PROTON COSMOLOGY

FUNDAMENTAL MECHANICS

In the early 1970's, Quark Theory was relatively well established but, no quarks or direct evidence of any had been found. **[1]** A film titled, "The Hunting of the Quark", BBC "Horizon"- Educational Scientific Series, written & produced by David Paterson, (1974) was aired on Public Television. [Nova] on November 17, 1974.

"The Hunting of the Quark"; A portion of this film described an exclusive reaction (electronproton scattering experiment) that was done at Stanford University and what was found when computer analysis was done with the data. A program was run to search for any symmetrical charge morphology or configuration on the proton. In the film, an animation was shown of a rapidly alternating dynamic charge pattern that was found, as the only symmetrical configuration to fit the scattering data.

The Changing Shape of Protons;

The animation represented the proton as a sphere with two counter spinning rings of intensifying positive charge, each rotating near the relative poles, in one state. In the alternate state, four point charges were shown equally displaced around the equator of the proton. These four point charges then began to simultaneously elongate into linear arc charges stretching out toward, and almost reaching the poles of the sphere. The film's narrator stated that, "theorists could explain what might cause the ring charges to occur, but were unable to account for the four point, elongating into line-arc charges". He also pointed out that this data [1], although intriguing, did conflict with some of the basic axioms of "quark" theory. Recent experimentation indicates that the proton has an electro-dynamic like nature and various morphologies. [2] "Surprise to physicists" protons aren't always shaped like a basketball". This recent finding seems to confirm the existence of the dynamic charge patterns predicted by computer and described in this hypothesis. ((Comparison)) Such charge patterns, (inner) as described in the ["Horizon Film"] would result in the various proton morphologies (outer) found by Gerald A. Miller, et al. The shapes would be observed, as polarized electrons deflect off an oscillating proton. These various shapes are caused by electrodynamic-like, symmetrical positive charge fields that do move at the speed of light. These dynamic positive charges are momentarily stored on the surface of an oscillating, internally driven, externally dynamic charge morphology varying proton.

Internal Structure of the Proton;

To understand what is occurring within the proton, that causes the alternating charge patterns to appear and alternate, visualize the proton as a hollow, thin shelled mass sphere or space-time bubble. Inside the sphere there are four identical, positively charged particles. These four particles are synchronously oscillating from near the proton's center, almost to the containing shell, and back again. Their oscillation paths are equally spaced at ninetydegree intervals in the plane of the proton's equator. For ease of illustration and to avoid confusion these particles will be referred to as Quadrons, rather than, quarks. Synchronicity at the quantum level may seem counter-intuitive to the "Uncertainty Principle", but is not precluded by it.

It is known that when a basic charged particle, the electron for example, takes on a relative linear motion it generates a spinning electromagnetic field.. This radiated field expands at the velocity of light, at right angles to the particle's linear direction, in a clockwise spin, if facing the oncoming electron particle. (Positive particles field spins rotate opposite to negative particle spins) Applying this field concept, and starting at the farthest points from the proton center, the four quadrons are pushed inward. They are repelled by their own charge fields, which are mirrored and stored by the containing energy-mass spherical shell. As the particles take on relative linear motion they each radiate a spinning, obtuse, conical energy field at right angles to their respective motion.

As these spinning energy fields expand outward, at the velocity of light, they encounter the proton shell. They are deflected around and along its inner physical surface. As the particles progress inward, these four energy fields generated at an angle of 90 degrees to each other, expand and curve around the inner surface of the shell to meet each other adjacently at an angle of 180 degrees. It is known that when similar charge fields of the same rotational spin direction encounter each other; at an angle of 180 degrees, they join together. (Electromagnetic field coupling) This charge field coupling is what creates the two counter spinning charge rings around the proton poles. The increasing magnitude of the double charge rings that are formed, keep the four quadrons oscillating within a plane, preventing close packing. (Fig.#2) & (Fig.#3).

