

PHYSICS' UNIFIED THEORY - FINAL SYNTHESIS

The introduction of new ideas in the interpretation of physical phenomena, the discovery of a new mechanics, the construction of its logical structure and formulas of calculus, adding the intention of displacing important and accepted theories or procedures in order to change and improve them, is in itself a hard task, with little hope of success; however, the need to interpret reality better that cannot be encompassed by any theory whatever, would always demand more effort, trying to penetrate its core and reveal any of its infinite mysteries; this is enough motivation to try to go ahead and explore the knowledge of reality.

The theory may expand indefinitely therefore it is necessary to end this first stage of construction and development with a brief summary that, in a few words, will synthesize the essential aspects of the new mechanics and its most important achievements.

I. The initial idea is to interpret the condition of repose and movement of the bodies as states of relative balance or imbalance in respect to other bodies taken as referents, or to definite systems of inertial coordinates.

This way it is easy to deduce the fundamental law of the relativistic dynamics of Albert Einstein, namely:

$$dI = F \cdot dt = d(m \cdot V) = m \cdot dV + V \cdot dm$$

$$dL = dE = F \cdot dX = V \cdot d(m \cdot V) = m \cdot V \cdot dV + V \cdot dm$$

m= mass of Lorentz ; l = impuls ; L= work; l= lenght

II. Following the adopted line of reasoning, the two added terms that compose the relativistic equations are interpreted as expressions of two different resistances: the inertial resistance of Lorentz's mass ($m \cdot dV$), associated to an amount of motion and energy inherent of the body that the forces transform during the process of movement, and the resistance of a hypothetical elastic energetic media ($V \cdot dm$). Media that becomes evident opposing the force that accelerates the body. This media restricts the motion imposing a speed limit and increasing the total inertial resistance accentuated by speed.

The hypothetical resistant and elastic media remains indifferent, with no reaction whatsoever in front of the rectilinear uniform motion, it presents characteristics in common with the electromagnetic ether; its disturbance, by the action of the forces, gives a physical meaning to De Broglie and Compton's wave lengths.

With its use, the laws of Albert Einstein and Max Planck are deduced, laws that are relative to the photons and the radiant energy.

The interpretation of motion in this theory is essentially relativistic but, the introduction of a hypothetical energetic medium that restricts motion by imposing to it a speed limit and by increasing its inertia, gives the theory a similar character to that of classical mechanis presenting analogies with the movement of a body in a viscous medium.

III. The similitude of the hypothetical Energetic Media with the electromagnetic field ether, plus its definite properties lead to pose the hypothesis, duly based or of the existence of special corpuscles, corpuscles whose movements respond to modified equations of the relativistic dynamics, namely:

$$dI = F \cdot dt = m \cdot dv \quad ; \quad dL = F \cdot dX = m \cdot V \cdot dv.$$

Equations of a vibratory movement with quantified impulse, inertial mass with two signs, a positive and a negative one, and recoverable energy. The properties of motion of these corpuscles simply explain the motion of the electron's in the atomic orbits and that of the elementary particles in the nucleus; the results coincide with those obtained in the theories of modern physics, in particular the theories of the undulatory and quantum mechanics, although they do without them completely.

2

The theory of the Energetic Media derived from Einstein's formulas allowed to describe a new Atomic Model assigning a **rotation radius associated to the electron's Spin** eliminating contradictions in the phenomena of movement of electrons at atomic level .

IV. The theory is applied without difficulty in Optics, deducing the laws of light refraction and of light dispersion from the fundamental principles of the mechanics, that is to say, of the conservation of energy and of the conservation of the quantity of movement.

Among its most important achievements we have:

- Associated Radius, electronic Spin.
- The explanation of the phenomena of the atomic nucleus, among others, and in particular, the explanation of its cohesion; the disintegration of the free neutron using the properties of the electric and magnetic fields.
- Determination of a mathematical law for the luminous dispersion.
- Explanation: **negative result** experiment of Michelson and Morley's , **Doppler effect**.
- Deception of a dynamic conception of space-time.
- Correction of Lorentz's transformation, basis of the relativistic kinematics and return to the use of absolute time.
- _Etcetera...

