

$$\begin{aligned}
i\hbar \frac{\partial \psi_{\epsilon}(\mathbf{r}, t)}{\partial t} = & -\frac{\hbar^2}{2m} \nabla^2 \psi_{\epsilon}(\mathbf{r}, t) + V(\mathbf{r}, t) \psi_{\epsilon}(\mathbf{r}, t) \\
& + (1 - \epsilon) \frac{\hbar^2}{2m} \frac{\nabla^2 |\psi_{\epsilon}(\mathbf{r}, t)|}{|\psi_{\epsilon}(\mathbf{r}, t)|} \psi_{\epsilon}(\mathbf{r}, t)
\end{aligned}$$