

Matter Reduction Beam And Free Field Energy Extraction

-By-

Jerry E. Bayles

November 28, 2006

Updated December 31, 2006

Introduction:

Contemporary physics paints a picture of our universe as one of coming into being during a gigantic explosion of energy and after this event, no further energy input was considered to have occurred. To me, this is a very self-limited scope of possibility, especially since it appears that the universe has a great deal of negative energy and dark matter that the one time big bang event cannot begin to explain.

This paper will present my ongoing concept that fundamental quantum particles such as the electron and proton are connected through their centers to the same non-local energy space that created the big bang. Further, that the potential field energy associated with the fundamental charge of the electron and proton that exists in local space is theoretically infinite. Then the so called mass of the fundamental particles is standing wave field energy and that standing wave field energy is refreshed by energy space as needed to support the field associated with the charge of the quantum particle.

This paper will start by establishing some necessary constants so as to allow for the calculation of frequencies that are key to the structure of matter and fields. Thus, the reader must bear with me as the start is somewhat boring but necessary. As we move deeper into the actual makeup of matter and fields, the results will probably become much more interesting and maybe even frightening. Fear not, however, it was predicted by people of science that nitroglycerin would destroy the world and exceeding the speed of sound would undoubtedly kill a human being. Neither of these has occurred as a direct consequence of either event.

Back in the sixties, I wrote a poem in a college creative writing class concerning how I viewed the beginning of the universe and I repeat it below since it seems to fit in with this paper quite well.

**Fire blue-white throughout the night,
Changing darkness into light.**

**Leaves move slowly in the tree,
Moved by force we cannot see.**

**The Cosmos move much too slow,
For us to see, for us to know.**

**In the whole, we are in part,
The mind of God as well as heart.**

Statement of Related Variables and Constants.

$$\alpha := 7.297353080 \cdot 10^{-03} \quad m_e := 9.109389700 \cdot 10^{-31} \cdot \text{kg} \quad h := 6.626075500 \cdot 10^{-34} \cdot \text{joule} \cdot \text{sec}$$

$$v_{LM} := \sqrt{\alpha \cdot \text{m}^2 \cdot \text{sec}^{-2}} \quad v_{LM} = 0.0854245461 \cdot \text{m} \cdot \text{sec}^{-1} \quad c := 2.997924580 \cdot 10^{08} \cdot \text{m} \cdot \text{sec}^{-1}$$

$$\lambda_{LM} := \frac{h}{m_e \cdot v_{LM}} \quad \lambda_{LM} = 8.5149954162 \cdot 10^{-3} \cdot \text{m}$$

$$\mu_o := 4 \cdot \pi \cdot 1 \cdot 10^{-07} \cdot \text{henry} \cdot \text{m}^{-1} \quad \mu_o = 1.2566370614 \cdot 10^{-6} \cdot \text{henry} \cdot \text{m}^{-1}$$

$$q_o := 1.602177330 \cdot 10^{-19} \cdot \text{coul} \quad f_{LM} := 1.003224805 \cdot 10^{01} \cdot \text{Hz}$$

$$i_{LM} := q_o \cdot f_{LM} \quad i_{LM} = 1.6073440395 \cdot 10^{-18} \cdot \text{amp}$$

$$l_q := 2.817940920 \cdot 10^{-15} \cdot \text{m} \quad r_{n1} := 5.291772490 \cdot 10^{-11} \cdot \text{m}$$

Note: Click on the area enclosing the formula for VLM. This will take the reader to a paper titled "Electrogravitation And A New Gravitational Constant", first uploaded to AOL in 1996. The paper explains the reasoning for the association of the fine structure constant having meter squared per second squared units related to least quantum kinetic energy of electrogravitation action.

The non-local connecting electrogravitational force constant is therefore:

$$F_{QK} := \left(\frac{i_{LM} \cdot \lambda_{LM}}{l_q} \right) \cdot \mu_o \cdot \left(\frac{i_{LM} \cdot \lambda_{LM}}{l_q} \right) \quad F_{QK} = 2.9643714504 \cdot 10^{-17} \cdot \text{newton} \quad 1)$$

The electrogravitational energy related to the force constant F_{QK} above is:

$$E_{QK} := F_{QK} \cdot \lambda_{LM} \quad 2)$$

Therefore the non-local force constant electrogravitationally related frequency is:

$$f_{QK} := \frac{E_{QK}}{h} \quad f_{QK} = 3.8094358134 \cdot 10^{14} \cdot \text{Hz} \quad 3)$$

The **A** vector associated with the force constant above that when multiplied by the force constant F_{QK} and a like **A** vector that will produce the required force in [(newton)*(henry/m)*(newton)] units format at the r_{n1} shell of the hydrogen atom is:

$$A_{n1} := \frac{\mu_o \cdot i_{LM} \cdot \lambda_{LM}}{4 \cdot \pi \cdot r_{n1}} \quad A_{n1} = 2.5863786008 \cdot 10^{-17} \cdot \frac{\text{weber}}{\text{m}} \quad \text{Note: The } \mu_o \text{ term for the proton is 1836.152756 times as great for the proper EG force at } r_{n1}. \quad 4)$$

Then the electrogravitational force at the r_{n1} level of the hydrogen atom is:

$$F_{EG} := A_{n1} \cdot F_{QK} \cdot A_{n1} \quad F_{EG} = 1.9829730809 \cdot 10^{-50} \cdot \text{newton} \cdot \frac{\text{henry}}{\text{m}} \cdot \text{newton} \quad 5)$$

Another form of the electrogravitational equation is:

$$F'_{EG} := \frac{h \cdot f_{LM}}{r_{n1}} \cdot \mu_o \cdot \frac{h \cdot f_{LM}}{r_{n1}} \quad F'_{EG} = 1.9829730829 \cdot 10^{-50} \cdot \text{newton} \cdot \frac{\text{henry}}{\text{m}} \cdot \text{newton} \quad 6)$$

