# **Quantized Atomic Inertial Force**

by

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## **Abstract**

Almost everyone has experienced the inertial force due to swinging a weight in a circle. Many years ago it occurred to me that if it were possible to cause the weight to suddenly appear in only a part of the circle and then disappear for the rest of the circle, the result would be a force in one direction.

This is physically impossible with macroscopic items. Only on the quantum scale do we observe "spooky action" where particles can appear and disappear at random times and unpredictable places.

While considering a previous paper, "Grand Unification Theory Electrogravitation" it was discovered that the A-vector equation (eq. 4) would yield a solution for the potential voltage when the force was set equal to the calculated force for the lowest energy shell of the Bohr hydrogen atom. This was accomplished by multiplying the A-vector by the velocity attributed to the energy level. Surprisingly, the voltage turned out to be greater than the 13.6 volts expected. All other variables being the same, the actual potential calculated was as shown in eq. 2 below.

It occurred to me that if we quantize the energy shell into a section by setting the width of the allowed arc in the energy shell, the same average force per section as for the normal 360 degree shell would occur. The results are as shown below.

Allowing for the sections to occur at random points around the nucleus, the average would be equal to the ordinary atomic shell configuration. However, this would cause a jitter in the atom location in all possible directions. Especially in a non-crystalline bulk material such as hydrogen or any other gas at normal temperatures.

Using an external method of alignment such as acoustic and or or electromagnetic external stimulation it may be possible to point the normally random pointing sections of inertial force in the same direction. The result is obvious. Massive stones would lift themselves such as the stones used for the Great Pyramid at Giza in Egypt and Easter Island to name only a few locations.

## Related Constants: Units S.I.

| $\Phi_0 := 2.067834610 \cdot 10^{-15} \text{weber}$                                  | Fluxoid quantum          |
|--|--------------------------|
| $\varepsilon_0 := 8.854187817 \cdot 10^{-12} \cdot \text{farad} \cdot \text{m}^{-1}$ | Electric permittivity    |
| $\mathbf{a_0} := 5.291772490 \cdot 10^{-11} \cdot \mathbf{m}$                        | Bohr radius              |
| $G_{const} := 6.672590000 \cdot 10^{-11} newton \cdot m^2 \cdot kg^{-2}$             | Gravitational constant   |
| $m_e^{} := 9.109389700 \cdot 10^{-31} \cdot kg$                                      | Electron rest mass       |
| $c_{vel} := 2.997924580 \cdot 10^{08} \cdot m \cdot sec^{-1}$                        | Speed of light in vacuum |
| $h := 6.626075500 \cdot 10^{-34} \cdot joule \cdot sec$                              | Plank constant           |
| $\mu_0 \coloneqq 4 \cdot \pi \cdot 1 \cdot 10^{-07} \cdot henry \cdot m^{-1}$        | Magnetic permeability    |
| $q_0 := 1.602177330 \cdot 10^{-19} \cdot coul$                                       | Electron charge          |
| $\alpha := 7.297353080 \cdot 10^{-03}$   | Fine structure constant  |

In the n1 energy shell of the Bohr Hydrogen atom the A vector can be calculated as:

$$A_{vec} \coloneqq \frac{\Phi_0}{a_0} \qquad \text{where,} \qquad A_{vec} = 3.9076408026 \times 10^{-5} \cdot \frac{volt \cdot sec}{m} \tag{1}$$

Multiplying the magnetic vector potential  ${\bf A}$  by the n1 velocity will yield a scalar potential  $\phi_v$  as:

$$\phi_{\mathbf{v}} \coloneqq \mathbf{A}_{\mathbf{vec}} \cdot \left( \mathbf{c}_{\mathbf{vel}} \cdot \mathbf{\alpha} \right) \qquad \qquad \phi_{\mathbf{v}} = \mathbf{8.54871224358} \times \mathbf{10}^{\mathbf{1}} \, \mathbf{V}$$

