

## **The One Fundamental Particle**

Author; Eric Sabo

August 8, 2008

East Haddam, CT

[www.howgravityworks.org](http://www.howgravityworks.org)

The purpose of this paper is twofold. The first is to further detail the reasoning behind the “nuclear isotopes” drawings and subsequent strong force/weak force comments in the Unified Theory section of this site and “Original Documents” that were distributed in 2006.

The second is to further bring to light and stress the significance of one of the most important discoveries of the past century. This discovery was made by Walter Babin ([www.wbabin.net](http://www.wbabin.net)) and presented July 9, 2002 at the International Scientist's Club, Congress 2002, University of St. Petersburg, Russia. It was brought to my attention in late May of this year, (2008)

In correspondence with Walter Babin regarding sub atomic particles I wrote;

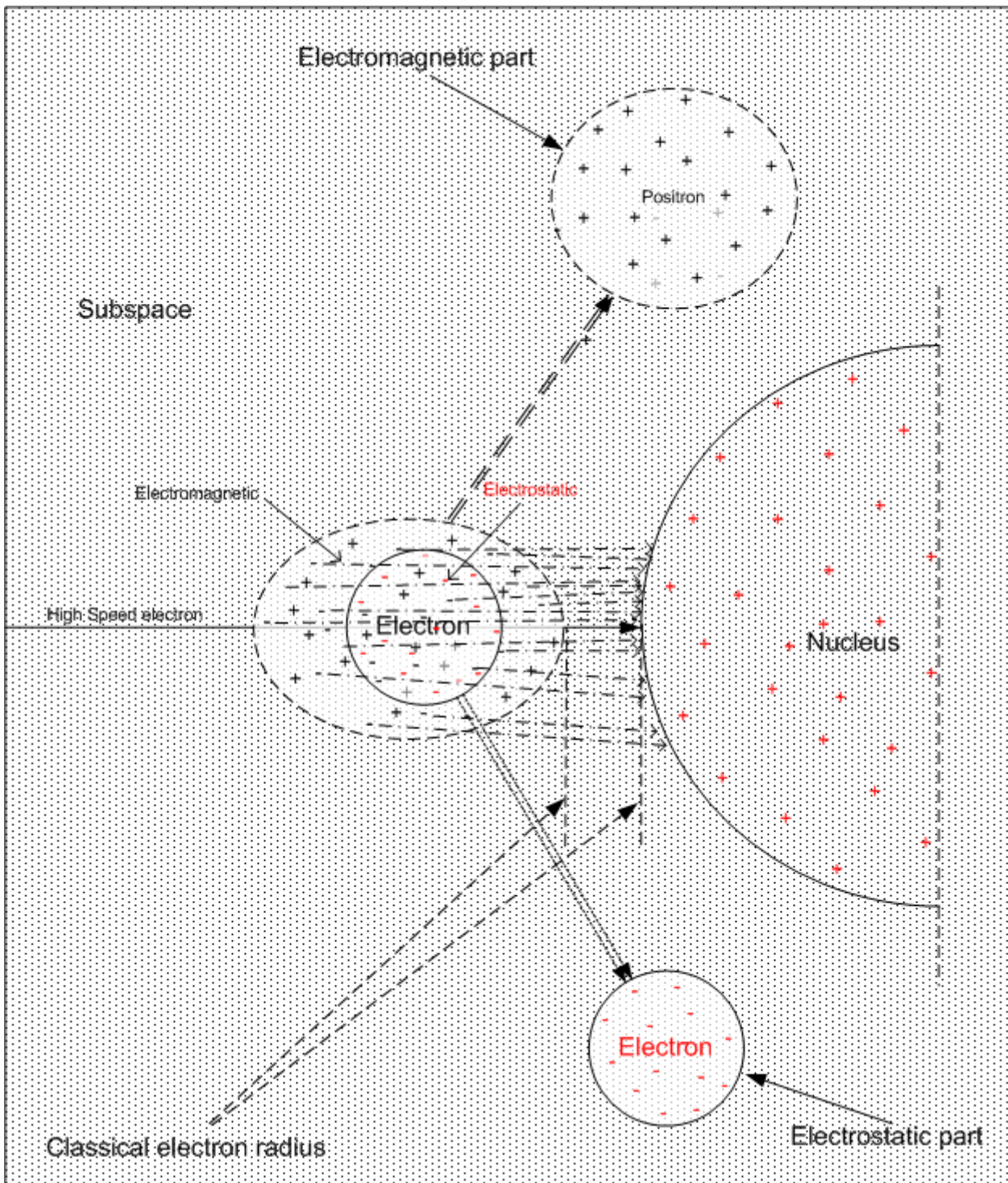
“Quarks and Muons are just like sub atomic space debris. The only viable particles are the proton, electron, and neutron. The neutron isn't even all that great because, in just under 15 minutes, it decays to a proton and an electron.” His response was;

**“There is only one particle.”**

I have to say, that I just sat there looking at those words totally void of expression. His correspondence then proceeded;

**“As an electron approaches a nucleus at near the speed of light, it flips and becomes a proton. Try it using the relativistic equations!”**

I sat back in my chair thinking that it seemed an incredulous scenario. After several weeks of thinking about it, and further correspondence, I decided to draw it up. It's not exactly as he further described it, but it is how I envisioned it using the proposals offered my “Matter-Antimatter Reaction” (Halflets) and “Dark Matter” papers.



