Nikola Tesla's Ether technology

"I firmly believe that Nikola Tesla is one of the most important people of our civilization because - as we have already shown that several times (e.g. [1]) - the depth of his insights into the structure of True Reality and the principled mechanisms of Cosmos and Nature - is more and more recognized and is absolutely unsurpassed even in modern science...

As a long-time, theoretical and practical researcher of his work, I am really sorry that this truly intuitive genius, the proven inventor and top scientist is currently the most underrated and most misinterpreted genius of all time. What is amazing - most frequently by academically educated people - "top" experts for Tesla ...

The fact is that confessions are given to him for the invention of a rotational magnetic field, polyphase currents, the illumination of wireless vacuum tubes and many other high frequency effects that impressed the world. Although his tremendous contribution to our technological advancement is undoubted and confirmed with over 300 patents and about 700 inventions - it is based on Tesla's work in the first part of his life of only 16 years - since his arrival in America in 1884 to the experiments in Colorado Springs in 1900 and in fact, in my opinion, is minor in relation to what he did for the next 40 years - which is almost completely unknown to us.

To what extent Tesla was ahead of his contemporaries - and in large part today's doctrines, we will show in the next section - without intentions to dispute any of the valid theories. However, we want to point out the necessity of their review and proper upgrading.

The main problem of understanding Tesla's idea is a great difference in the interpretation of the structure of nature and elemental mechanism of electromagnetic waves propagation.

According to Nikola Tesla EM waves are complex vibrations of the Ether - material substance which is the perfect fluid of special quality (see 1.5), and according to modern scientific interpretations EM waves propagate by themselves without the need for a material medium as its carrier and without any connection with the source of its origin.

So the difference is enormous – but "Bridgeable" - under the condition that science changes its arrogant and ignorant attitude according to Tesla's ideas about the "Non-Hertzian" waves.

Namely, Tesla clearly and unequivocally asserts that he does not use the "Hertzian" waves in his work, that is, EM waves originally produced by H. Hertz and theoretically described by J.C.Maxwell – but that he uses waves of entirely different types that he called "Non-Hertzian".

According to the interpretation of official science, Tesla's "non-Hertzian" waves do not exist. Considering he did not complete the university, Tesla did not have enough conventional-scientific knowledge and, from that aspect, he could not understand what her really works ... For modern science, Tesla's "Non-Hertzian waves" are only a special form of conventional ("surface") transversal-vectorial waves in "the near field" of transmitters such as, for example, Norton and/or Zenneck waves.

In my opinion, Tesla is absolutely right because it is a completely different physical entity that is significantly different from the "transversal-vectorial" mechanism described in "a simplified" version of Maxwell's theory as modern science uses today (more detail in section 4).

Well, let's start respectively.

1. Nikola Tesla's well documented statements:

- 1.1 Wireless transmission of electric energy, "Electrical World and Engineer", March, 1904: "In essence, it is the circuit of very large self inductance and low resistance, for which <u>construction and method</u> <u>of excitation could be said to be DIAMETRICALLY OPPOSED to those of a typical transmitter for telegraphy</u> <u>using HERTZ or electromagnetic radiation</u>."
- 1.2 "Nikola Tesla Patenti II", Zavod za udžbenike i nastavna sredstva, Beograd,1996.g. "It is too noted that the <u>phenomenon here involved</u> in the transmission of electrical energy is one of TRUE CONDUCTION AND <u>IS NOT TO BE CONFOUNDED WITH THE PHENOMENA OF ELECTRICAL RADIATION</u> which have heretofore been observed and which from the very nature and mode of propagation would render practically <u>IMPOSSIBLE THE TRANSSMISION OF ANY APPRECIABLE AMOUNT OF ENERGY TO SUCH</u> <u>DISTANCES as are of practical importance</u>. ..."
- 1.3 Canadian Patent 142,352 "Art of Transmitting Electrical Energy through the natural Medium": "... IT IS NECESSARY TO EMPLOY OSCILLATIONS IN WHICH THE RATE OF RADIATION OF ENERGY INTO SPACE IN THE FORM OF HERTZIAN OR ELECTROMAGNETIC WAVES IS VERY SMALL.

It is especially significant that Nikola Tesla (1.2) claims that energy can not be transferred at a distance of greater practical significance by conventional electromagnetism - what we are witnessing today. Bombastic statements about a successful "wireless transfer of energy" speak about the transfer of power from a few to a few dozen watts a few meters - just as Tesla estimated one hundred years ago.