Where the force magnetic at the n1 level is:

$$F_{M_{n1}} := \frac{h \cdot f_{LM}}{r_{n1}} \quad F_{M_{n1}} = 1.2561846364 \cdot 10^{-22} \cdot \text{newton} \quad 7)$$

Multiplying the force magnetic $F_{M_{n1}}$ at the n1 level of hydrogen times the fundamental electrogravitational wavelength λ_{LM} yields energy and that energy divided by planks constant h derives a frequency unique to the n1 **A**-vector.

$$EM_{n1} := F_{M_{n1}} \cdot \lambda_{LM} \quad EM_{n1} = 1.0696406421 \cdot 10^{-24} \cdot \text{joule} \quad 8)$$

$$f_{EMn1} := \frac{EM_{n1}}{h} \quad f_{EMn1} = 1.6142898494 \cdot 10^9 \cdot \text{Hz} \quad 9)$$

The hyperfine frequency of radiation f_{H1} of the hydrogen atom is known to be:

$$f_{H1} := 1.420405751786 \cdot 10^{09} \cdot \text{Hz} \quad 10)$$

The ratio of f_{EMn1} to f_{H1} is:

$$\frac{f_{EMn1}}{f_{H1}} = 1.1364990936 \quad \left(\frac{f_{EMn1}}{f_{H1}} \right)^2 = 1.2916301897 \quad 11)$$

We may also solve for a frequency that will match the local space **A** vector force output to the non-local electrogravitational force constant F_{QK} as shown below. We use Mathcad's symbolic processor to solve for the unknown time t_x . Momentum is charge times the **A** vector and momentum divided by time is force. We then solve for a time t_x that will yield the F_{QK} force in terms of the time related to the **A** vector.

$$F_{QK} = \mu_o \cdot \left(\frac{q_o}{t_x} \right) \cdot q_o \cdot \frac{1}{t_x} \quad \text{has solution(s)} \quad \left[\begin{array}{l} \frac{1}{\sqrt{F_{QK}}} \cdot \sqrt{\mu_o \cdot q_o} \\ -1 \\ \frac{-1}{\sqrt{F_{QK}}} \cdot \sqrt{\mu_o \cdot q_o} \end{array} \right] \quad \begin{array}{l} \text{The solutions for time} \\ \text{can be positive as well} \\ \text{as negative.} \end{array} \quad 12)$$

$$t_{xp} := \frac{1}{\sqrt{F_{QK}}} \cdot \sqrt{\mu_o \cdot q_o} \quad t_{xp} = 3.2987484824 \cdot 10^{-14} \cdot \text{sec} \quad 13)$$

$$f_{xp} := t_{xp}^{-1} \quad f_{xp} = 3.031452702 \cdot 10^{13} \cdot \text{Hz} \quad \text{Local space frequency.} \quad 14)$$

The ratio of the non-local F_{QK} frequency to the local space **A**-vector frequency is equal to 4π .

$$\frac{f_{QK}}{f_{xp}} = 12.5663706081 \quad \text{where also,} \quad 4 \cdot \pi = 12.5663706144 \quad 15)$$

The r_{n1} \mathbf{A} -vector solved for above may have a general \mathbf{A} -vector form since the product of the permeability of free space and current is also in the units of the \mathbf{A} -vector. We may then solve for a general local space \mathbf{A} -vector r_{n1} frequency as shown below.

$$f_{\text{AGen}} := \frac{A_{n1}}{\mu_0 \cdot q_0} \quad f_{\text{AGen}} = 1.2846110456 \cdot 10^8 \cdot \text{Hz} \quad \text{also:} \quad \frac{c \cdot \alpha}{2 \cdot \lambda_{\text{LM}}} = 1.2846110361 \cdot 10^8 \cdot \text{Hz} \quad (16)$$

The general \mathbf{A} -vector frequency can possibly be used as a probe to stimulate instantaneous electrogravitational action via non-local space to the surroundings at a distance through the force constant F_{QK} since \mathbf{A}_{n1} is derived as shown above for the r_{n1} level of the hydrogen atom. The second expression immediately above also derives the same frequency as f_{AGen} based on dividing the $n1$ velocity by twice the electrogravitational wavelength, λ_{LM} .

The above f_{AGen} frequency relates to stimulating the energy domain of the atom $n1$ velocity and possibly releasing energy from the field at levels near to but below the $n1$ energy level. The below set of equations suggest it may be possible to cause energy interaction and modification to electromagnetic waves which are based on the velocity of light propagation.

$$f_{\text{QEM}} := \frac{c}{f_{\text{QK}}} \cdot \frac{F_{\text{QK}}}{h} \quad f_{\text{QEM}} = 3.5207588889 \cdot 10^{10} \cdot \text{Hz} \quad \text{also:} \quad \frac{c}{\lambda_{\text{LM}}} = 3.5207588889 \cdot 10^{10} \cdot \text{Hz} \quad (17)$$

The c/f_{QK} above represents the key electromagnetic wavelength associated with the force constant.

$$\lambda_{\text{QEM}} := \frac{c}{f_{\text{QK}}} \quad \lambda_{\text{QEM}} = 7.8697338053 \cdot 10^{-7} \cdot \text{m} \quad (18)$$

The above wavelength may access the force constant non-local connection directly which may allow for tapping directly into energy space as well as affecting all gravitational action.

