## The New Neutron According to the Structured Atom Model

## **Conventional Neutron**

The Standard Model of the Atom states the nucleus consists of protons and neutrons. The neutron is thought to be a particle of its own. However, if a neutron is removed from the 'safety' of the nucleus within 15 minutes it will spontaneously decay into a proton, an electron and an anti-neutrino. Therefore, a neutron by itself is an inherently unstable configuration. A neutron must be part of a nucleus to stay together. Protons and neutrons have nearly the same mass whereas electrons are much less massive.

The relative masses are: Neutron = 1 Proton = 0.99862349Electron = 0.00054386734

## The New Neutron

SAM postulates that the neutron does not exist as a fundamental particle but is a proton and electron held together electro-statically. This means the nucleus is composed of protons and electrons, not protons and neutrons. The nuclear electrons bind the protons together and hold them rigidly in a densely-packed structure.



On the left, we see the deuterium nucleus or 2H. It consists of 2 protons and one electron. This structure is stable and can exist on its own. It is the basic building block of the larger elements.

Deuterium has one outer electron - it orbits about the nucleus at an estimated 100,000 times the radius of the nucleus. The outer electron cannot be within the nucleus because there is no room for it. It has been booted out from the nucleus and orbits about it.





On the right is the nucleus for Helium-3, a stable but very rare isotope of helium. On earth, there is a million times more helium-4 than helium-3. The Helium-3 nucleus has three protons and one inner electron. The electron is thought to settle into a resting position in the middle of the protons.





To the left is Helium-4 with 2 inner electrons. You can think of it as 2 deuterium pairs, each pair being held together with its own electron.

Beta Decay

It is known if a neutron is removed from the safety of the nucleus of an atom, it will decay into a proton, electron and electron anti-neutrino within 15 minutes. This process is called beta decay. The conventional equation to describe beta decay is:

```
Neutron \Leftrightarrow Proton + electron + anti-neutrino

\mathbf{n}^{\circ} \Leftrightarrow \mathbf{p}^{+} + \mathbf{e}^{-} + {}^{-} \mathbf{v}_{\mathbf{e}}
```

In SAM, we rewrite the above equation by adding a neutrino to each side and get the following equation:

Neutron + neutrino (activation energy)  $\Leftrightarrow$  Proton + electron  $\mathbf{n}^{\circ} + \mathbf{v}_{\mathbf{e}} \Leftrightarrow \mathbf{p}^{+} + \mathbf{e}^{-}$ 

SAM postulates the neutrino is not a particle but is a form of energy that activates the beta decay. This decay does not occur randomly through some internal process, but is activated by an input of external energy. We conclude this activation energy comes from the environment, not from within the atom. This idea was put forth by Nikola Tesla when he claimed atoms had no intrinsic energy but that this energy comes from the Sun. This is not so different from conventional belief that we are bathed in a sea of neutrinos which comes from the Sun.

A paper written by Carl Johnson puts forth there is no need for the neutrino. The reason the neutrino was invented was to balance spin in calculating neutron decay. Johnson shows that this was a miscalculation because Enrico Fermi treated spin as a scalar value instead of a vector. If we use vectors for spin the calculation balances nicely without adding in a neutrino.

Is what we call a neutrino actually a form of energy that permeates all of space, what we call the aether?

## Tritium decay to Helium-3

T + initiation energy  $\rightarrow$  3He + energy





On the left is 3H or tritium, a semi-stable isotope of hydrogen. On the right, we see 3He or Helium

Conventional belief is that the nucleus has one 'proton' and two 'neutrons'. SAM redefines the nucleus to consist of three protons and two inner electrons. Both theories agree there is one outer electron in orbit.

When tritium decays into 3He the structure of the nucleus changes from three nucleons in a line into 3 nucleons in the shape of a triangle (on the right). This triangular configuration does not have room for 2 inner electrons, therefore one of the inner electrons is booted into an outer orbit. This leaves us with Helium-3 which, according to conventional theory, is a nucleus with two 'protons', and one 'neutron'. SAM redefines the nucleus to be 3 protons and 1 remaining inner electron. Because one electron was booted from the nucleus there are now 2 electrons orbiting about the nucleus.