

## AN INTRODUCTION TO THE ABSOLUTE THEORY

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*This paper outlines the principles of a new fundamental theory, the Unified Quantum Field theory, which has recently been renamed the absolute theory. It shows, in simple terminology, why the theory, the fundamental energy 'brick', its associated properties and characteristics, may be regarded as absolute, for, not only, logical and scientific reasons but also for experimental considerations. Its predicted impact on modern physics and scientific theories and concepts is referred to briefly.*

In these days, when new elementary particles are still being discovered at a breathtaking rate, and the hunt for the elusive quark is in full cry, it is, perhaps, relevant to draw attention to a fundamental new theory that appeared on the scientific horizon as long ago as 1968. This theory, published by the author privately in 1972, under the title **The Unified Quantum Field Theory** (recently renamed the absolute theory) claims to have discovered the smallest indivisible absolute energy 'brick' from which it has been possible to define the electric, magnetic, gravitational and nuclear fields. Not only these four fields, but also the electromagnetic or radiation field, and matter itself, have also been defined in terms of this infinitesimally small energy quantum unit. This includes all the short-lived particles as well as the stable proton, electron and neutron. The exact derivation of the ten physical characteristics of the quantum unit have followed, the most important being the energy of this fundamental and indivisible unit, which is equal to  $6.625 \times 10^{-27}$  erg.

These new physical constants have been developed by the normal processes of intuitive and logical reason being applied to certain well-known physical constants. These are as follows:

- 1) The velocity of light,  $c$ , equal to  $2.9979 \times 10^{10}$  centimeters/sec.
- 2) Planck's constant,  $h$ , equal to  $6.625 \times 10^{-27}$  erg sec.
- 3) the electric charge on the electron and proton,  $e$ , equal to  $4.80 \times 10^{-10}$  e.s.u.
- 4) Newton's gravitational constant,  $G$ , equal to  $6.67 \times 10^{-8}$  cm<sup>3</sup>/gm/sec<sup>2</sup>.

In addition, the well-known equations of Planck, Einstein and De Broglie, relating radiant energy to atomic energy, namely

$$E = h\nu \quad (\text{radiant energy at frequency, } \nu)$$

$$E = mc^2 \quad (\text{atomic energy of mass, } m)$$

$$E = h\nu = mc^2 \quad (\text{De Broglie's equation}).$$

which, together with certain atomic concepts, were largely instrumental in resolving the unified field problem. This process revealed the fundamental and absolute relationship between all the various energy fields and matter itself. Einstein proved that everything in the universe consists of energy in both matter and field. The real problem, that has remained unresolved after more than fifty years of steady scientific onslaught, consisted basically in obtaining an objective view of the fundamental energy 'brick' behind the complexities of nature. One of the great problems was that of action, or force, at a distance. By what mechanism, if any, does the sun cause the earth and the other planets to move in their orbits? What force mechanism keeps the stars suspended in their galaxies? What causes the well-known effect of iron filings around a magnet, revealing hidden lines of force? What causes the electron to move only at certain energy levels or orbits around the proton in the atom? The atom, itself, has been shown dramatically and even catastrophically to consist of enormous energy. Enormous strides were made in simplifying man's concept of matter since the time of John Dalton's atomic theory of matter. The atom was found to consist mainly of electrons, protons, and, lastly, of neutrons, and could be systematically arranged in a periodic table from the lightest element, hydrogen, to the heaviest, uranium, and even beyond to the radioactive elements, whose atomic weights exceed 238. Now, with the advent of high-energy particle accelerators, man is faced with an even greater number of 'elementary' or 'fundamental' particles than there are different atoms in the periodic table. Most of these particles have very short lives, before being reabsorbed or disappearing as radiant energy gamma-rays at around  $10^{21}$  Hz. In addition to this Pandora's box of particles, it appears that for every particle, there is also its corresponding anti-particle of opposite electrical polarity. All of these new particles, apart from the electron, proton, neutron, neutrino and the photon of radiation, are extremely unstable and short-lived. It is as though the universe itself takes exception to their appearance and they are quickly engulfed in either matter or disappear as radiant energy.

