The Classical Nuclear Model

Formally proposed in1964, and awarded the Nobel Prize for physics in 1967, the quark paradigm was relatively well-established in the early 1970's. On November 17, 1974, a film titled, "The Hunting of the Quark", BBC Horizon educational, scientific series was broadcast on public television.
Described in a later portion of this film, was an exclusive reaction (electron-proton scattering experiment) that had been conducted 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. An animation was shown of two dynamic, perpendicularly opposed charge patterns that were found as the only symmetrical charge configurations to fit the linear accelerator scattering data [1].

The Proton

In one configuration the animation represented the proton as a sphere with two counter-spinning rings of intensifying positive charge, each rotating near the relative poles of the proton. 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 longitudinally into four linear arc charges, stretching out from the equator and almost reaching the poles of the proton. The film's narrator stated that, "theorists could explain what might cause the spinning ring charges to occur, but were unable to explain the four point elongating into line-arc charge configuration".

The Changing Shape of Protons

More recently at Jefferson Lab linear accelerator, electron-proton elastic collisions reveal that the proton has varying charge morphologies. [2] "Proton's aren't always shaped like a Basketball" This finding seems to confirm the existence of the dynamic charge patterns predicted by computer and described in this hypothesis, ((COMPARISON)) [1] such charge patterns (inner) as described in the horizon film result in the various proton morphologies (outer) found by Gerald A. Miller, et al. These shapes would be observed, as polarized electrons deflect off an oscillating proton. These various shapes are caused by electrodynamics-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 Dynamics of the Proton

To understand what is occurring within the proton, that causes the alternating charge patterns, visualized 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 the protons center, almost to the containing shell and back again. Their oscillation paths are equally spaced at 90° intervals in the plane of the proton's equator.

These four oscillating positive particles will be referred to as "quadron's". Synchronicity at the quantum level may seem counterintuitive to Heisenberg's, "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 particles linear direction. If facing an oncoming electron particle, a clockwise spin. Positive basic particle field spins rotate opposite to negative particle spins so radiate a counter-clockwise spin. Applying this "positive" electromagnetic field concept and starting at the farthest points from the protons center, the four quadrons are pushed inward. They are repelled by their own charge fields, which are mirrored and stored on the containing energy mass bubble.
As the particles take on relative linear motion they each radiate a spinning, extremely obtuse, conical energy field, at right angles to their respective forward motion. As these four spinning energy fields expand out at the speed of light, they encounter the proton shell. They are deflected around and along its inner physical surface as the quadrons progress inward. These four energy fields generated at an angle of 90° to each other expand and curve around the inner surface of the spherical containment to meet each other adjacently at an angle of 180°. It is known that when similar charge fields of the same rotational spin direction encounter each other at an angle of 180° they join together. (Electro-magnetic field coupling). This charge field coupling between adjacent quadrons is what creates the two diametrically opposed, 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. See, Fig. 2 & 3

Ring Field Collapse

As the four quadrons travel inward toward the center of the proton eventually their linear velocity will begin to slow, due to the repulsive nature of their own similar charges and closing proximity. Change in forward linear velocity of a charged particle will cause the radiated field of that particle to collapse back inward toward the particle from which it was radiated, in an effort to sustain the particles linear motion. The individually radiated fields of the four inbound quadrons have been combined, divided in half and reoriented 90° from the direction in which they were originally radiated. They are now in the form of two intensified, diametrically opposed, and positively charged spinning energy rings located at the relative poles of the proton.

Their reorientation has focused the rings upon a point at the exact center of the proton, equidistant from the four gathered quadron particles and each other. The rings collapse upon this equidistant point at the speed of light, due to economy of motion. The area that charge is focused into a point would be reduced at $V = 2(\pi r^2)$.

Substituting c for r, energy to mass conversion occurs $r^2 = c^2$. It can be momentarily visualized as a conical hourglass of charge collapsing in at its center. The mass of the newly created particle would be, $m = 2(\pi c^2)$. Condensation of mass are created and layered upon each other, as the two rings collapse inward to form a new fifth particle at the exact center of the spherical proton. This newly created particle will be called the, "Universal Particle" or "U" particle.

