There may be Fermi Energy levels in the hollow interiors of Nanotubes that would allow for a type of Quantum RICHARD KRISKE, University of Minnesota — There may be Fermi Energy levels that would allow for easy travel by Atoms, Molecules and Particles, in the hollow interior of Nanotubes. This may result in a Quantum Mechanical explanation of Capillary Action, and it may result in devices could take advantage of the idea that it takes no energy to rise in a Capillary tube, only in leaving it. This no-energy conjecture of Capillarity sounds very much like the idea that Electrons in orbitals lose no Energy staying in orbit, only in changing orbits. It is this conjecture that may reveal that a Fermi Energy state is essentially in a weak orbital. This weak orbital could be exploited to store Anti-matter for instance. More profoundly it clearly shows how the Quantum Mechanical states meld smoothly into Classical Physics. It also reveals how extremely efficient Classical Machines could be constructed to take advantage of this spontaneous action. Say a tube could be designed to nudge electrons out of a weak orbital in one place, sent down the tube (which is another weak orbital) and deposited in a weak orbital of another very distant Atom, apparently with little or perhaps no work being done, as long as the orbitals are the same energy. This may already exist in some Biological systems. Although more experimentation is needed, this would be the breakthrough that is needed to unify Classical and Quantum Mechanics.