Note that: 
$$m_{\lambda} := \varepsilon_0 \cdot A_{vec}^{2} \quad \text{or,} \quad m_{\lambda} = 1.35200407811 \times 10^{-20} \frac{kg}{m}$$
 3)

Mass per unit distance is also fundamental to the gravitational equation." 1 It was demonstrated in tests by myself that it can also generate free power from wobbulating rotating magnets." 8

The related n1 shell inertial force related to  $\mathbf{F} = \mathbf{m}^*(\mathbf{vel}^2)/\mathbf{r}$  is given as:

$$\mathbf{F}_{En1} \coloneqq \mathbf{m}_{\lambda} \cdot \left( \mathbf{c}_{vel} \cdot \alpha \right)^2 \cdot \left( \frac{4}{\pi} \right) \qquad \mathbf{F}_{En1} = 8.23872953738 \times 10^{-8} \, \text{N} \qquad \qquad \text{Note the 4/m} \qquad \qquad 4)$$

The potential due to the average kinetic energy of the n1 energy shell of the same atom is:

$$Vpot_{n1} := \frac{m_{\lambda} \cdot \left(c_{vel} \cdot \alpha\right)^{2} \cdot \left(\frac{4}{\pi}\right) \cdot a_{o}}{2 \cdot q_{o}}$$

$$Vpot_{n1} = 1.36056981653 \times 10^{1} V$$
5)

where also: 
$$\frac{F_{En1} \cdot a_0}{2 \cdot q_0} = 1.36056981653 \times 10^1 V \tag{6}$$

$$Ratio := \frac{\varphi_v}{Vpot_{n1}} \qquad \qquad Ratio = 6.28318527997 \times 10^0 \qquad = 360 \text{ deg / 1 radian} \qquad \qquad 7)$$

The ratio of the inertial potential to the kinetic energy potential is not unity! It is therefore suggested that the inertial potential is a radian <u>segment portion</u> of a full 360 degrees so as to set the inertial potential at the same as for the kinetic energy potential.

$$\theta_{\text{Ratio}} := \frac{360 \cdot \text{deg}}{\text{Ratio}} \qquad \qquad \theta_{\text{Ratio}} = 5.72957797612 \times 10^{1} \cdot \text{deg}$$
 8)

Using a synchronizing signal, (acoustic or electromagnetic, or both), the inertial force of countless atoms connected in a bulk material so that the segment inertial force is not random, the coherent alignment could easily provide a force or lifting or propulsion of very massive objects. The huge monolithic stones of the Great Pyramid at Giza comes to mind as well as others such as found on Easter Island.

The average inertial force points in random directions under normal conditions. This would cause such things as electronic noise such as Nyquist noise for example. When organized into pointing in one direction, a huge lift advantage is provided from the total sum of all of the involved atomic contributions of force offset.

$$F_{Ratio} := \frac{2 \cdot \left(q_0 \cdot \varphi_v\right)}{a_0} \quad F_{Ratio} = 5.17654641549 \times 10^{-7} \, N \qquad \frac{F_{Ratio}}{Ratio} = 8.23872953738 \times 10^{-8} \, N \qquad 9)$$

Impinging electromagnetic fields, such that the angle between the electric and magnetic fields be equal to  $\theta_{Ratio}$  above, matter may dissolve and even release considerable energy in the process. The Kowsky-Frost experiment reported a deformation of considerable amount in pure quartz crystal as well as levitation. This was accomplished via electric and magnetic fields via a strong high frequency radio generator set.<sup>2</sup>

Acoustic means could also have been used such as in the case of the great pyramid construction. Also of interest is Edward Leedskalnin's "Coral Castle" where he used electromagnetic and acoustic means to handle huge monoliths of coral by himself.<sup>3</sup>

There is amassed a huge amount of evidence that ancient builders had mastered the secret of causing huge monolithic stones to move themselves. Connected with that ability would be the lifting of spaceships of any size desired. The book, "Chariots Of The Gods?" by Erich Von Daniken is a good reference source.4 When I first read "Chariots Of The Gods?", it was in the 1960's and I was totally shocked that this information was not common knowledge.