THE SCIENTIFIC THEORY

The research of reality is carried out using both the scientific and the philosophic methods, observing reality from different points of view: the philosophical method observes reality from a higher level of abstraction and generality; the scientific perspective with its experimentally verifiable truths that dissipate doubt and build the opinions until they achieve an unanimous consensus. This unanimity cannot be reached by philosophy; however, both have the same motivation: the longing to know, and the search for truth.

Theory is the final point and the superior aim of all research. If the theory is elaborated and synthesized the Conception of the Universe, the image of the same one that we suppose to be reality, by similarity, without ever managing to exhaust reality, to comprehend it entirely, for the magnitude of the intellect capable of fully comprehending reality is not an attribute of the human being.

The conception of the world, elaborated by the scientific theory nourishes itself with metaphysic- philosophic assumptions, without them, theory cannot be constructed; the conception in which science and philosophy get together to better interpret reality according to Max Planck.

Thoughts and ideas, not formulas, are the beginning of every physical theory, asserted Albert Einstein. The study of light has been one of the scientific keys to interpret the physical world; the speed of light is the most important absolute magnitude of physics, and to which all motion, and, as a consequence, all physical phenomenon is subordinated.

“In the beginning God created Heaven and Earth. But Earth was formless and empty and darkness covered the surface of abyss. And the Spirit of God moved over the waters. So, God said: Let there be light, and there was light. And God saw the light was good and God divided the light from the darkness”.

(Genesis 1.1., Sacred Bible)

APPLICATION OF THE UNIFIED THEORY IN DIFFERENT CHAPTERS OF THE PHYSICS

- _ Refraction of the light, corpuscular theory.
- _ Mathematical Law of the Refraction of the light, lines of Fraunhofer (refraction index "n").
- _ General theory of the movement. Special corpuscles with quantified impulse.
- _ Physics study and deduction of the length of wave of Broglie and Compton.
- _ The atom of Hydrogen, deduction of the "quantum postulate of Bohr", discontinuous spectrum, principal series of the Hydrogen.
- _ Planck's Constant. Deduction
- _ Refraction of an energetic corpuscle (photon), deduction of the refraction -Index based on the principles of conservation of energy and quantity of movement (momentum)
- _ Electronic Radius, Hydrogen Atom.
- _ Fine structure and fundamental radius of the Hydrogen.
- _ Movement description within and without the atomic nucleus.
- _ Stability of the atomic nuclei.
- _ Analysis of the movement of the special corpuscle with quantified impulse equivalency with an electromagnetic vibration.
- _ Proton interaction with electron.
- _ Quantified radius
- _ Radius of Bohr
- _ Radius of nuclear resonance (gamma) rays
- _ Explanation of Rutherford-Bohr atomic model, based on classic electromagnetic theory of Faraday, Maxwell and Hertz. Spin Electron Radius
- _ Radius associated to electronic Spin
- _ Gamma Energy and pairs electronic
- _ Photon, Meson and Hyperon, masses. The free neutron .
- _ Nuclear cohesion. Negative mass of Lorentz
- _ Synchronization of frequencies in the orbits of the atom of Hydrogen, stable and unstable balance.
- _ Electromagnetic mass and magnetic radius of the electron.
- _ Analogy between relativistic mechanics with the development of movement in a resistant energy medium. Similarly with the development of movement in a viscous medium.
- _ Resistant work of the medium. Laws of Planck, Einstein, Broglie and Compton.
- _ Deduction of the Lorentz transformation for an inertial coordinated system .
- _ Center of inertia in Cartesian coordinates.
- _ The space-time in a dynamic conception .
- _ The Doppler Effect in the relative movement of the light.
- _ Commentary on Michelson-Morley experiment .
- _ Intrinsic Impedance of void and constant of Planck.
- _ Bohr's magneton, fine structure, intimate pair of the spectrum's lines.
- _ Theories: Classic mechanics, relativistic and quantum.
- _ A new atomic model
- _ Etcetera...

**Unified Theory of the Physics (Second...etc.). Article in the Total Index Blog orden (14-41) 125 págs. - "NUEVAS INVESTIGACIONES EN CIENCIA Y TECNOLOGÍA"-
Dirección Internet: www.enriqueblaksleybazterrica.com**