

## Last lecture

- Time dependent Schroedinger equation
- Interpretation of  $\Psi^*(x,t) \Psi(x,t)$
- Time independent Schroedinger equation if potential  $U(x,t)$  ONLY  $U(x)$   
 $\Psi(x,t) = \psi(x)T(t)$  where  $T(t) = e^{-iEt/\hbar}$
- Solve for  $\psi(x)$
- Example – 1D infinite potential well
- $\psi_n(x) = A \sin n\pi x/L$  where  $A^2 = 2/L$

## This lecture

- Energy levels
- Superposition of states (alive/dead??)
- 1D finite potential well – tunneling!!

