

$$i\hbar \frac{\partial \psi_c(\mathbf{r}, t)}{\partial t} = -\frac{\hbar^2}{2m} \nabla^2 \psi_c(\mathbf{r}, t) + V(\mathbf{r}, t) \psi_c(\mathbf{r}, t) \\ + \frac{\hbar^2}{2m} \frac{\nabla^2 |\psi_c(\mathbf{r}, t)|}{|\psi_c(\mathbf{r}, t)|} \psi_c(\mathbf{r}, t) \ ,$$