1.4 Tesla Sees Evidence Radio and Light Are Sound, New York Times, Sec. X, P. 9, c. 1, April 8, 1934

It is true, said Mr. Tesla, "that many scientific minds envisaged <u>the theory of a gaseous ether</u>, but it <u>was rejected</u> <u>again and again because in such a medium longitudinal waves would be propagated with infinite velocity</u>. Lord Kelvin conceived the so-called contractile ether, possessing properties which would result in a finite velocity of longitudinal waves. I consider this extremely important, said Mr. Tesla. "Light cannot be anything else but a longitudinal disturbance in the ether, involving <u>alternate compressions and rarefactions</u>. In other words, light can be nothing else than a sound wave in the ether..."

- 1.5 Dynamic Theory of Gravity, <u>https://peswiki.com/dynamic-theory-of-gravity</u>: Tesla published a prepared statement on his 81st birthday (July 10, 1937) critiquing Albert Einstein's theory of relativity. The following is a portion of that statement: <u>Tesla 's aether is in fact a medium</u>, <u>"a perfect fluid"</u> that wets everything in which are immersed "independent carriers". <u>It behaves as a solid to light (high frequency} and is transparent to matter, while it's effects can be felt through inertia.</u>
- 1.6 "Tesla's prophecy ", M.Matić, No Limit Books, page 143: "<u>Earth's vibrations are periodical</u> and last around 1 hour and 45 minutes : That is <u>if I shake earth</u>, <u>contraction</u> <u>wave goes trough her and comes back in 1 hour and 45 minutes</u>, <u>but in state of expansion</u>. The earth is ,as everything else, in permanent state of vibrating. <u>She is constantly contracting and expanding</u>."

In short - Tesla's technology is based on the volumetric, compressing-expanding vibrations of the ether !

2. Original Periodic System of Dmitry Mendeleev,

engraved on his monument, contains a <u>"zero" element</u>, placed in the zero column and zero row about which we are not learned at school, which he called <u>"Newtonium" in honor of the immortal Newton, and represents "the most important and fastest element in nature: ETHER"!</u>



3. The theory of micro-lepton fields, of Anatoly Fedorovich Ohatrin

according to which <u>MICROLEPTONS</u> – are elementary particles that form a weak-field. They <u>have the</u> <u>characteristics inherent in torsion, axial and spin fields.</u> Fulfills all environment and the land, water and air and the <u>cosmos, have a mass of 10⁻³⁹ to 10⁻⁴⁴ kg!</u> All the objects of the material world are surrounded by and filled with these super-lightweight particles. All environment and living systems are soaked with them. These particles carry information about the composition and structure of the substantial body. For them there are no physical barriers. <u>Heavy and inert</u> <u>mass depend on the density and temperature of the microleptonic gas in it</u>.

If microleptonic gas - in any way — is removed from the masses - the body loses weight and inertion !



According to the Energy Density Quantization model, Stable object k9, that represents the Tesla waves quantum carrier, has a rest mass with expected value of about: 1.6 * 10 ^ -47 kg !

4. James Clerk Maxwell's Equations

are the basic equations of electromagnetism. The name was given by Scottish physicist J.C. Maxwell, who published the first work with equations that interpret electromagnetic phenomena in 1864. This theory has fundamentally explained the unity of the electric and magnetic fields and their cause-and-effect connection.