The hyperfine frequency f_{H1} may be shown to have a quantum mechanical source as will be developed in the below equations.

$$E_{\text{H1}} := f_{\text{H1}} \cdot h \quad E_{\text{H1}} = 9.411715752 \cdot 10^{-25} \cdot \text{joule} \quad \sqrt{\frac{E_{\text{H1}}}{m_e}} = 1.0164587538 \cdot 10^3 \cdot \text{m} \cdot \text{sec}^{-1} \quad (19)$$

The Δ DeBroglie wavelength associated with this Δ energy related to the electron is:

$$\lambda_{\text{EH}} := \left(\sqrt{\frac{E_{\text{H1}}}{m_e}} \right)^{-1} \cdot \frac{h}{m_e} \quad \lambda_{\text{EH}} = 7.1561154444 \cdot 10^{-7} \cdot \text{m} \quad (20)$$

A Debroglie velocity associated with the above wavelength λ_{EH} is determined by multiplying it by the related f_{QK} frequency.

$$v_{\text{EH}} := \lambda_{\text{EH}} \cdot f_{\text{QK}} \quad v_{\text{EH}} = 2.7260762459 \cdot 10^8 \cdot \text{m} \cdot \text{sec}^{-1} \quad (21)$$

The v_{EH} velocity is below the speed of light by about .9093211561 of c . Dividing v_{EH} by λ_{EH} will yield the frequency exactly equal to f_{QK} . Thus, the force constant may now become the source of the hyperfine energy through the DeBroglie reduction velocity v_{EH} . This lower velocity is associated with matter waves and it therefore must be less than the velocity of light in free space. It may also have associated relativistic implications concerning the fact it is a matter wave.

The electromagnetic wavelength associated with f_{OK} is derived as λ_{QEM} below. Then the ratio of the electromagnetic to the matterwave wavelength is found to be equal to 0.9093211564. This ratio may be resolved to equal unity if we allow for λ_{QEM} to be relativistically shortened to equal λ_{EH} above.

$$\lambda_{QEM} := \frac{c}{f_{QK}} \quad \lambda_{QEM} = 7.8697338053 \cdot 10^{-7} \cdot m \quad \frac{\lambda_{EH}}{\lambda_{QEM}} = 0.9093211564 \quad (22)$$

$$\Gamma = \sqrt{1 - \frac{v^2}{c^2}} \quad \Gamma^2 = \left(1 - \frac{v^2}{c^2}\right) \quad \frac{v^2}{c^2} = 1 - \Gamma^2 \quad v^2 = c^2 \cdot (1 - \Gamma^2) \quad (23)$$

$$v = \sqrt{c^2 \cdot (1 - \Gamma^2)} \quad \text{simplifies to} \quad v = i \cdot c \cdot \sqrt{-1 + \Gamma^2} \quad (24)$$

$$\text{Define relativistic gamma:} \quad \Gamma := \frac{\lambda_{EH}}{\lambda_{QEM}} \quad \Gamma = 0.9093211564 \quad (25)$$

$$vel := i \cdot c \cdot \sqrt{-1 + (\Gamma)^2} \quad vel = -1.2474213759 \cdot 10^8 \cdot m \cdot sec^{-1} \quad v_{EH} = 2.7260762459 \cdot 10^8 \cdot m \cdot sec^{-1} \quad (26)$$

$$\text{Check:} \quad \sqrt{1 - \frac{vel^2}{c^2}} = 0.9093211564 \quad \text{The angle and Pythagorean wavelength are of interest:} \quad (27)$$

$$\text{atan} \left(\frac{c}{\sqrt{v_{EH}^2 + vel^2}} \right) = 45 \cdot \text{deg} \quad \text{AND:} \quad \sqrt{\lambda_{EH}^2 + \lambda_{QEM}^2} = 1.0636855664 \cdot 10^{-6} \cdot m \quad (28)$$

$$\text{Where:} \quad \lambda_{QEM} \cdot \frac{4}{\pi} = 1.0020056287 \cdot 10^{-6} \cdot m \quad \text{AND:} \quad \lambda_{QEM} \cdot \frac{4}{\pi} \cdot \pi = 3.1478935221 \cdot 10^{-6} \cdot m \quad (29)$$

$$\text{ALSO:} \quad \frac{h \cdot f_{QK}}{q_o \cdot \left(\frac{4}{\pi}\right)} = 1.2373607605 \cdot \text{volt} \quad \text{This is the electron volt energy level of the formation of the neutral hydrogen atom beginning at 3000 degrees Kelvin (or less) in free space.} \quad (30)$$

$$\frac{h}{m_e \cdot \left(\lambda_{QEM} \cdot \frac{4}{\pi}\right)} = 231.0718623533 \cdot m \cdot sec^{-1} \quad \text{This is the fundamental mass-motional quantum velocity related to the wavelength equal to } \lambda_{QEM} \text{ multiplied by } 4/\pi \text{ and } \pi \text{ which then equals 4.} \quad (31)$$

$$\frac{m_e}{h} \left[\frac{h}{m_e \cdot \left(\lambda_{QEM} \cdot \frac{4}{\pi}\right)} \right]^2 = 7.3405234557 \cdot 10^7 \cdot \text{Hz} \quad \text{This is the final result which is the fundamental quantum mass-motional frequency that is related to } f_{OK} \text{ by the reduction math shown above.} \quad (32)$$

The above results show that there exists a geometric relationship involving the $4/\pi$ ratio (which is contained in the geometry of the Great Pyramid) that can be further be shown to have a geometric influence even down to the quantum level of the proton and electron mass and Compton wavelengths.