Modern powerful and comprehensive scientific theories, such as Planck's quantum theory, Einstein's relativity theory, De Broglie's, Eddington's, Schrodinger's, Heisenberg's, et al., relativistic wave mechanics, Rutherford's atomic theory and particle physics, have, so far, not been able to conceive an overall integration that would result in a unified field theory. Such a theory would provide a solid absolute rock on which future progress could more readily and rapidly be based. It was even thought by many that such an absolute concept was not possible in a relativistic universe. Could it be that relativity was only the surface appearance of reality, while absolute reality, in the form of energy quantum 'bricks', lay concealed behind the electron, proton, gravity and other energy fields? The concept of the new theory centered around the four major fundamental constants,  $c$ ,  $h$ ,  $e$ , and  $G$ . Was it possible that they were not only constant but absolute? Could they all be related by simple relationships or equations? It is important to notice that these constants are all ratios of the old classical scientific dimensions of mass, length and time. Since we are looking for an extremely minute particle or quantum of energy, Planck's constant,  $h$ , known as action, has an obvious and direct appeal on account of its almost infinitely small value. It is, in fact, the smallest constant known to science.

The real breakthrough for the achievement of a unified energy field theory came when it was found to be a relatively easy matter to prove scientifically that Planck's constant concealed the fundamental quantum of energy,  $h_e$  erg. This fact is the core and center of the whole theory, the nucleus from which all the other constants and equations stem. The fairly simple proof of this basic fact is contained in the author's first book and in two papers on Planck's constant. It should be easy to see that we now have a very powerful tool to hand; namely the energy quantum unit,  $h_e$  erg, which is also equal to force multiplied by length or distance, also mass multiplied by velocity squared,  $mc^2$ . The so-called rest energy of matter is given by

Einstein's famous equation,  $E = mc^2$ . Therefore it can be seen that one gram of matter would have an energy of:  $1 \times c^2 = 9 \times 10^{20}$  erg. Hence if we divide this value by the fundamental energy quantum value,  $h_e$ , erg, we obtain

$$c^2/h_e = \frac{9 \times 10^{20}}{6.625 \times 10^{-27}} = 1.36 \times 10^{47}$$

quantum energy units. This extremely large number is the number of energy quantum units in one gram of matter.

Similarly, the number of fundamental quantum energy units in the electron and proton is respectively,  $1.24 \times 10^{20}$  and  $2.27 \times 10^{23}$  quantum energy units. It should be obvious to those who are engaged in searching for the quark, which is alleged to be fundamental by its supporters, that, even if it can theoretically account for all the elementary particles, it will be merely another macroscopic particle when viewed in the light of the extremely minute energy content of the fundamental energy unit. The quark, which is supposed to be either  $1/3$  or  $2/3$  of the electron's charge (and the proton's), must be of comparable size and mass as the other known particles, somewhere between the electron and the proton, if it exists. It may be safely predicted from the new theory, that the quark, if discovered, would also consist of enormous numbers of the fundamental quantum energy unit.

Following very closely on the discovery of  $h_e$ , the size and other characteristics of the quantum unit were readily determined. During this process a large number of new equations came to light, which related the microscopically small quantum unit with all the other fundamental constants, and because of the fundamental relation of  $h_e$  to  $G$ , the equations relating  $h_e$  with the total mass of the universe,  $M_U$ , the total energy therein, and its radius, were soon brought to light. These exact values are given in the author's first book with their method of derivation. In fact, there are so many ways and methods of deriving these fundamental values that there can be no possible logical or experimental room for error. These multiple relationships are contained in fourteen further books and papers as yet unpublished by the author.