 Maxwell's equations in guaterionic form (Treatise, 2nd edition, 1881, Vol. II, p. 239–240; S = scalar and V vector part of quaternion) \mathfrak{G} = velocity, ψ, Ω = scalar el./mg. pot., eg. numbers 1st column from 1865, 2nd one from 1881 (B_1) (A) $\mathfrak{B} = V \nabla \mathfrak{A}$ $(S \nabla \mathfrak{A} = 0 \Rightarrow \mathfrak{B} = \nabla \mathfrak{A})$ eq. of mg. induction $(D) (\mathsf{B}) \qquad \mathfrak{E} = V\mathfrak{G}\mathfrak{B} - \dot{\mathfrak{A}} - \nabla\psi$ eq. of el.motive force (C) $\mathfrak{F} = V\mathfrak{CB} - e\nabla\psi - m\nabla\Omega$ eq. of el.magn. force (D) $\mathfrak{B} = \mathfrak{H} + 4\pi\mathfrak{I}$ eq. of magnetization (C) (E) $4\pi\mathfrak{C} = V\nabla\mathfrak{H}$ eq. of el. currents (F) [G] $\mathfrak{K} = C\mathfrak{E}$ eq. of conductiv. (Ohm) (E) [F] $\mathfrak{D} = \frac{1}{4\pi} K \mathfrak{E}$ eq. of el. displacement $(A) [\mathsf{H}] \qquad \mathfrak{C} = \mathfrak{K} + \dot{\mathfrak{D}}$ eq. of true currents (B_2) [L] $\mathfrak{B} = \mu \mathfrak{H}$ eq. of ind. magnetiz. (G) [J] $e = S \nabla \mathfrak{D}$ [Coulomb-Gauss law] $m = S \nabla \Im$ $\mathfrak{H} = -\nabla \Omega$

In the original, authentic, version of the theory presented by Maxwell in the form of quaternion, hyper complex numbers, in addition to the so-called "the transversal-vectorial" EM wave ("Hertzian" EMW) described by the vector part of quaternion the theoretical basis for the existence of scalar, (ethereal, longitudinal) waves was established, described by the scalar part of quaternion.

The quaternions are a set of symbols of the form $\underbrace{a}_{\substack{scalar \\ part}} + \underbrace{bi + cj + dk}_{vector part}, \text{ where } a, b, c, d \text{ are real numbers.}$ They multiply using the rules $i^2 = j^2 = k^2 = -1$; ij = k.

Unfortunately, after the death of J.C. Maxwell, with the excuse that this mathematical form is unnecessarily complicated ..., Oliver **Heaviside**, Josiah Willard **Gibbs** and Heinrich **Hertz**, simplified the original Maxwell's work and reduced it to a collection of only four VECTOR equations.

This group of four equations are known as the Hertz-Heaviside equations and the Maxwell-Hertz equations, but have now become universally known as Maxwell's equations. However, we must emphasize that these four vector equations, which are found in textbooks and taught at universities as "Maxwell equations", are not identical to the original version.

Here we quote them in a differential and in an integral form:

Name	Differential form	Integral form
Gauss's law	$\nabla \cdot \mathbf{E} = \frac{\rho}{\varepsilon_0}$	$\oint \!$
Gauss's law for magnetism	$\nabla \cdot \mathbf{B} = 0$	$\oint \!$
Maxwell–Faraday equation (Faraday's law of induction)	$\nabla\times {\bf E} = -\frac{\partial {\bf B}}{\partial t}$	$\oint_{\partial S} \mathbf{E} \cdot d\mathbf{l} = -\frac{\partial \Phi_{B,S}}{\partial t}$
Ampère's circuital law (with Maxwell's correction)	$\nabla \times \mathbf{B} = \mu_0 \mathbf{J} + \mu_0 \varepsilon_0 \frac{\partial \mathbf{E}}{\partial t}$	$\frac{\mathbf{D}}{\mathbf{D}} \oint_{\partial S} \mathbf{B} \cdot \mathrm{d} \mathbf{l} = \mu_0 I_S + \mu_0 \varepsilon_0 \frac{\partial \Phi_{E,S}}{\partial t}$

The vectors are "dimensionally" a lower mathematical form than quaternion, meaning that this "simplified" variant significantly reduces the "strength", "resolution" and "power" of the original theory to describe real EM fluctuations. Moreover, the expelling of the scalar part it is considerably diminished - and actually lost - the possibility of a good description of the longitudinal (ethereal) vibrations with which Tesla worked.

The reason is - in my opinion - the fact that longitudinal vibrations - even theoretically - can not be limited by the propagation speed, which, bearing in mind the basic postulate of Theory of Relativity, is a great problem. The fact that the propagation of longitudinal waves, in contrast to transversal-vectorial, requires the existence of a material carrier is also solved very easily - the ether as the hypothetical carrier of this kind of electrodynamics vibration is expelled from science on the basis of the well-known Michelson-Morley experiment.

5. Problems of the contemporary version of Maxwell's theory

According to Faraday's law and one of Maxwell's equations, the electromotive force is proportional to the change in the magnetic flux: $\Delta x E = -dB/dt$ (or rot E = -dB/dt).