Let the established S. I. proton mass be stated: $m_p := 1.672623100 \cdot 10^{-27} \cdot \text{kg}$

Then the Compton proton and Compton electron wavelengths are:

Compton proton radius: $r_p := \frac{h}{2 \cdot \pi \cdot m_p \cdot c}$	Classic Compton electron radius: $l_q := \frac{h \cdot \alpha}{2 \cdot \pi \cdot m_e \cdot c} \tag{33}$
----------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------

$r_p = 2.1030893224 \cdot 10^{-16} \cdot \text{m}$	$l_q = 2.8179409431 \cdot 10^{-15} \cdot \text{m} \tag{34}$
----------------------------------------------------	-------------------------------------------------------------

The classic Compton electron radius l_q divided by the Compton proton wavelength (2π times the Compton proton radius r_p) and the natural number e, all further multiplied by the square root of the golden ratio ($4/\pi$), yields a number very close to unity.

$$\frac{l_q}{(2 \cdot \pi \cdot r_p) \cdot e} \cdot \left(\frac{4}{\pi}\right) = 0.9988722249 \tag{35}$$

Therefore, the square root of the golden ratio number even appears in the ratio of the dimensions of the classic electron radius to the proton wavelength as shown above. The positive mathematical solution to the golden ratio is:

$$\Phi := \frac{1 + \sqrt{5}}{2} \quad \text{where,} \quad \sqrt{\Phi} = 1.2720196495 \quad \text{and} \quad \frac{4}{\pi} = 1.2732395447 \tag{36}$$

The ratio of $4/\pi$ to Φ is: $\frac{4}{\pi} \cdot \frac{1}{\sqrt{\Phi}} = 1.0009590223$ The result is very close to unity. 37)

It is of interest that the direct ratio of the classic electron radius to the proton radius as shown above yields a number that agrees with very important results of previous paper of mine that is available on-line at the following reference. [1](#)

$$\frac{l_q}{r_p} = 13.3990549668 \quad \text{and} \quad \frac{l_q}{r_p \cdot \alpha} = 1.8361527557 \cdot 10^3 \quad \text{where,} \quad \frac{m_p}{m_e} = 1.8361527557 \cdot 10^3 \tag{38}$$

The above ratio number result is very close to the same result as the above reference which stated a number of:

$$\left(\frac{\text{Re}(v1)}{V_{n1}}\right) = 13.395826267695 \tag{39}$$

which expressed the ratio of the first complex fine structure constant reduction velocity down from the velocity of light divided by the velocity of the $n1$ energy level of the hydrogen atom. This number divided by the fine structure constant equals the ratio of the proton mass to the electron mass.

The frequency f_{HI} associated with the latent energy available from the force constant structure F_{OK} is more than enough to cause electron spin flipping of the atomic neutral hydrogen. Thus, atomic neutral hydrogen would not need external stimulation to produce the electromagnetic radiation associated with f_{HI} .

In previous works, I have defined the fundamental mass-motional frequency as: **$A'_{dbf} = 73.40523441$ MHz.**

The A'_{dbf} frequency as well as the f_{HI} hyperfine radiated frequency of **1.420405751786 GHz** discussed above are both listed in the U. S. and Canadian frequency allocation tables as frequencies that are allocated for radio telescope electromagnetic regions of study.

Therefore, I suggest that use of both frequencies A'_{dbf} and f_{HI} to probe free atomic hydrogen may enable extraction of energy from the refresh support field and thus become a source of free energy. The extraction rate should allow for the geometry of the hydrogen atomic atom to be maintained by the refresh input pulse from energy space so as not to cause the input energy from energy space to rise above the ability of close control by the extraction mechanism. However, this may only scratch the surface of what is available.

The recent movie on DVD, "**War of the Worlds**", originally copyrighted 1952 and released again in 2005 with an updated copyright in 1980 by Paramount Pictures, has a few very interesting scenes involving descriptions of the technical aspects of the Martian heat ray. At 37 minutes, 24 seconds into the movie, **mesons** are used as the possible carrier of the ray heat. At 41 minutes, 50 seconds, "**Atomic force without the heavy shielding we use.**" Further, "**Thats where they get the power for their rays.**"

The atomic force quote is of interest since the force constant analysis of this paper and others previously published online at <http://www.electrogravity.com> leads directly to that same mechanism.

Next, we examine the frequencies of equations of another previous paper² which give a special frequency for the B_{LM} and E_{LE} fields as shown below. The frequencies relate to energy gain by Plank's constant as for the quantum case of $E = hf$.

$$f_{BLM} := -295.955984569332 \cdot \text{KHz} \quad \text{and} \quad f_{ELE} := -295.928924539595 \cdot \text{KHz} \quad (40)$$

$$\frac{1}{f_{BLM}} = -3.3788808206 \cdot 10^{-6} \cdot \text{sec} \quad \sim \text{mu-meson half-life.} \quad \text{Let: } A'_{dbf} := 73.40523441 \cdot 10^{06} \cdot \text{Hz} \quad (41)$$

$$\frac{1}{A'_{dbf}} = 1.3623006698 \cdot 10^{-8} \cdot \text{sec} \quad \sim \text{charged pi-meson mean lifetime.} \quad (42)$$

Further, the time related to the frequency of the force constant field F_{QK} is:

$$\frac{1}{f_{QK}} = 2.6250606362 \cdot 10^{-15} \cdot \text{sec} \quad (43)$$

which is very near the life of a neutral pi-meson. A pi-meson is also known as a pion.