The Role of Quadron Linear Velocity;

The ring charges collapse across their radii at the speed of light, thus, r = c. The area that the charge is compacted into a point would be reduced at $V = 2(1/3\pi c^2 h)$, the volume of two

counter-rotating cones of energy. $(r^2 = c^2)$, energy to mass conversion occurs. Condensations of mass are created and layered upon each other as the two rings collapse inward to form a new fifth particle at the center of the proton. Both ring charges being focused on the same central point predispose the newly created particle to be spherical. The two spinning, diametrically opposed ring charges collapse inward in an hourglass shaped charge to form a new particle. This particle will be called the "Universal Particle" or "U" particle. As the quadrons move inward toward the center of the proton their linear velocity begins to slow, due to the repulsive nature of their similar charges. This action causes the concentrated double ring charges, at the proton poles, to collapse back upon the four particles from which they were generated, in an effort to maintain the particle velocities from which they were radiated (Self induction). However, the four quadron charge fields have been combined divided in half and rotated 90 degrees from the direction in which they were originally radiated. They are now in the form of two, intensifying diametrical, spinning rings of similar positive charge, at the proton poles, focused upon a point at the center of the proton. The two charge rings collapse upon this point at the proton's center, in a conical fashion due to economy of motion. It resembles an hourglass of charge caving in on itself at its center.

The U Particle;

Within the proton we observe four positively charged particles gathered around a newly created fifth U particle, at the proton center. To enable this system, to keep oscillating, the charge on the new U particle would need to be positive. The five positive particles are now in closer proximity to each other than they could be, under any other circumstances, at the same energy levels. The quadron particles are repelled by the like charge of the newly created fifth positive particle and each others similar charge. (Like or same type charges repel each other, unlike charges attract.) The four quadrons would be sprung outward away from the proton center, toward the containing spherical shell. As the four quadrons travel outward their rotating charge fields expand and adjacently encounter each other at an angle of 90 degrees. Field coupling cannot occur as it did along the shell wall on the inward journey. The charge fields now deflect each other adjacently, outward toward the proton shell at an angle of 45 degrees relative to the oscillation paths of the quadron particles. A map analogy would have the quadron oscillation paths at the North, south, east and west locations while the deflected charge fields would be at the Northeast, southeast, northwest and southwest positions. The charge fields, which travel at the velocity of light, lead the quadron particles outward toward the proton shell. The four pair of mutually repelling energy fields would

appear first as four point charges, equally displaced around the equatorial plane of the proton. These point charges expand into the building linear arc charge pairs as the four quadrons move closer to the proton shell and more of their deflected charge fields encounter it.

Returning to the center of the proton we observe that the, newly created, fifth positive particle (U particle) is emitting field relative to the oscillating particles. It is being stripped of field, as though the U particle is traveling in four directions at once. It would be anisotropically accelerated at the four points where the counter-rotating, repelling, receding quadron fields met and are deflected outward at the velocity of light and four points where it faced the quadron particles. The fields would tend to form quadra and or octapoles on the rapidly changing U particle.

Considering energy-mass as a spectrum, with mass at one end, energy at the other, and charged particles at various places in between, a statement can be made: Energy-mass which is changing in a direction toward mass, will have a positive charge; Energy-mass that is changing in a direction toward energy, will have a negative charge.

Transformation of the U Particle:

The U particle is being relatively accelerated by the speed of light squared. Changing in a direction toward energy, it takes on a negative charge and explodes outward as its negative exterior begins to annihilate with its positive interior. It is ripped and blown apart in the process of mass being converted back to energy. (The point our Universe is at, given that size and time are infinitely relative). The four outbound quadron particles eventually come in close enough proximity to the proton shell to be repulsed by the reflection of their own charges. The central U particle has been completely converted to energy. The four quadrons begin to slow when they approach reflected containment. The four pairs of counter-spinning, uncombined, deflected arc charge fields, stored along the proton shell, collapse inward toward the slowing, respective particles from which they were radiated, approaching them from each side. (Self-induction).