The U Particle

To enable this classical system to function properly the charge of the newly materialized 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 level. The four quadron particles are repelled by the similar charge of the newly created fifth positive particle and each other's similar charge. The four quadrons are sprung outward, away from the protons center toward the containing spherical shell. As the four quadrons accelerate outward their rotating charge fields expand and adjacently encountered each other at an angle of 90°. Field coupling can not occur as it did along the shell wall on the inward journey. The charge fields now meet and deflect each other adjacently, outward toward the proton shell, at an angle of 45° 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 occur at the Northeast, Southeast, Northwest and Southwest positions. The deflected charge fields travel at the velocity of light and lead the quadron particles outward toward periphery of the proton. The four pair of mutually repelling, counter spinning energy fields would appear first as four point charges, equally displaced around the equatorial plane of the proton.

These four point charges expand into the linear arc charge pairs, as the four quadron particles move closer to the protons containing 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 four receding oscillatory quadrons. It is being stripped of field, as though the U particle is traveling in four directions at once and emitting field respectively. The U particle is accelerated at the four points where the counter rotating, repelling, receding quadron fields meet and deflect outward at the velocity of light, as well as the four points where it faces the outwardly bound quadron particles. These fields would tend to form quadra and or octapoles on the rapidly transforming centrally located U particle.

Defining Charge

Considering energy-mass as a spectrum, with mass at one end, field energy at the other and charged particles at various stable places in between, along with our first assumption a definitive statement can be made: Energy-mass that is changing, being transformed in a direction toward mass, will have a Positive charge, conversely, Energy-mass that is being transformed in a direction toward energy, will have a Negative charge.

The centralized U particle is being relatively accelerated by the speed of light squared. It is changing in a direction toward energy, it takes on a negative charge and explodes outward as its negative exterior begins to annihilate with its positively charged interior. The U particle is ripped and blown apart in the process of mass being converted back toward energy.
The four outbound quadron particles eventually come in close enough proximity to the containing proton shell to be repulsed by the reflection of their own charges. The central U particle has been completely converted back to field energy. The decelerational change in velocity of the quadrons causes the four pairs of counter spinning, uncombined, deflected arc charge field energies stored on the proton shell, to separate as they collapse inward upon the respective particles from which they were radiated. The arc energy collapse springs the four quadrons back inward toward the protons center. The process begins again, the oscillations continue. The proton is the beating heart of matter. The difference in velocity between the oscillating sub-luminary quadron mass particles and the speed of light charge fields which they generate, within the geometry of the proton sphere along with the foreword progression of time, maintains this perpetual motion.

The initial two, eight, electron atomic orbital valence shell capacity observed in the Noble Gas column of Chemical Elements, demonstrates an obvious correlation. Two opposing spin rings of positive charge, followed by four pairs of opposing spin arcs radiated and projected by the proton easily explains the two and eight capacity of the first two electron valence orbital's and underlies the Pauli principle. In helium and larger elements, adjacent protons would necessarily oscillate 180° out of phase. This would reinforce a continuous two, eight positive force field projection from the atomic nucleus.

The Neutron
The neutron is created when the proton acquires extra energy-mass. Under extreme temperatures and densities, as in the center of a star, we observe high energy leptons in close proximity, are attracted and pulled through one of the protons spinning polar ring charges. It is stopped in the center by the opposite polar spin ring. The particle is trapped inside the proton and changed in a direction toward mass as the charge rings collapse inward upon it. It is incorporated into a larger, newly created fifth particle. This new positively charged U particle is too massive to be totally converted back to field energy, as it would be in a standard proton. Its charge polarity, however, is changed, flipped from positive to negative as the four quadrons are initially repelled and move outward, away from it. It still exists as a mass containing, negatively charged U particle at the proton/neutron center, when the quadron particles reach the outer limits of their respective oscillation paths. The extra massive negative U particle draws the oscillating quadrons into a position of charge equilibrium, given charge field always moves at light speed, faster than the oscillating masses. This causes particle oscillations to halt. The quadrons become static, drawing the last of any radiated field energy away from the shell, making it more negative at the terminus of their last outbound oscillation.