The above lifetimes are tied to the fundamental electrogravitational interaction field frequencies A'_{dbf} , f_{BLM} and f_{FOK} above and suggest that combined use of these frequencies could break down the neutron and proton binding forces in atoms such that water vapor could easily be separated into pure Hydrogen. Further, H_2 Hydrogen might easily be disassociated into single atoms of H_1 Hydrogen. Mesons are the glue which holds the nucleons together according to present nuclear theory. Quote: "**The pions play the same role in the meson field as photons do in an electromagnetic field.**"³

Further is quoted: "Three types of pi-mesons, or pions, have been discovered. One has a positive charge, another is negative, and the third is neutral. All are radioactive. The charged ones have mean lives of the order of 10^{-8} sec, but the life of a neutral pion is only about 10^{-15} second ... *Note: In describing the fundamental particles mean lives rather than half-lives are usually stated."⁴

Also is quoted: "According to present nuclear theory, all three types of pi-mesons are found in the nucleus, and it is believed that both protons and neutrons are continuously emitting or absorbing positive, negative, and neutral pi-mesons. The particular process depends upon which nucleons are paired in experiencing exchange forces at the moment, that is, proton-neutron, proton-proton, or neutron-neutron. Thus the general view is that each nucleon has an associated meson field through which it interacts with other nucleons. This is analogous to the action through an electromagnetic field of an electrically charged body on another."⁵

A quote concerning the mu-meson half-life is: "An observer moving with a mu-meson would conclude that its half-life was a few microseconds."⁶

What I propose is that if we were to provide the correct and fundamental inverse time related frequencies as shown above, it may be possible to cause a relevant meson mean time of decay to cease providing the binding force that holds nucleons together. This would release a tremendous amount of energy with a relatively small amount of trigger energy. Thus a "ray" of the proper frequency, as determined by the above equations, would stimulate the collapse of atomic nuclei since the mesons would decay spontaneously, releasing the binding energy. Matter would appear to have been *melted* by a heat ray but the ray itself would contain very little energy by comparison.

A final quote involving the pi-mesons is, "In flight, the positive and negative pi-mesons decay into positive and negative mu-mesons respectively, and also into neutrinos. When negative pions are slowed down in matter, they are captured by atoms, make x-ray transitions down to the K level, and then are absorbed by the nucleus, causing violent explosions called "stars." Positive Pi-mesons stopped by matter decay into mu-mesons, all of which have about the same energy."⁷

Therefore, the negative pi-mesons, once released by the nucleus, would further cause reduction of matter as a result. Thus it is possible that some matter outside of the target may also be reduced. **The more dense the matter, the more matter would be reduced via a chain reaction process.** A neutron star may be formed by this process. Tanks, aircraft and warships would melt like hot butter if hit by a stream of negative pi-mesons or by the trigger frequency associated with eq. 42 above.

Tesla's dream of ending war through the prospect of mutual total mutual destruction would be the result of implementing the above matter reduction process. No leader or military force would gain an advantage if everyone had the same means of deterrent. The greatest danger would be if only a few had this technology.

In yet another of my previous papers,⁸ there is derived the basic quantum frequency for any interaction involving the magnetic permeability of free space and thus all matter:

$$\text{Where, } f_{\mu_0} := 2.4123534027 \cdot 10^{12} \cdot \text{Hz} \quad \text{This frequency should affect ALL matter and fields.} \quad 44)$$

$$\text{Note that: } \frac{f_{\text{QK}}}{f_{\mu_0} \cdot (4 \cdot \pi)^2} = 1.0000000031 \quad \text{Note: } f_{\text{QK}} = 3.8094358134 \cdot 10^{14} \cdot \text{Hz} \quad 45)$$

$$\text{Then: } \frac{2 \cdot f_{\mu_0}}{f_{\text{QEM}}} = 137.0359901858 \quad \text{or, } \frac{2 \cdot f_{\mu_0}}{f_{\text{QEM}}} \cdot \alpha = 1.0000000051 \quad 46)$$

$$\text{Note: } f_{\text{QEM}} = 3.5207588889 \cdot 10^{10} \cdot \text{Hz}$$

The following is a copy of the above reference 8: Let: $\Phi_o := 2.067834610 \cdot 10^{-15} \cdot \text{volt} \cdot \text{sec}$

$$v_{\mu o} := 2 \cdot (\Phi_o \cdot f_{LM}) \quad v_{\mu o} = 4.1490059468 \cdot 10^{-14} \cdot \text{volt} \quad \text{Solving for time } t_{\mu o}, \quad (47)$$

$$\mu_o = \frac{v_{\mu o} \cdot t_{\mu o}}{i_{LM} \cdot \lambda_{LM}} \quad \text{has the solution of:} \quad \frac{\mu_o}{v_{\mu o}} \cdot i_{LM} \cdot \lambda_{LM} \quad (48)$$

$$\text{Then:} \quad t_{\mu o} := \frac{\mu_o}{v_{\mu o}} \cdot i_{LM} \cdot \lambda_{LM} \quad \text{or,} \quad t_{\mu o} = 4.1453296168 \cdot 10^{-13} \cdot \text{sec} \quad (49)$$

$$f_{\mu o} := t_{\mu o}^{-1} \quad \text{Therefore,} \quad f_{\mu o} = 2.4123534011 \cdot 10^{12} \cdot \text{Hz} \quad (50)$$

The power to generate the correct frequency matter reduction ray could be supplied by extracting the surplus energy available from the field of the hydrogen atom.

It is possible that a great deal of free energy is available in the open (ionized) proton field of the Hydrogen H1 atom. A pressure wave exists that builds over time to become a considerable force per meter squared. There are clues to the existence of that pressure wave in nature. One of the most obvious is that since the proton cannot be perfectly shielded by the electron, some of the pressure wave escapes and causes neighboring atoms to be pushed away. This may explain why Hydrogen and Helium gas is 'light' since there is so much room between the atoms caused by the action of the proton's positive force pressure wave. There is more room between the atoms or molecules than can be explained by the rudimentary collisions due to kinetic energy since the gasses can be cooled to near freezing and still be lighter than air.

The 1420 MHz hyperfine radiation occurs as a natural radiation that does not require any form of external stimulation. I suspect that the 73.405 MHz radiation may also be radiated freely from the Hydrogen atom by the same process. Both the 1420 and 73.405 MHz frequencies are listed by the United States and Canadian frequency allocation charts as being radio telescope spectrums of research. I have noticed locally that the 73.405 MHz frequency has a very strong 15,750 Hz television sweep modulation frequency on top of it which may be a blocking or jamming signal. An interested collaborator from India has measured the 73.405 MHz signal as having a very sharp null at his location when measured on his 28 band short wave receiver. He went on to say that it appeared to be an absorption null. A negative energy wave would do just that.