Maxwell-Faraday equation is the modification and generalization of Faraday's law which says that the TIME-CHANGING MAGNETIC FIELD creates the SPATIAL-CHANGING ELECTRIC FIELD and vice versa.

The fact that every change in the electric field creates a magnetic field, and any change in this magnetic field produces an electric field, ... and in this way creates a sequential series of changeable electromagnetic fields. Since the field represents energy, all of these changes spread into the space at a finite speed c, producing an EM wave, popularly called "Rolling wave".

From the above formula it can be seen that the vectors of the electric (E) and the magnetic field (H) are in phase, mutually perpendicular to one another and at the same time both are vertical to the direction of propagation of the wave as is illustrated by the figure below:

Classical Maxwell's, vectorial, transverse, Electromagnetic wave



If the "two-component" "E" and "H" waves are in phase, as derived from the Maxwell-Faraday equation, then the total wave energy varies from some maximal value (E, H = max) to zero (E, H = 0), and then returns to the maximum value ... According to the basic settings of modern physics, energy can not be created or destroyed. It can only change the forms of its manifestation.

5.1 Modern version of Maxwell's theory does not explain where the energy goes when it is not part of the wave, and why it returns to the wave once it is all gone.

In the original Maxwell theory, the electrical and magnetic components are "intertwined" with the longitudinal component and they have a material carrier - which gives a lot of interpretation possibilities that are not possible in the current version.

It is more than interesting that - IN REALITY - on the "dipole", the element that radiates EM wave - current and voltage are shifted for 90 degrees in phase because the voltage (analog of E field) on the dipole ends is maximal and the current (analogue of H fields) is minimal and vice versa. In other words:

5.2 <u>At its "source" the electric and magnetic components are shifted in the 90-degree phase</u>. This difference decreases during wave propagation in the so-called "Near field" zone (~ 1 to 2 wavelengths) and reaching the "Far field" zone are coming to a phase - what - neither can be seen nor can be explained by the above equation. So the phase matching of the E and H fields takes place according to a mechanism that is completely unknown to the modern science.

5.3 Displacement current and Maxwell's theory

One of the most famous problems of the Maxwell's theory is the problem of "Displacement current".



It is an indisputable fact that in the electric circuit, the "condenser" actually represents a "break" of that circuit because its electrodes are separated by a dielectric - an isolator. Then how does the electric current flow? The explanation is - thanks to the so-called. "Displacement current".

In electromagnetism, displacement current density is the quantity $\partial D/\partial t$ appearing in Maxwell's equations that is defined in terms of the rate of change of D, the electric displacement field. Displacement current density has the same units as electric current density, and it is a source of the magnetic field just as actual current is. However it is not an electric current of moving charges, but a time-varying electric field (D= ϵ E). In physical materials (as opposed to vacuum), there is also a contribution from the slight motion of charges bound in atoms, called dielectric polarization.

The modern day derivation for displacement current in the vacuum, is based on consistency between Ampere's law for the magnetic field and the continuity equation for electric charge...

Having in mind the complexity of quantum physics and the modern interpretation of the vacuum structure understanding of the above, as well as all nuclear phenomena and electromagnetism, becomes very demanding.

In fact, all the problems of contemporary physics and the disagreement of existing theories with experimental reality are trying to be explained by the phenomenology of the "quantum field," the virtual-real wave-particles, the entities that "appear" and "disappear" ... which may and do not have to have a rest mass, can have a negative wave number, negative energy - even "borrowed" (?), like "virtual photons", so that we now operate with terms such as "dark mass ", "dark energy" and similar HYPOTHETICAL, non-detectable and non-measurable phenomena - that is not in accordance with the basic definitions of science that include careful observation, experiments, measurements ...

However, Maxwell himself gave his - much more understandable and logical explanation, close to Tesla's ideas. Unfortunately, it is based on a material medium as a transferor of the displacement current - which is absolutely unacceptable from an aspect of modern physics ...

Maxwell's displacement current was postulated in part III of his 1861 paper "On Physical Lines of Force". Few topics in modern physics have caused as much confusion and misunderstanding as that of displacement current. This is partly due to the fact that Maxwell used a sea of molecular vortices in his derivation, while modern textbooks operate on the basis that displacement current can exist in free space.