The logic behind the concept of  $h_e$  is given further discussion in two recent papers regarding the real nature of Planck's constant,  $h$ . Two further papers show that the quantum length,  $Q_1$ , equal to  $1.075 \times 10^{-12}$  centimeters, can now be determined experimentally by literally millions of different experiments that cover the entire radiant spectrum, from zero to  $10^{22}$  Hz. It also shows how the nature of the electromagnetic and gravity field, as defined by the theory, proves that the well-known red shift of the spectrum first discovered by Hubble in 1925, is not due to an expansion of the whole universe, but can be defined exactly and logically as well as experimentally, by the expression  $Q_1^4/\lambda^4$ , or, the ratio of the quantum length to the wavelength, all raised to the fourth power. This value represents the red shift of each individual cycle of radiation per cycle of wave travel. If this value is now divided by the wavelength, then the expression,  $Q_1^4/\lambda^5$ , will be the red shift of the wave per centimeter of travel, normally referred to by the symbol  $z$ . Hubble's constant,  $H$ , is equal to  $z/D$ , where  $D$  is the distance from the light source being measured. Hence the new expression for the red shift,  $z$ , will be  $Q_1^4/\lambda^5 D$ , and Hubble's constant,  $H$ , is equal to  $Q_1^4/\lambda^5$ . Since this is a non-linear relation depending on the inverse fifth power of the particular wavelength, this provides a remarkable feature against which the new theory can be experimentally verified. If found to be correct it will mean that the new theory's definition of all the quantum constants is correct, and that by their precisely defined application in the gravitational and electromagnetic fields, a unified field theory has at last been realised. The red shift of distant galaxies is thus due to the ratio of the fundamental quantum's length,  $Q_1$ , to the wavelength,  $\lambda$ , coupled with the distance,  $D$ . It has been proved in the Hubble papers referred to above, that this effect is due to the difference in the relative velocities of the sinusoidal wave and the gravity field path which is straight. This produces a velocity

lag between the two fields, resulting in a gradual stretching effect on the wavelength by the gravity field, which carries the oscillation, thus ensuring the eventual return of all oscillations to the all-powerful gravity field. It can be seen at this stage that as the universe is a closed system whose overall characteristics may be defined by the new theory, that the gravity field pressures inside stars produce radiant energy only to be returned gradually to the gravity field from whence it came. The impact of this concept on man's present concept of entropy and the nature of the universe, is covered in a new cosmology, the eternity theory. The universe equations contained in both books prove that the principal relation governing the entire universe is the equality that exists between the total energy in matter,  $M_U c^2$ , and the total energy in the gravitational field, equal to  $M_U Q_g h_e R$  divided by  $Q_1$ . There are also many other ways of deriving this relation and it takes many forms owing to the very rich set of equations that relate the fundamental quantum unit with the universe. In the above:

$M_U$  is the mass of the universe, equal to  $1.46 \times 10^{55}$  gram.

$Q_g$  is quantum gravity links per gram, equal to  $1.35 \times 10^8$ .

$Q_1$  is the quantum length, equal to  $1.075 \times 10^{-12}$  centimeter.

$R$  is the radius of the universe, equal to  $1.075 \times 10^{27}$  centimeter.

The latest paper applies the new theory to show how large positive results should have been obtained from the Michelson-Morley experiment. This was carried out in Cleveland, U.S.A., in 1887, and subsequently a great number of times, and only negative results were obtained, although certain small wave interference effects were observed at times. This paper shows that there was a major error in the theoretical concept of the aether, which led automatically to an incorrect light-beam paralleling and setting-up procedure on all occasions. The necessary experiment proving that relatively large positive results should have been obtained, has, in fact, already been carried out by the late Professor Frank Nimrod. Nimrod has published his results in several papers and books. He built several different so-called "displacement pointers", and after 37 different experiments extending from 1955 to 1967, in Australia, Italy and U.S.A., he measured an average absolute velocity of the earth through space of 225.97 kilometers per second.

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