If allowed to build up over time, the pressure wave force may become irresistible. In fact, the force can be quite significant as the following quote⁹ attests to concerning hydrogen blistering: "*Cracks or blisters caused when atomic hydrogen penetrates steel via submicroscopic discontinuities or voids and becomes molecular hydrogen and develops internal pressures.*" Italics are mine.

In reading eyewitness accounts of the tremendous heat generated during the Hindenberg blimp disaster, I am prompted to consider that there may have been atomic hydrogen mixed in with the molecular hydrogen in high enough amounts such that when the atomic hydrogen began to combine during a sudden pressure increase associated with the landing process, the bonds forming molecular hydrogen would release considerable energy that may have created enough heat to burn through the skin of the blimp to the open air. The final result would be total disaster when the molecular hydrogen was then allowed to combust with the available oxygen in the open air which then caused the complete destruction of the blimp.

There is available a very interesting book¹⁰ wherein it was brought to my attention that the dissociation energy required for splitting the hydrogen molecule into atomic hydrogen was only 103 cal/gram mole while the exothermic recombination energy released 109,000 cal/gram mole. At first, I thought it may have been a misprint. However, I checked my sourcebook¹¹ on the enthalpy energy of hydrogen concerning its dissociation and bond energy and when I converted the units to what the author William R. Lyne was using, a very close agreement was obtained with his figures and those given by my sourcebook.

For the values claimed in "Occult Ether Physics" by William Lyne:

$$\text{Let: } \text{kJoule} := 1000 \cdot \text{joule} \quad 51)$$

William R. Lyne's research states an exothermic energy release of:

$$E1_{\text{gross}} := 109000 \cdot \frac{\text{cal}}{\text{gm}} \quad 52)$$

My resource book states an energy release of:

$$E2_{\text{gross}} := 453.6 \cdot \frac{\text{kJoule}}{\text{gm}} \quad \text{or, converting to cal/gm:} \quad E2_{\text{gross}} = 1.0834049871 \cdot 10^5 \cdot \frac{\text{cal}}{\text{gm}} \quad 53)$$

We see that the two results for the energy released are very close in agreement.

William R. Lyne's research indicates a dissociation energy of:

$$E1_{\text{diss}} := 103 \cdot \frac{\text{cal}}{\text{gm}} \quad 54)$$

My resource book indicates a ΔH_{vap} (dissociation) energy of:

$$E2_{\text{diss}} := 0.46 \cdot \frac{\text{kJoule}}{\text{gm}} \quad \text{or, converting to calories per gram:} \quad E2_{\text{diss}} = 109.8691124486 \cdot \frac{\text{cal}}{\text{gm}} \quad 55)$$

We see again that the results compare very closely. Here we are using Mathcad's ability to convert units effortlessly and accurately. In the source book I am using, the units are in kjoule/mole and for atomic hydrogen this works out to be the same as kjoule/gram since Avogadro's number times 1 AMU for hydrogen equals one gram.

The results above suggest that there is a tremendous energy gained from the open field of the dissociated hydrogen atom which is released upon forming the molecular form of hydrogen. Further, the dissociation energy is very small in comparison which amounts to overunity as shown below.

$$E1_{\text{gross}} - E1_{\text{diss}} = 1.08897 \cdot 10^5 \cdot \frac{\text{cal}}{\text{gm}} \quad \text{Net heat output per recombination.} \quad 56)$$

My theory as to why the dissociation energy is so much lower than the energy released on recombination is that the proton pressure wave is almost as strong as the recombination bond. Further, the energy associated with the open atom proton pressure wave field is free to build to a very large amount compared to when it is in the molecular or bound condition. This entire process is supported by what I call energy from energy space such as exhibited by the presence of the 1420 MHz hyperfine frequency continuously radiated from the unperturbed Hydrogen atom.

William R. Lyne also compares the BTU per pound of Gasoline combusted with oxygen, ordinary hydrogen combusted with oxygen and finally Atomic Hydrogen stored field energy released. ¹² This is shown below.

$$\text{Gasoline combustion (n-Heptane)} \quad 19,314 \text{ BTU/lb} \quad 57)$$

$$\text{Hydrogen combustion (H}_2 + \text{O)} \quad 52,200 \text{ BTU/lb} \quad 58)$$

$$\text{Atomic hydrogen (H}_2 \leftrightarrow 2\text{H)} \quad 196,200 \text{ BTU/lb} \quad 59)$$

Note that the atomic hydrogen process does not involve a consumption of the hydrogen. It could take place in a closed system and be recycled indefinitely as it is capable of being used to continuously extract energy from energy space.

A quick check on the above finds: $E_{1gross} - E_{1diss} = 1.960146 \cdot 10^5 \cdot \frac{\text{BTU}}{\text{lb}}$ (Units check o.k.) 60)

Returning to the Hindenberg disaster for a moment, I remember that the "fire" was observed to have began in the upper part of the tail fin at the rear of the blimp. Dissociated hydrogen is lighter than molecular hydrogen since it radiates more pressure wave per unit volume. This forces more space between the atomic hydrogen and its neighboring atoms or molecules of hydrogen. Then the atomic hydrogen would concentrate at the highest point in the blimp structure and as a result, it would not take much of a pressure change to cause it to recombine into the molecular form and release great amounts of energy in the process.

The heat of recombination from atomic to molecular state is given in ref. 8 as:

$$\Delta H_{\text{fusion}} := 0.12 \cdot \frac{\text{kJoule}}{\text{gm}} \quad \text{or,} \quad \Delta H_{\text{fusion}} = 28.6615075953 \cdot \frac{\text{cal}}{\text{gm}} \quad 61)$$

Multiplying the heat or energy per unit mass times the mass of the hydrogen atom (1 AMU) will yield the energy of interest and therefore the Plank frequency per atom as well.