I envisioned the nucleus absorbing the excess negative halflets from the shell and deflecting the remains off in the form of a positron. The nucleus would then not be able to acquire any more negative halflets and the electron would also deflect off. Walter suggests that the electron is absorbed as a neutron at that point and an electron is then emitted if necessary.

After looking at this drawing for several days, I wrote back to Walter;

**“Did “we” just stumble on the fundamental difference between matter and antimatter?”**

He wrote back;

**“The one-particle idea is in <http://wbabin.net/babin/wd6.htm> under the Compton Effect.”**

(THE SYNTHESIS OF QUANTUM ELECTRODYNAMICS, SPECIAL RELATIVITY AND CLASSICAL MECHANICS)

“See <http://wbabin.net/babin/super.htm> which shows how an electron flips.”

(Superluminal Speeds and Superconductivity)

I can boil down the wd6.htm paper (the super.htm furthers the wd6.htm) for the purposes of this paper. Walter writes;

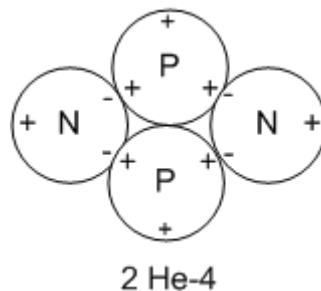
“As the electron approaches the nucleus, the Compton effect shows that the induced electric field approaches the magnitude of the primary field. Of specific interest is where the field strength is equivalent to the proton mass, which occurs at the classical electron radius. It is clear that an inversion of space, time and mass takes place at this point. **It is also clear that the proton and electron are both aspects of the same fundamental particle.**”

To me, this is perfectly logical in that what differentiates particles is whether they have an excess of positive (proton) or negative (electron) halflets, or an equal number (neutron). It also seems that antimatter particles are a result of the electromagnetic shell and that is how they fundamentally differ from ordinary matter. And that is, they are like ghost particles.

Walter does not agree with me on the halflet scenario, but has an open mind. His belief is that it all starts with the electron and that it is the smallest, naturally occurring, fundamental particle. I have to go with the halflet scenario because of the matter-antimatter reaction result and the unresolved structure of the photon in contemporary physics. Also, the halflet scenario leads into the possible answer to the dark matter question.

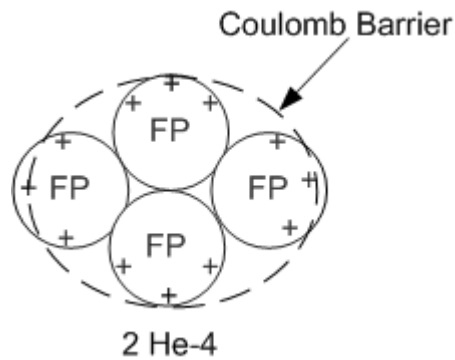
However, I believe that Walter is correct in his statement that the electron is the basic fundamental particle in the construction of all matter.

This is correct for one fundamental reason; **All atoms are roughly the same size.** Here’s why. Observe this drawing from my Unified Theory page;



There are two protons and two neutrons. The positive and negative elements lock the four particles together with tremendous force. In my original documents distributed in 2006, I stated that in the nucleus, the positive charges migrate to the surface. This creates a nuclear surface tension. Well, they do not migrate. They are simply what are left exposed and they manifest themselves as a surface tension. We are all familiar with this nuclear surface tension.

**It is called the Coulomb Barrier! Because protons, neutrons and electrons all are two component particles composed of an electrostatic and electromagnetic, once incorporated in the nucleus and locked together, the protons and neutrons become fundamental particles with no apparent difference of appearance.**

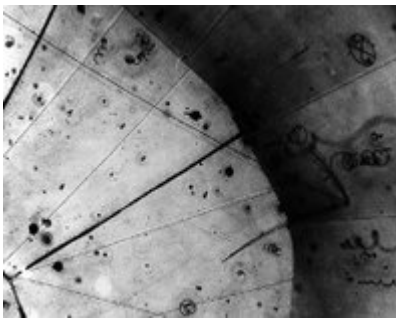


As the elements progress up the periodic table, (or chart of the nuclides), **mass increase is not linear**. And, the fundamental particles in the nucleus become increasingly smaller by losing some of their electromagnetic shell. This is accomplished most commonly by beta decay. (There's the electron again.)

At the end of the day, in the largest nuclei on the charts, the fundamental particles are the size of an electron. This implies that the elements were most likely constructed one at a time up the chart of the nuclides.

**So, the "One Fundamental Particle" is the size of an electron and has no net charge.** If anybody wants to know where the "God" particle is, just look around. They are in every atom. The reason they can't be found is because they only exist inside the nucleus. Once outside the nucleus, it's a beta particle.

Fermi would have called them "neutrini", for "little neutron". If we do see one, that's probably what we are seeing here;



Furthermore, an excerpt from the wd6.htm paper, Walter states;

**"The identification of opposing electrostatic and mechanical states point the way towards a unification of all forces into one encompassing theory.**

**The fact that the above results were implicit in the formulas for electromagnetism and relativity, attest to their validity. The problem occurs in the interpretation. It is astounding that simple oversights such as in equation (3) would lead to the complex, *ad hoc* and divergent theories of the previous century. The solutions to the fundamental problems were available at the outset. This emphasizes the need for a rigorous evaluation of any new theories and their relationship to those of the past."**

Given the apparent disarray of contemporary physics, I'd say we are in total agreement. This has been the objective of the HGW.org website. Compared to Walter's work, HGW.org is only an outline that points toward the electromagnetic force as the basis for the unification of all forces.

Thank you for your time,

Eric Sabo