

CHEM2504 HW 5

Due: April 9, 3:00 pm, 2024

For the TLS under the density matrix representative discussed in class, similar to TLS under the wavefunction representative, use the parameters from HW4 (Set $E_1 = -0.1$ eV, $E_2 = 0.1$ eV, $\gamma = 0.02$ eV, $\hbar\omega = 0.12$ eV and $\eta = 0.001$ fs⁻¹.), solve the density matrix evolution exactly using the numerical method. Plot state 1 and state 2 occupation ($|C_i(t)|^2$) as a function of time and compare with the "wavefunction" representative results in HW4.