In part III, in relation to displacement current, he says:

"I conceived the rotating matter to be the substance of certain cells, divided from each other by cell-walls composed of particles which are very small compared with the cells, and that it is by the motions of these particles, and their tangential action on the substance in the cells, that the rotation is communicated from one cell to another.".

Furthermore:

5.3.1 using Newton's equation for the speed of sound (*Lines of Force*, Part III, equation (132)), that "light consists of transverse undulations in the same medium that is the cause of electric and magnetic phenomena."

- linking the phenomenon of electromagnetic waves to the material basis as their primary carrier.

6. On Analogies Between Hydrodynamics and Electrodynamics [2]

Nikola Tesla's work is so inspirational that it still arouse the interest of many people - of those who are not technical professions to top scientists. One of them is dr. Vladimir Lj. Bychkov. What distinguishes him from many who deal with Tesla's technologies is the remarkable consensus of his insights in with the ideas of Nikola Tesla - but also with the axiomatic principles of ancient teachings, which we will be speaking more about in the next chapter.

In [2], Dr. V. Bychkov showed the following:

- Application of hydrodynamic equations allows to obtain analogous results for a number of experiments from a field of macroscopic electrodynamics.

6.1 <u>An analogue of the electric field represents an acceleration of some flow, and an analogue of magnetic induction</u> <u>– a frequency of some rotational motion in a background fluid</u>. Momentum and continuity laws in the fluid give expressions similar to Maxwell's equations with some differences..

- Development of new plasma technologies requires regular reconsideration of approaches to basic concepts lying in their background [3]. It is especially true in case of existing developed science of electricity, which is a background for plasma physics. About that in electromagnetism is far not all known testify N. Tesla's works. He demonstrated many electric phenomena and created a lot of new devices which till now nobody can repeat though all his patents are well-known. Discussion between H.Hertz and N. Tesla on the nature of electromagnetic waves is known [4].

6.2 <u>According to Tesla electromagnetic waves are longitudinal waves in the physical environment similar to a gaseous fluid (ether) which in modern terminology is a physical vacuum.</u>

- A concept about ether (the physical vacuum) as of the gaseous environment, shared also D.I. Mendeleyev [5]. Maxwell himself had written his equations, being based on properties of the ether. Now used Maxwell's equations have a form given to them by H. Hertz, and they are not identical to the initial equations [6].

6.3 The superconductivity, semi conductive, dielectric and magnetic features are not connected with electrons in the wire but with a special flow defined by the material. This result agrees with the concepts of the work [7] where there was put forward a question on a nature of a current in the superconductors, which does not heat the material of the conductor, what is possible only in absence of moving charged in it !

On Analogies between Hydrodynamics and Electrodynamics for Plasma Technologies Vladimir L. Bychkov, Andrey Yu. Mokin

HYDRODYNAMIC EQUATIONS (3):
$$\frac{\partial V}{\partial t} - V \times rot (V) + grad (V^2/2) + \frac{1}{\rho} grad p = F$$
. (3)

Analogy for the Lorentz force

the following expression:

Let us introduce a formal analogy between a vortex of the fluid and a magnetic induction by a formulae: $rotV \Leftrightarrow -B$, (4a) which follows from the Biot- Savart law, and between an electric field strength E (electric force) and an acceleration of the fluid $\partial V/\partial t$ $E \Leftrightarrow \partial V / \partial t$. (4b) and use a formal identity rotV = -B, (5) $E = \partial V / \partial t (6)$ $\boldsymbol{E} + (\boldsymbol{V} \times \boldsymbol{B}) = \boldsymbol{F} - (grad(\boldsymbol{V}^2/2) + \frac{1}{\rho}gradp) \equiv \boldsymbol{F}_L,$ Then from (3), (5) and (6) we obtain (7)

It is an analogue of the Lorentz force, which acts some liquid volume. It means that an introduction of the analogy (3) allows to describe the magnetic field as some vorticle fluid field and the analogy (5) as some acceleration of it.

$rot \frac{\partial V}{\partial t} = rot E (8) \text{ and } rot \frac{\partial V}{\partial t} = \frac{\partial rot V}{\partial t} = -\frac{\partial B}{\partial t} = rot E (9) \text{ pot}$ They lead to an equation analogous to $\frac{\partial B}{\partial t} = -rot E (10)$	Expression 8 indicates that if there is no electric field that is divergent and potential V exists = Rozen-Podolsky experiment ⇔ it indicates that ether exists and this experiment confirms the existence of an ether ether windows
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6.4 Experiment Rosen Podolsky - EPR paradox - is a proof of ether existence.