This stops the outward movement and springs the quadrons back inward toward the proton center. The process begins again, the oscillations continue. The difference in velocity, between the oscillating sub-luminary (slower than light) quadron wave-mass particles and the speed of light charge fields that they generate within the geometry of the proton sphere, maintains this perpetual motion. The initial two, eight electron atomic orbital shell capacity observed in nature shows an obvious correlation. Two opposing spin rings of positive charge, then four opposing spin, pairs of arcs radiated by the proton easily explains the two, then eight capacity of the first two electron energy shell orbital's. The "8" interval pattern would follow logically as observed in the stability of the Nobel gas elements. The positive charge of the proton is projected into space in perpendicularly opposed, rapidly alternating two, then eight charge field patterns. The oscillating proton model offers a superior charge dynamic descriptive to the currently accepted two, $2/3^{rd's}$ positive plus one, 1/3 negative, randomly orbiting charge entities of the current proton paradigm. It also is in agreement and field wise, can explain the Pauli principle. Notice the "s" sub-group never contains more than two electrons, no matter the orbital shell capacity or level, because two of the electrons in each shell, will always be attracted to the ring charges. A brief description of the neutron, based on this model can be located <u>here</u>.

Large Scale Phenomena;

Many recently observed anomalies in astrophysics, at the macro-level of the cosmology, suggest that our observable universe is a much larger mirror image the U particle described in this oscillating proton model. Our universe is being pulled apart by the charge and expanding energy fields (dark energy) of four outbound quadron (anti-matter) universes. A perpendicular light polarization alignment of the observable galaxies in our universe has been discovered (duel crossing spirals) **[3]**.

A dipole, quadrupole and/or <u>octapole orientation</u> has also been discovered in the CMB (cosmic microwave background radiation) called the "<u>Axis of Evil</u>"[**4**].

The expansion of space-time surrounding the universal particle would be symmetrical, yet anisotropic during the outbound oscillation phase of the quadrons. Four points where their radiated spinning charge fields encounter adjacently at 45 degrees and deflect outward, at c and nearby space-time volume expansion approaches c². Astrophysicists have discovered at least one of these <u>deflection points</u> in our cosmos. It is known as <u>Large-scale Peculiar</u> <u>Velocities of Clusters of Galaxies</u> [5]. The <u>physical constants</u> [6] of nature would also vary from place to place within anisotropically accelerated space-time, depending upon location within or near a repulsing dark energy pair deflection point. Constant variation Alpha 1/137 See: lower right labeled, "<u>OUTBOUND</u>".

The latest analysis of seven years worth of Cosmic Microwave Background data from NASA's Wilkinson Microwave Anisotropy Probe seems to indicate that our early universe was influenced by <u>four extra-universal objects</u>, **[7]** as would be predicted by this model. "Dark energy", is a term coined to explain the unexpected anomaly of universal expansion accelerating, rather than, slowing down as most physicists expected. Four anti-matter universe sized (probably larger) structures, outside and traveling away from our universe, as the quadrons do inside this proton model, would account for the observed space-time effects of the still undefined "dark energy" and "dark flow". What is believed to be caused by dark Matter is caused by dark energy. The universe we exist in is being pulled apart, during and after exploding, analogous to the universal particle described in this oscillating proton model. Any matter left over from the initial anti-matter, matter annihilation event would be caught up in the swirling spirals and vortices of the repulsing **[8]** <u>dark energy</u> fields of the four outbound anti-matter (Quadron) universes. Matter would take up the nature of these counter rotating, repulsing fields where they interface on the cosmic scale.

Circular Universe

An undeniable axiom of the universe we exist in is the sphere or the circle, if considered two dimensionally. It permeates our existence at every level. The universe appears to be multidimensionally, circular in design. It is structured that, if you look up and down far enough, eventually you arrive at the same place. Imagine, a universe inside every proton and ours a part of what?

"The opposite of a correct statement is a false statement.

But the opposite of a profound truth may well be another profound truth".

-Niels Bohr - 1885 ''' 1962

Physics Journal References.

[1] unobtainable
[2] <u>http://prc.aps.org/abstract/PRC/v68/i2/e022201</u>, & <u>http://arxiv.org/abs/0802.3731v1</u>
[3] <u>http://prl.aps.org/abstract/PRL/v78/i16/p3043_1</u>

[4] <u>http://arxiv.org/PS_cache/astro-ph/pdf/0611/0611518v2.pdf</u>

[5] http://www.nasa.gov/centers/goddard/pdf/276176main_ApJLetters_20Oct2008.pdf

[6] <u>http://arxiv.org/abs/1008.3907</u>

[7] <u>http://arxiv.org/abs/1012.1995</u>, & <u>http://arxiv.org/abs/1012.3667v1</u>

[8] <u>http://arxiv.org/abs/0711.0958</u>