Foreword

This paper is the delineation, the master-lines of a physic-logical method, used by nature in its engineering, in construction of a model extremely simple. According to Richard P. Feynman: ¹ "Nature uses long threads to describe its patterns, but smaller portions reveal the structure of all drapery". O que é uma Lei Física, Editora Gradiva 1989, p.45. I complete this quotation, saying that it still has as consequences an auto-replicant mechanism in all levels, perceptive in an infinite diversity of varieties. The physical model in nature is semi-finished but in evolution, auto-engendering itself. At the virtual-logic it is still in construction and I

¹ This quotation was translated by the translator of this article, which means that those are not the same words used by Richard P. Feynman, author of the book entitled "The Character of Physical Law" in English, 1965.

am developing and generalizing a method which surely will discharge in a reasonable virtual-logic model, with correspondences closer to reality and a very broad comprehension of the universe working.

Let us reach the subject.

What I am stating is that there is no vacuum, a place in nature destitute of matter. The so-called absolute space is a pseudo-vacuum. In reality it is the first state of matter formed by a wave-particle which quantic physicists call quantic substance or quon, defined at this paper as Photon-Neutrino (PN). I will make it clear now. Matter is genus, mass and charge and energy are species. In reality the Space is a "sea" of PN. This physical being is the basic component of matter, the absolute producer of timing-motion, the basic fractal unit of the Universe, the bit of a logical-physics, an auto-engendered physical-software which discharge into autoregulated systems, winner of the entropy: Life. A vast rotational motion, the gravitation of this substrate "sea" of Neutrinos auto-compacted itself in form of Protons and Electrons in a retrosupplied process, in its first changing phase, in a sort of repetition of the following three states of matter: Gases, Liquids and Solids, now with our proposal: Absolute Space, Gases, Liquids and Solids, completing the model.

After Proton; Electron. Then we have Proton plus Electron. Again Proton plus Electron, plus PN, in Neutrons, inside the nucleus, in a new being distinguished qualitatively and quantitatively, providing a new quality: the atom. Now light atoms in Star Centers, heavy and light Atoms in Galactic Centers.

Nowadays we see clouds, huge atomic clouds moved by this substrate material,

The Absolute Space, producing new structures in star groups as they say, and

the image of Hubble telescope shows, or the noticeable variant of descompactation of these agglomerated, New ones, Super New etc. After that, the aging process, periphery and matter "aging", planets, and life emersion. It seems that biological life, in universe, is result of matter aging process, of its global cooling.

Photon-Neutrino and its features are always present on these facts which add themselves in its agglomerated, the circular motion and its variants: Gravitation, due to different quantities of PN, inserted into the gravitational Mass which is Electro-magnetic also in form of Neutrons, Protons and Electrons, which implicates in distinguished features, at the new structure but with a relation of constant proportionality. Making me more accurate.

It is the compactation phenomenon of the so-called Auto-Energy that is the work necessary to construct with Neutrinos, through Force, Charge and Mass, after all agglomerated. The process, which provides stars formation is the same for Charges and Masses and Atoms, consequently is also the bridge between "Heaven and Earth and Conscience". This paper is the "embryo" of this method, it is the generalization of the concept of Gravitational Potential Auto Energy of Charge and Mass, connected through the Fine Structure Constant beside the Mass, Gravitation through the side of Charge by the ratio Proton/ Electron. Explaining, as Weber intended the proportionality relation between Charges and Masses and revealing a comprehension of a new quality of Mass, based

quantitatively on electro-magnetic energy, Photons-Neutrinos. In other words, a new qualitative and quantitative variant of PN.

Through the combination, which we call 1^{st} structure, between Planck's constant (h), speed of light (c) and electron charge squared, a dipole which is a Force relation (e²) between two poles, in this case in (UES), they extract the Fine Structure Constant, which is represented in this paper by $\alpha = 137.04$ that is one of the relativistic tying of the ratio relation between electrical and electromagnetical forces.

Planck did not know that his constant (h) and its derived (h) h-Bar, the angular momentum is not a unique constant but an agglomerated of constants. In reality a super-operator of energy and moment, virtual-logic, which already brings,

literally in its bulge the Fine Structure Constant, which has been brought plenty of expectancies to physics, and as it will be shown, it is a relativistic adjuster. A electrical dipole in (UEM), a relation of force among these constants, mediated by the speed of the inner light, rotation, which forms the physical object called Photon-Neutrino, which will be explained in this paper.

Through combinations among Planck constant (h), speed of light (c), and of the Newtonian gravitation constant (G), such combination which we call relations of **2nd structures**, we extracted a Mass, a length and a Time called Planck's Length, Mass and Time.

Many considerations about this length were described by Mário Schenberg in his book "Pensando a Física". His expectation about this length was huge that was able to reproduce in at least four different moments p.28,31,95,141, formulation about the potential of this length for geometrization of physics, a genial and truthful intuition. Einstein had this same expectation regarding to the Fine Structure Constant.

Schenberg, Einstein and Planck did not know that these Length , Mass and Time were gravitational and so was the classic beam of electron (a length), they also did not know that these Lengths and Masses are physical, material, real. Those phenomenon were a path so that I could get to the material method used by the nature, the method of compactation, in other words, the method of gravitational Auto-Energy of Charge and Mass.

The relation between these two groups of physical equations, the Gravitational Potential Auto-energy of Charge and the Gravitational Potential Auto-energy of Mass, their combinations and with the Equation of Einstein's Energy, $(M.c^2)$, (which is an equation of descompactation of mass, which expose energy of compacted Photons Neutrinos, related to electron), relations which we call, equations of 3rd third structure which with help of the Fine Structure Constant allowed me to return and obtain the same Lengths, Masses and Time, inserted into the equations of the 2nd structure but now with a physical-leader mechanism, that is to say, equations from 3rd structure allowed me to obtain the same Masses, Lengths and Time, which were already obtained on the equation of the 2nd **structure**. These physical and Mathematics correlation of Auto-energy

legitimate the Physical Natural mechanism of Compactations. It is possible to deduce algebraically from these correlations that every Charges, Lengths and Time are Gravitational and real and also open a path for generalization of all Physics. The proportionality relation between Charge and Mass is thereby extracted, at the so-called Fundamental Equation of Fields Unification, is an that correlates Gravitation, Electrostatic, Electromagnetism. It joins equation Classical, Relativistic and Quantic Physics. From this equation is explained all natural Constants known, directly or not. We derived the Planck constant, Fine Structure Constant, and also included Gravitation, since then separate of the forces unification roll and lead us to one of the categories called Dialectic-Logic, the existence of a connection among all, directly or not. It offers the possibility of comprehension of the Indetermination Principle by Heisenberg, which was only my initial purpose, towards atomic series; discovers the substrate of the physical phenomenon of the series of Titius-Bode, a mathematical series since then without connection with material reality, showing as Galilean used to say, that the Nature language is Mathematical, Numerical, Algebraic and Geometric. Eventually we can uniform and generalize all Physics, enabling a logical and global comprehension with basic Physical algorithms, with the same letters and words which God writes the world. Motion will say, that is to say, Time will say.

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