Set: $\text{AMU} := 1.660540200 \cdot 10^{-27} \cdot \text{kg}$ Then:

$$E_{2gross_atom} := E_{2gross} \cdot \text{AMU} \quad E_{2gross_atom} = 7.5322103472 \cdot 10^{-19} \cdot \text{joule} \quad 62)$$

$$E_{2diss_atom} := E_{2diss} \cdot \text{AMU} \quad E_{2diss_atom} = 7.63848492 \cdot 10^{-22} \cdot \text{joule} \quad 63)$$

$$\Delta H_{\text{fusionAtom}} := \Delta H_{\text{fusion}} \cdot \text{AMU} \quad \Delta H_{\text{fusionAtom}} = 1.99264824 \cdot 10^{-22} \cdot \text{joule} \quad 64)$$

The $\Delta H_{\text{fusionAtom}}$ energy is taken as that energy required to initiate the covalent bond. This may be included with the heat of dissociation E_{2diss_atom} for finer consideration of the net output related to E_{2Gross_atom} energy. The quantum frequencies are given below related to the above quantum energies.

$$\frac{E_{2gross_atom}}{h} = 1.1367528709 \cdot 10^{15} \cdot \text{Hz} \quad \frac{E_{2gross_atom}}{q_o} = 4.701233881 \cdot \text{volt} \quad 65)$$

$$\frac{E_{2diss_atom}}{h} = 1.1527917121 \cdot 10^{12} \cdot \text{Hz} \quad \frac{E_{2diss_atom}}{q_o} = 4.7675652233 \cdot 10^{-3} \cdot \text{volt} \quad 66)$$

$$\frac{\Delta H_{\text{fusionAtom}}}{h} = 3.0072827272 \cdot 10^{11} \cdot \text{Hz} \quad \frac{\Delta H_{\text{fusionAtom}}}{q_o} = 1.2437126669 \cdot 10^{-3} \cdot \text{volt} \quad 67)$$

The above frequencies relate directly to the energy per atom. Note that the lowest energy is the trigger energy of combining hydrogen atoms, forming molecular H_2 or $\Delta H_{\text{fusionatom}}$ as shown above in eq. 67.

The energies above are associated with the extra-field geometry of the hydrogen atom and are thus difficult to model since the fields are not due to energy level differences between the various shells but represent external energy in the open fields associated with the unconfined proton energy/pressure wave dynamic. We can however take them for what their empirical values have been found to present.

The expanding horn of plenty field that I mentioned above is a dynamic field model that grows over time. The energy that supports the energy/pressure wave comes from the proton via the center of the proton being connected to energy space. The surface of the horn has different velocity modes according to the surface being considered at a specific place and time.

I have postulated that the energy that supports the field energy dynamic comes from energy space via an energy gate comprised of a "shutter" of energy times time. The amount of energy gated into the field from energy space is proportional to the required repetition rate or gate width gate width that is necessary to support the field so that the standing wave energy that defines the proton or electron mass is not compromised. If the standing wave energy were diminished, it would cause the particle to no longer be a fundamental particle. The proton or electron can in a limited manner be compared to an ordinary transformer, except the proton and electron are transforming energy from non-local space to our normal space as field energy. An ordinary transformer cannot transform energy, only the voltage or current components that make up the energy which is the same at the output as for the input in a perfectly efficient ideal transformer.

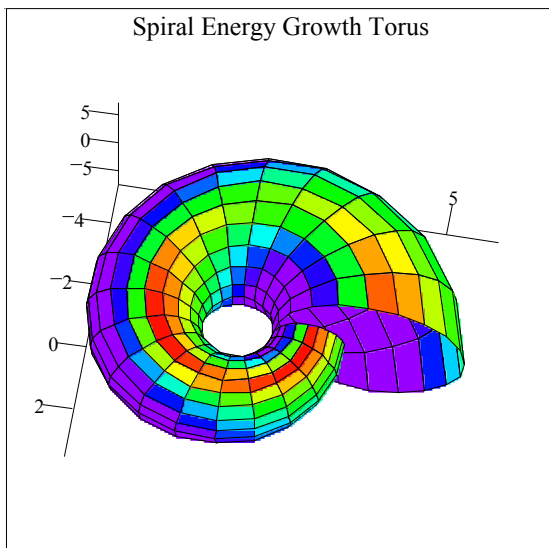
In considering the timing of the energy refresh pulse, I am reminded of the address buss of a computer and how the signals on the buss change width and rate based on the requirements of the I/O system where interrupts signal the main processor when a particular I/O needs attention according to the priority. In nature, the process must be in parallel and not serial as for an ordinary computer. How many address lines would be required to address all of the matter in our universe if we utilized the design of the ordinary computer to run things? Further, the clock speed would have to be nearly infinite in frequency if quantum parallel processing were not used. This greatly amplifies the requirement that all matter in the universe must be connected instantly to all other matter via a single connection or nexus in energy space. This process must by its nature be located outside of the comfy confines of the normal space light cone.