Modern machinery and engineering cannot begin to match the magnitude of force necessary to move 200 ton (Or even larger) monolithic stones that were moved on Easter Island, The Great Pyramid of Egypt at Giza, the Stonehenge construct and many other locations throughout the world.

#### Making Waves

Ocean waves have fascinated me for most of my life. I have observed many times on a calm and wind free day that waves would begin out from the shore by <u>suddenly</u> rising up from calm water to form a crest and then start moving towards the shore while at the same time building in amplitude. Near the shore they would curl over from the top and come crashing down near the edge of the shore with a thunderous boom! The curl over at the top moves ahead of the main curl and is almost parallel to the surface as if some unseen force was propelling it towards the shore ahead of the bulk wave.

I see this action occurring by stimulation of a frequency and fundamental vertical wavelength that occurs right at the beginning of the wave where it first "jumps up" and begins to form a rotation towards the shore. The speed of sound in salt water is given in Wikipedia as 1560 meters per second. In previous works by this author concerning the Great Pyramid at Giza, a heated air speed was calculated as 371.7731304 meters per second. The fundamental wavelength common to both speeds is 0.8442450090 meters which is exactly four times the wavelength of the hyperfine radiation of the hydrogen atom. This wavelength also fits exactly for the extremely hard sandstone monoliths of Stonehenge where the speed of sound is near 5950 meters per second. Interestingly, this is the same speed as in Iron and iron particles have been found imbedded in the crop formation grass left by UFO's. Let us calculate some frequencies related to the master wavelength mentioned above for the speed of sound in air and then for saltwater.

$$\begin{array}{ll} V_{air} \coloneqq 371.7731304 \cdot m \cdot sec^{-1} & \qquad \text{(Great Pyramid Grand Gallery Air Speed.)} \\ \\ \lambda_H \coloneqq 0.8442450090 \cdot m & \qquad \text{(Universal Fundamental Hydrogen Related Wavelength.)} \\ \\ f_{air} \coloneqq \frac{V_{air}}{\lambda_H} & \qquad f_{air} = 4.40361656198 \times 10^2 \cdot Hz \end{array}$$

$$V_{saltwater} := 1560 \cdot m \cdot sec^{-1} \cdot (1.01537)$$
 (~Plus one percent adjustment.)

$$f_{saltwater} := \frac{V_{saltwater}}{\lambda_{H}} \hspace{1cm} f_{saltwater} = 1.87620558382 \times 10^{3} \cdot Hz$$

Note: The Great Pyramid is constructed on the basis of 4 over  $\pi$  which is ratio of the pyramid height to 1/2 the base length.

Then: 
$$\frac{f_{saltwater}}{f_{air}\cdot\left(\frac{4}{\pi}\right)^6} = 1.00002352327\times10^0$$
 Extremely close to unity.

We see our old friend the four over  $\pi$  ratio at work again. Let us now examine granite for the  $4/\pi$  relationship.

$$\begin{split} V_{granite} &:= 5950 \cdot m \cdot sec^{-1} \\ & f_{granite} := \frac{V_{granite}}{\lambda_H} \qquad f_{granite} = 7.04771711597 \times 10^3 \cdot Hz \\ & \frac{f_{granite}}{f_{saltwater} \cdot \left(\frac{4}{\pi}\right)^{5.5}} = 9.9486095652 \times 10^{-1} \qquad \text{Very close to unity.} \end{split}$$

The builders of Stonehenge also cut the stones fundamental to the wavelength related to the hydrogen hyperfine frequency and the acoustic speed at whole multiples.<sup>7</sup>

The frequency ratio of granite (and/or hard sandstone) to air with the 4 over pi multipliers is:

$$\frac{f_{granite}}{f_{air} \cdot \left(\frac{4}{\pi}\right)^{11.5}} = 9.94884358904 \times 10^{-1}$$

The 4 over  $\pi$  ratio and the wavelength of four times the hyperfine wavelength of the hydrogen atom is common to air, sea water and granite. (As well as free space electromagnetic radiation.)