The four positive quadrons are all attracted to, yet held out away from the neutron's negative center, [3] by their mutual repulsion of like charge. (Coulomb effect)
No charge field motion occurs across the inner/outer surface of the containing shell. Charge cannot be detected from the outside. The proton has changed into a neutron by capturing and transforming additional energy changing toward mass, resulting in the creation of a more massive, negatively charged, U particle, which causes quadron oscillations to cease. This five particle configuration inside the neutron will be referred to as the "quadron wheel"[4], with the negative U particle acting as the wheels axis. The quadron wheel moves randomly about within unbound neutrons.
The duel ring charges that are radiated to the proton surface and the four alternate deflection point pairs expanding into line-arc charges would be attracted to and induce motion in nearby static quadron particles within adjacent neutrons. These static positive quadrons are held out away from the quadron wheel's attracting negative center by mutual repulsion of their own similar charge. At the core of the strong force is the need for radiated charge, stored on the proton surface, to induce motion in proximal static charged particles. Energy, field and motion are readily interchangeable at the sub-nuclear scale. The static quadrons in the neutron can be visualized as charged ball bearings attracted to, yet held out from the quadron wheels negative axis by their own similar mutual charge repulsion. The alternating, radiated charge morphologies on any proton in close enough proximity would induce motion in the static quadrons within the neutron. The charge fields of the proton dynamically bonding the neutron to it, by means of charge field to particle interaction. The projected proton fields cause the neutrons static quadron wheel to align perpendicularly to the protons plane of quadron oscillation.
The quadron wheel rotates within the confines of the neutron generating its own field that projects the negative charge of the neutron wheels axis in the direction of the adjacent proton, whose projected fields are causing the quadron wheel rotation [4]. The proton (neutron) charge density has a long range positively (negatively) charged component [3]. The field projection is powered by the intensifying and alternating charge field morphologies on the surface of adjacent protons. The rotation, counter-rotation of quadron wheel within a fused neutron acts as a push-pull charge field amplifier that bonds protons and neutrons together. This topic is further explained in, Classical Charge Mechanics of Deuterium [4].
Much of the data in this Classical model is based on the amazing work and discoveries of Gerald A. Miller, an experimental physicist of first order who employs the current "Quark" paradigm to explain what is causing his discovered phenomenon to occur.
In the following Article, as in his others cited, Dr. Miller again attempts to describe the charge results found on and in the neutron and proton by using the quark paradigm, but offers no causality or mechanism to account for his proposed orbiting quarks of various velocities and trajectories.

The proposed Classical Hamiltonian proton and neutron model delineated can explain the scattering data that Dr. Miller, et al. have spent most of a lifetime in discovering.

Dr. Miller states in the last four paragraphs of the article; Miller's findings would seem to suggest an actual physical location for these quarks within a neutron, but the truth, he said, is much more complicated. "We're not talking about location as much as we are talking about density," he said. "What we are saying is the probability of finding a particular charge density is a function of distance. Quarks are constantly moving within a neutron, so this tells us the odds of finding more of them in one area over another." "The connection between quarks and charge location also breaks down when examining the proton", said Miller. "While a proton is made up of one down quark and two up quarks, the same accelerator tests found the proton was positively charged throughout, with the middle region possessing a stronger charge than the interior and exterior".

The oscillating proton model doesn't "break down when examining the proton", but agrees with the observation, as the four oscillating quadrons would cross the middle region twice for every full oscillation cycle of the proton, resulting in the middle region possessing a stronger charge density than the interior and exterior.

This Classical model is based on computer analyzed linear accelerator data discovered about 10 years after the conception of the quark hypothesis, the known laws of electrodynamics and its positively charged compliment, along with Einstein's energy-mass equivalence formula, the physical shape of a spherical containment and the forward progression of time. Electronics is the cornerstone of our cutting edge technologies, there is no reason why these Classical Hamiltonian Laws should not be valid for charged particles inside the nuclei of the atomic nucleus. The oscillating proton model, defines a working mechanism for the components and mechanics of the atomic nucleus.

Definition of Occam's razor**:** a scientific and philosophical rule that entities should not be multiplied unnecessarily which is interpreted as requiring that the simplest of competing theories be preferred to the more complex or that explanations of unknown phenomena be sought first in terms of known quantities.

References:

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