

























































Figure 1: Potential energy landscape  $V(\vec{r})$  and the wavefunction  $\hat{\Phi}_{13}(0, \vec{r})$  for a system with a double-well potential. The ground state  $\Phi_{13}(0, \vec{r})$  and the excited state  $\hat{\Phi}_{13}(0, \vec{r})$  are shown as shaded surfaces. The potential  $V(\vec{r})$  is shown as a dashed line. The vertical dashed lines at the atomic site indicate the positions of the wells.