

Quantum Theory & the Atom

Electrons are located within certain orbits

- each orbit has a particular energy associated with it
(quantized)

atomic orbital - places where electrons are likely to be found



ground state - the most stable energy state
($n=1$)

excited state - higher energy state than ground state

* when electrons gain energy, they jump from lower energy state to higher energy state

Electrons have properties of both waves & particles
 ↓ frequency ↓ mass & velocity

Heisenberg Uncertainty Principle - impossible to know the position & velocity of electron at the same time