The energy horn is shown below which is also in Chapter 7, p. 130 of my book. **13**

$$N := 20 \quad m := 0 .. N \quad n := 0 .. N \quad R := 1 \quad a_L := \frac{1}{2 \cdot \pi} \quad r_n := e^{\frac{n}{N}}$$

$$\phi_m := \frac{2 \cdot \pi \cdot m}{N} \quad \theta_n := \frac{2 \cdot \pi \cdot n}{N} \quad \Phi_m := \frac{2 \cdot \pi \cdot m}{N} \quad Z_{m,n} := (e \cdot r)_n \cdot \sin(\Phi_m)$$

$$X_{m,n} := (R + r_n + r_n \cdot \cos(\phi_m)) \cdot \cos(\theta_n) \quad Y_{m,n} := (R + r_n + r_n \cdot \cos(\phi_m)) \cdot \sin(\theta_n)$$



X, Y, Z

Note that the inside of the horn is a circle of unchanging radius since the minor and major radii are expanding at the same rate which cancels any outward expansion. In other words, the two radius vectors are pointing towards each other. The center circle circumference may represent the Compton classical wavelength. The outside of the horn is expanding at more than the rate of either of the major or minor radii since the two radius vectors are additive.

Even the process of forming bubbles in water during boiling may be explained by the proton and electron pressure waves being released and aligned at a critical heat of the Hydrogen molecule which is no longer shielded as well as when the water is cooler. The other phase change occurs at freezing which also causes expansion between the molecules due to the pressure wave also causing the molecules of water to move further apart. The luminescence of small bubbles during shock waves in the water may also be explained by the energy released from the pressure waves being suddenly distorted.

It is well known that there appears to be a tremendous latent power in superheated steam. So much so that boiler explosions occur if the steam is not provided an escape route. Even if an escape route is supplied and it is working properly, the steam can expand so fast in some instances as to cause an explosion anyway. A good example is the boiler of a steam locomotive. If the water feed should be interrupted to the boiler, the main boiler will heat to red or even hotter since it has no water to cool the metal surface. If water is then allowed to enter the boiler, even a small amount of water will blow the boiler apart as the water expands into a superheated pressure wave that is not confinable with ordinary iron and steel. I postulate that if sufficiently heated, atomic hydrogen is created by the oxygen and hydrogen being ripped apart by the energy of the heat and the free hydrogen is even ionized. The oxygen is combined with the metal of the boiler. The result is the proton pressure wave adds tremendous energy to the mix and the boiler blows apart. If an atomic reactor "melts down", the water around it will actually *burn* due to a similar process.

I mentioned that a neutron star could be formed by the reduction of a nucleus by addition of negative pions, which work their way down to the K level and are captured by the nucleus. This process could become self-sustaining if the gravitational pressure were great enough to compress the nuclei close enough for cross-section capture area to exceed unity. Negative pions would be released by each reduction and the process would occur somewhat like a regular fission reaction since the negative pions would then be absorbed by another nucleus which would emit another negative pion during reduction, etc. Tremendous energy would be released during this process and it would occur very rapidly until only closely spaced neutrons were left. A much less dense material, such as ordinary matter, would simply run down more slowly through the mass numbers until only single protons, neutrons or atoms were left.

In other words, a focused nuclear reduction trigger beam played on a nuclear bomb would dismantle the entire structure including the plutonium all the way down to singular and separate basic particles. Not even radioactivity would be left. Quite a bit of heat would be released but it would not be released explosively. Any material having mass could be reduced in this manner while it released its energy over a controlled amount of time, thus becoming a matter to energy conversion with little or no pollution.

It is possible that the observed expansion of the universe is by means of the negative field energy that is associated with the proton pressure wave since negative field energy would cause a repulsion of ordinary matter. Further, the hidden mass in the universe may also be attributed to the accumulated free positive energy that exists in space. There is more negative energy in the whole since protons formed first.

The General Theory of Relativity depends on the speed of light being the absolute limit for any field to convey action and thus the concept of the curvature of space-time is evoked where it is presented as an invisible fabric over which grid lines can be envisioned. This is a good way to *model* the observation of the *reaction* but a very poor way to explain the mechanics of the *action*. In other words, General relativity models the *effect* quite well but falls short of the necessary mechanics of the *cause*. Electrogravitation, which allows for non-local action and local space reaction, models both the cause and effect as a total interaction and thus overcomes the self-imposed limitation of staying within the boundaries of the light cone.

Conclusion:

In this paper I have presented not only the possibility of generating limitless and clean energy from ionized atomic hydrogen but a method of neutralizing waste and atomic threat. Who, among all of humanity, would not want that?

Author

Jerry E. Bayles

References:

1. Bayles, Jerry E., *Particle Field Energy Down-Scaling Via A New Complex Fine Structure Constant*, eqs. 43 & 44 of p. 7.
http://www.electrogravity.com/EnergySpiral_3/EnergySpiral_3.pdf
2. Bayles, Jerry E., *Primordial A-Vector Firmament Creation Field*, eqs. 69 & 70 of p. 13.
<http://www.electrogravity.com/PrimePwr/PrimePwr.pdf>
3. Richards, James A. Jr., Sears, Francis Weston, Wehr, M. Russell, Zemansky, Mark W.,
Modern University Physics, copyright 1960 by the Addison-Wesley Publishing Company,
Inc., p. 957.
4. Ibid: p.955.
5. Ibid: pp. 956-957.
6. Ibid: p. 954.
7. Ibid: p. 956.
8. Bayles, Jerry E., *A Testable Dual Frequency Solution For The Electrogravitational Action Mechanism*, eq. 87, p. 23.
http://www.electrogravity.com/DualFreqEG/A_frequency4.pdf
9. Parker, Sybil P., McGraw-Hill Dictionary of Scientific and Technical Terms,
5th. ed., copyright 1994 by McGraw-Hill, Inc., p. 969.
10. Lyne, William r., "Occult Ether Physics", Copyright 1998, Published by
Creatopia Productions, p. 88.
11. Emsley, John, "The Elements", Copyright 1989, Oxford University Press,
NY, pp 86-87.
12. Ibid ref. 10, p 92.
13. Bayles, J. E., "Electrogravitation As A Unified Field Theory"
<http://www.electrogravity.com>
(The above is a downloadable free e-book in Adobe Acrobat PDF format.)