- Equation (8) in the figure above: rot E = rot dV/dt tells us that if there is no electric field that is divergent and potential V exist, what the experiment Rosen-Podolsky in essence is - it indicates that ether exists and this experiment confirms the existence of an ether.

Dr. V. Bychkov scientific paper [2] is of utmost importance not only for understanding the non-Hertzian technologies of Nikola Tesla and ABSOLUTE ACCORDANCE WITH TESLA'S ETHER PHYSICS, but also because of a deeper and clearer understanding of the plasma physics and the mechanism of "ball lightning" - which is of greatest importance for mastering the processes of controlled "cold fusion", i.e. the process of obtaining huge amounts of cheap and clean natural energy.

7. The coherence of the axiomatic principles of Sankhya and Tesla technology

Sankhya [9] is a unique field theory whose roots date back to the past, according to some sources, even about 33,000 years ago, based on a Perpetual dynamism of the substratum of space in Harmonic, Oscillatory state (PHO) forming the dynamic base for all manifestation. While physics was forced to abandon the concept of a substantial space because experiments failed to detect Ether (Michelson-Morley), deriving the PHO state into PHO multiplets:

7.1 Sankhya overcomes the Relativistic limitations by creating all manifestation as a hologram on a dynamic substratum, sustained at an exact and constant cyclic rate c (=10^{1/x-0.5}, x=golden mean, c~light velocity).

Sankhia shows (and mathematically proves) that all manifest phenomena, from the ubiquitous gravitational force onwards (EM, weak, strong), is only due to the change in the oscillatory rate of the PHO holographic state that reacts to regain its balanced, axiomatic cyclic state by the transmigration of stresses from a higher to a lower count state. The only "unification controlling" parameter is cyclic time, operated as the single critical variable in three modes of compression, resonance and expansion which is identified with volumetric space. <u>So it's about the VOLUMETRIC VIBRATION OF THE SUBSTRATE</u>.

In [10] we discussed unbelievably deep insights in the structure of the reality of ancients that is in fully accordance with the findings of contemporary physics in the macro and micro world domain and here we cite only some segments of significance for understanding the idea of brilliant Nikola Tesla.

It is shown that in the harmonic oscillatory state, the instant of colliding compression has a ratio of 1/x whereas the period of rebounding expansion is 1+x. The oscillator operates resonantly when 1/x = 1+x as then $x+x^2 = 1$ and that is maintained if x = 0.618034, the golden mean ratio, leading to self similarity and scale invariance as

the summa $x^{n} - - \infty = 1 + x = 1/x$.

Similarly, it has been shown that the substrate "resistance" to the stress transmigration is equal to Si = 377.0376, which is not only in the sense but also by numerical value very close to the "free space impedance" (Z) in contemporary physics: $Z = sqrt(\mu_0/\epsilon_0) = 376,730$ ohm. Analogous physical quantity in Sankhya is Si:

$$S_i = \left[10^2 / k - 1 \right] \left[10^2 - 2 / 10^2 \right] = 377.0376$$
, where k=2^{1/3} = 1.25992

"Intensity of Resistance" to the interactive stress transmigration, or acc. to [9]:

7.2 The impedance to the transmigration of interactive stresses in space occurs only when there is an accelerative displacement that causes the breakup of the simultaneous coherent state to crossover to a sequential resonant state.

"Impedance of free space" (Z = 376.730) by scientific terminology or "impedance ratio" (Si = 377.03) according to Sankhya - is a constant delay due to merging of interactive cycles and affects the interactive cycles in all axial directions. Though the compressive and expansive exchange takes place within an interactive cycle, it is not along the same axis as the phase symmetry is broken by the accelerative force. Hence a <u>forward transmigrating stress along the x axis</u> (longitudinal substratum vibration) <u>reacts with a simultaneous lateral (transversal) reaction</u> along both the y and <u>z axes</u>. As the x axis force is compressive the lateral one will be expansive. Hence both types of forces react simultaneously but in different axial directions.

