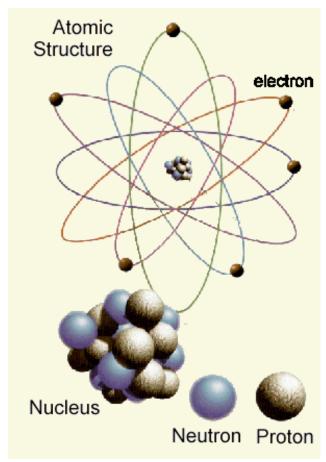
## Atoms are the basic building blocks of matter that make up everyday objects. A desk, the air, even you are made up of atoms!



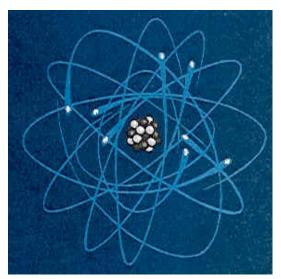
**Quantum Physics** 

The study of the atomic world

The word "quantum" came from the Latin word which means "how great" or "how much."

(If classical mechanics governed the workings of an atom, electrons would rapidly travel towards and collide with the nucleus, making stable atoms impossible.) *Move over mister Newton, something else is happening.* 

## Atoms contain Electrons, which are in constant motion



When we try to observe them. Weird things happen contrary to our experiences of everyday. They display all possible options, but the natural world can only observe one. These experiences our explained by different theories through different perspectives.

## What happens to all the potential?

Perspective 1) All possibilities are present and are equal real, it is only when we observe it, that we see only one. (Walk into a room with chaotic motion but when you step to close to look it stops, and reveals something entirely different then what you thought) **Conflation** occurs when the identities of two or more individuals, concepts, or places, sharing some characteristics of one another, become confused until there seems to be only a single identity. *-Observer conflict* 

Perspective 2) What you observer there is another you for all the other possibilities. (This could be displayed with the viewer displayed on the wall also with different perspectives (angles) of the viewer) – *Environment conflict* 

Perspective 3) "God doesn't play dice" Objective Collapse- There is a hidden variable where all states reach an end due to a pre-deterministic objective (the experience just ends randomly, predetermined) – The God Conflict

\*Quantum mechanics provides probabilistic results because the physical universe is itself probabilistic rather than deterministic.

## Why do I care?

- Can we ever clearly observe something?
- How does my perspective on life change how I see the world?
- Can there be multiple universes?
- Can we harness those potentials to create great forces of energy?