

## Adiabatic Theorem

Let a system be in an eigenstate  $\psi_n^i$  of the system. Now consider a case in which the Hamiltonian of the system starts changing in time. The adiabatic theorem states that if this change occurs slow enough, the system will remain in the  $n^{th}$  eigenstate  $\psi_n^i$  of the system at time  $t$ .