The changes in stress count densities would initiate accelerative transmigration in both the simultaneous and sequential modes. The <u>inward displacement would increase stress density and counts would merge</u>, while the outward expansion would decrease stress densities to increase counts that cause detectable transmigratory displacements. So - stress transmigrates through an interactive cycle of compression and expansion. The period of reversal impedes the stress count transfer rate proportionate to Si value.

7.3 In the <u>compressive phase the normal interactive rate of the PHO (=c)</u>, is increased to C*Si = ε r and in the <u>expansive phase it is reduced to C/Si = μ r.</u>

$$\varepsilon r = \left[\frac{Kx}{PxC^2}\right] \left[\frac{Si}{PM}\right] = 1.118203E + 11 \qquad \mu r = \left[\frac{Kx}{PxC^2}\right] \left[\frac{1}{PM \star Si}\right] = 7.865953E + 5$$

In modern electromagnetism, the reciprocal value of $\varepsilon_r \Rightarrow 1/\varepsilon_r = 8.94e-12$ is defined as the electrical permittivity of the vacuum and has a value of $\varepsilon_0 = 8.85e-12$ F/m, while reciprocal value of $\mu r \Rightarrow 1/\mu r = 1.2713e-6$ represents the magnetic permeability of the vacuum $\mu_0 = 1.257e-6$ H/m. From the stated values, it is quite clear that the difference in the number of values is really minor, but the qualitative (process-structure definition) difference is enormous!

Although only a smaller part of Sankhya's axiomatic principles, based on a very simple relations and elementary mathematics, is described in this section - a very high consensus of the Sankhyan values and the values of contemporary physics can be clearly seen. More importantly, along with precise mathematics Sankhya offers a very simple and logical explanations of the STRUCTURE of the processes that take place within the substrate and result in the form that the science detects and measures but without the capability to explain WHY some quantities has exactly that value. E.g. gravitational constant, light speed, plank constant, Avogadro number ... On the other hand:

7.4 <u>All manifested and non-manifested phenomena from Reality Sankhya defines as the **volumetric** (3D) vibrations of the substrate and the variation of its eternal dynamism: **harmonic compression-expansion oscillations and transformations of simultaneously-coherent potential states into kinetic phases and sequential processes** ...</u>

This section, and in particular Section 7.4, clearly and unequivocally indicates the ABSOLUTE CONSISTENCY of the axiomatic principles of SANKHYA with TESLA'S ETHER PHYSICS, as well as on the accordance of the insights and full validity of Dr. Vladimir Bychkov's assumptions about the Analogies Between Hydrodynamics and Electrodynamics!

8. Axiomatic transformation of longitudinal interactive counts in the vortex form

What I consider to be one of the most beautiful and inspirational insights and the highest ranges of ancient knowledge given in Sankhya is this: Using a self-similar proportion x (golden cross-section) in a repetitive (iterative) modality creates a ratio (ratio) π . If x is halved and triangulated and the difference is again triangulated and halved (A_{i+1}) then the iterative value of the components of the series: $2^{n*}A_n*10$ strive to the value of the number π :

$$\begin{array}{c|c} i := 0..100, \ A_0 := \frac{x}{2} \\ x = 0.618033988 \\ A_{i+1} := \frac{\sqrt{\left[1 - \sqrt{1 - \left(A_i\right)^2}\right]^2 + \left(A_i\right)^2}}{2} \\ \end{array} \begin{array}{c} n := 1..4 \\ 2 \\ \end{array} \begin{array}{c} 3.128689300804619 \\ 3.138363829113799 \\ 3.14078526072549 \\ 3.141390793700529 \\ \end{array}$$

Applying this principle to the 3D structure of the dynamic substrate PHO, it is clearly seen that <u>even if all</u> <u>interactions are always directed at the line of activity</u> (longitudinal), the relative direction between the two axes changes with the degree of interaction between the two axes. **This has a great significance** because it is obvious that:

8.1 regardless of the rate of interactive counts per cycle - <u>the longitudinal form of interactive stress will follow the</u> <u>circular path (vortex form)</u> and complete the circular cycle just after 10 sequential interactions, <u>under condition</u> <u>that an initial shift is equal to x or x/2</u>,

and still will remain in Aikaantha state (State of "Black Hole" Matter) because the sum of all interactions within the cycle is only added to $\pi/10$.

