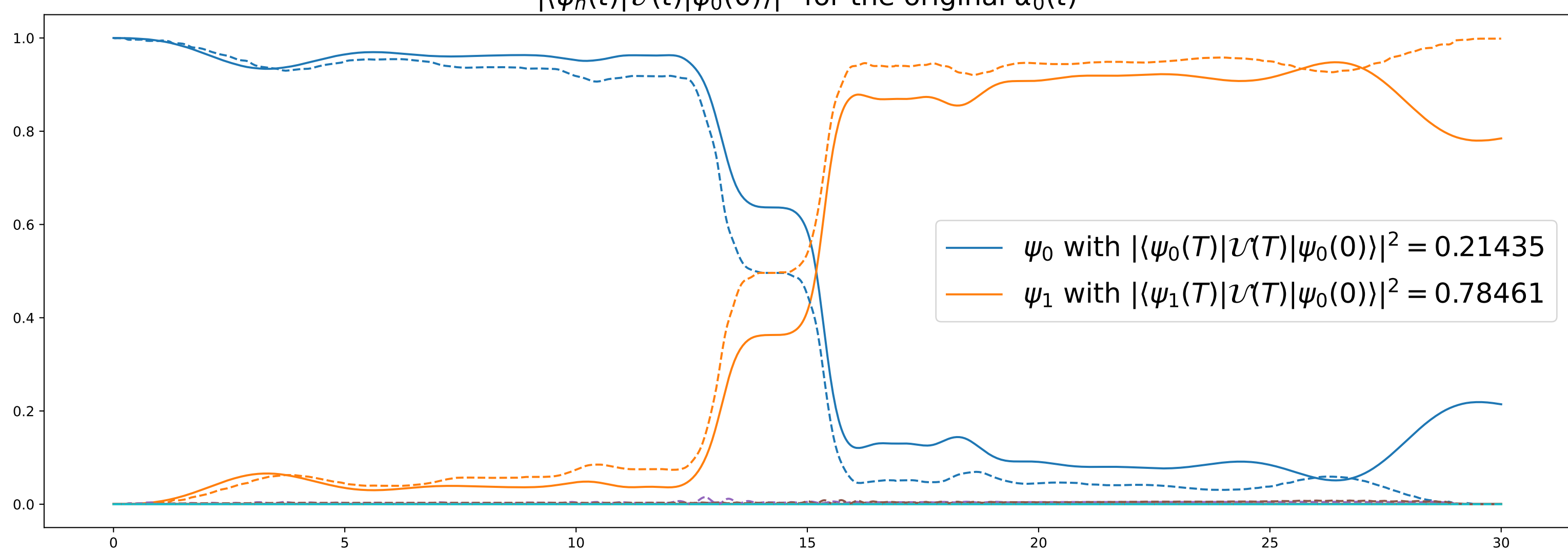
$|\langle \psi_n(t) | \mathcal{V}(t) | \psi_0(0) \rangle|^2$ with $\psi_n(t)$ being the adiabatic evolution of the n'th energy level for $\alpha = 1$



$|\langle \psi_n(t) | \mathcal{V}(t) | \psi_1(0) \rangle|^2$



$|\langle \psi_n(t) | \mathcal{V}(t) | \psi_0(0) \rangle|^2$ for the original $\alpha_0(t)$



$|\langle \psi_n(t) | \mathcal{V}(t) | \psi_1(0) \rangle|^2$

