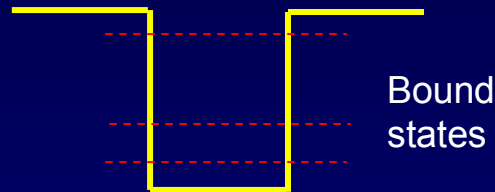


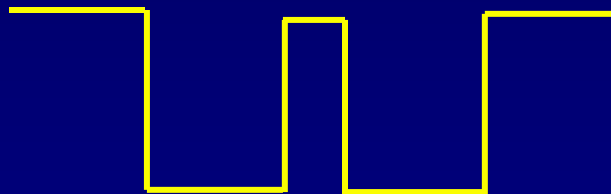
Particle in a Finite Square Well Potential

This has all of the qualitative features of molecular bonding, but is easier to analyze..

The 'atomic' potential:



The 'molecular' potential:



Consider what happens when two "atoms" approach one other. There is one electron, which can be in either well (or both!). This is a model of the H_2^+ molecule. We'll worry about the second electron later...