The structure of Stonehenge looks like it may have supported a flying saucer. It may in fact be a landing pad since it is circular and supported by very substantial upright stones buried securely in the ground. On top of the upright stones there were circular cut stones between each upright. The arrangement of the stones could also create acoustic energy which could be converted into electromagnetic waves for absorption by the flying saucer. In fact, the pyramids also were likely acoustic energy generators tuned to the energy of the cosmos, the energy freely available from the primordial hydrogen atom.

## The Working Mechanism:

The structure of the inertial force mechanism may be similar to a spiral staircase turned on its side so that it can roll along towards the shore. The downward pointing force segment pushes against the floor of the ocean while the top segment gains upward thrust from the bottom segments push against the ocean floor. The two thrusts compliment each other to double the total thrust force. At the same time, both thrusting segments are rotating about a common center or axis of rotation that is roughly parallel to the shoreline. All of this is triggered when a critical height from the floor to the ocean surface is encountered as the floor of the ocean rises to meet the shore. That critical height is of coarse related to the wavelength of the hyperfine frequency of hydrogen. The ocean is comprised of water which is 2 parts hydrogen atoms to one part oxygen. Energy in the form of Nyquist noise is added to the mechanism action by storms in the main body of the ocean which serves to increase the amplitude of the wave. The top force segments align vertically and march parallel towards the shore while being tilted towards the shore due to this synchronizing action. The bottom segments are inline with the top segments providing a pushing action towards the shore as well as upwards push.

Bench testing reveals the mass per distance perturbation of a spinning magnet assembly generates a three-vector dimensional shift wherein the vector of the mass per distance spinning magnet wobbulation generates a magnetic circular vector around the mass per distance vector direction. Further, around the mass per distance vector a radial electric field **E** is generated. Finally a magnetic **B** field is generated parallel to the mass per distance vector as a result of the circular magnetic **A** vector and E vectors being 90 degrees to each other as well as the mass per distance vector. 

I propose that these fields may be measured by careful testing inside of an ocean wave.

## The importance of $4/\pi$ and mass per unit distance cannot be overstated.

The Plank radius is calculated as:

$$r_p := \sqrt{\frac{G_{const} \cdot h}{c_{vel}}} \qquad \qquad r_p = 4.05083315388 \times 10^{-35} \, m$$

From reference one the electrogravitational equation is repeated below as:

$$F_{EGQtotal} := \left[ \varepsilon_{o} \cdot \left[ \frac{\Phi_{o}}{a_{o}} \cdot \left( \frac{4}{\pi} \right)^{2} \right]^{2} \right] \cdot \left[ c^{2} \cdot \left( \frac{1}{\mu_{o}} \right) \cdot \left( \frac{r_{p}^{2}}{q_{o}^{2}} \right) \cdot \alpha \cdot 2 \right] \cdot \left[ \varepsilon_{o} \cdot \left[ \frac{\Phi_{o}}{a_{o}} \cdot \left( \frac{4}{\pi} \right)^{2} \right]^{2} \right]$$

$$F_{EGQtotal} = 1.97729143291 \times 10^{-50} N$$

This is equal to:

$$\left(m_{\lambda} \cdot \frac{4}{\pi}\right) \cdot G_{const} \cdot \left(m_{\lambda} \cdot \frac{4}{\pi}\right) = 1.97729141486 \times 10^{-50} \, N$$

where: 
$$m_{\lambda} = 1.35200407811 \times 10^{-20} \frac{kg}{m}$$

Again we see our old friend  $4/\pi$  pop up this time in the electrogravitational equation. The above equation is for the force between two electrons separated by the radius of the n1 energy shell of the Bohr hydrogen atom.

It may be that the fundamental wavelength related to the hyperfine radiation of the hydrogen may be related to the fundamental geometry of space-time itself.

## References:

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