Simultaneous state ("nuclear" state, state of the nucleus) is established by merging, joining interactive cycles in the same period as one interactive cycle of: $\cos (2\pi/10)$ rad = $\cos (36 \text{ deg}) = 0,809$. Joining the three axes into sets of two - indicates a flux conversion to the mass density and finally the merging of all three sequential axial states into a simultaneously coherent state.

According to me, this process is equivalent to the concept of the transformation of the magnetic field of the straight conductor into the field of the helicoidally coil.

8.2 The fact that $\cos (2\pi/10) = 1/2x = Fi/2 = 1.618/2 = 0.809$ indicates that **the angular momentum is quantified** as the ratio between the linear (longitudinal) and circular (vortex) displacements within the same cyclic interval.

It is important to emphasize that every interactive displacement moves only in straight lines but the 'curvature' arises only due to the compaction of stresses within a cycle due to accelerative compression surround the transmigration path.

By the synthesis of the findings in Sections 7 and 8, it can be seen that the "Phenomenal world" is the result of a series of variations and transformations of simultaneous vibrations into sequential wave packets and vice versa, through the exchange of cyclic states through expansive-compression processes - thus constituting three-dimensional standing waves - i.e. **complex scalar fields** - as energy patterns of all manifested and unmanifested phenomena - or of the "Stable objects - according to the KGE Model [13]", which is explained in more details in the text "Universe - Perpetual Harmonic Oscillator" [11].

The significance of here pronounced can not be overstated. The importance of ancient cognitions and especially richness of sacred geometry is illustrated with the picture below - on which are seen the <u>numbers long known to ancient</u> <u>knowledge and esotericism - but to modern science also. They are present in the geometry of pyramidal and sacral objects also, characterize special natural phenomena (the first and second rainbow angles are equal to the angles of the sides and edges of the Keops pyramid ...), which is a reliable sign that all buildings with a particular geometry, based on the elementary cosmic constants: gold section, number π , natural logarithm base, are PURPOSELY built objects with an appropriate role in the energy processes of Nature and the World (micro, macro and hyper Universe).</u>



9. Coherent, simultaneous "Thaama state" in Sankhya = Scalar field in physics

In many of his statements, and especially in his diary from Colorado Springs [12], Tesla emphasizes the significance of the "POTENTIAL" that he favors in relation to "voltage" (= difference of potential, work) and in his terminology uses the word "pressure" - however, only few pay attention to his words, but every his word is of utmost importance ...

Concept of potential Sankhya explains as a coherent state in which any number of sequential time cycles is stored in one time cycle. Therefore, the potential can be described as a non-released state of stress, stored pressure, and when it is released, the stresses move or accelerate as a kinetic force. Identity or equality is defined by the relation 1+x = 1/x, so the coherent state can be defined in terms of sub-states or "nested" levels of values (nested = fit an object inside a larger one) according to only one value = x (golden mean).

In physics, there is no experimental method of measuring the potential or coherent state of dynamic activity, since each measuring instrument detects only a change in the state of a phenomenon relative to the corresponding reference state.

9.1 As long as there is no detectable difference in relation to the reference (background) condition, instrumental confirmation is not possible. This is the main reason for the inability to detect the dynamic substrate in the coherent state, that is, the base field.

Any component with total freedom will move linearly in reaction to a force but a sea of objects with no freedom whatsoever can only vibrate at the same location in response to an impetus with similar elemental objects around it. This axiomatic statement describes the internal interaction between components that follow laws categorized as self similar. It is limited to three Guna states that can be described scientifically as Thaama or inelastic collision, Sathwa or elastic radiant expansion and Raja as resonant or bound states.

Stating it simply -

- 9.2 Vibrations that remain and add up in the same location (affirmative interference in physics) is <u>coherent</u>, <u>simultaneous Thaama state</u> and it <u>corresponds to the term "standing wave" or "scalar field" in physics</u>. <u>Vibrations that keep changing their location</u> and seem to move away are <u>in radiant, sequential Sathwa state</u> which in physics <u>corresponds to the term "electromagnetic waves"</u>. Vibrations that are a unified combination of these two <u>states</u>, <u>seem to shuttle between them</u>, and cannot be described as Thaama or Sathwa <u>is</u> <u>"transient" Raja state</u>.
- 9.3 The implications of the holographic concept in Sankhya are that **every point in the substratum of space contains all the information in the Universe** as identical nested sets of vibrations in a frozen form. In essence, it means that every possible phenomenological state exists in every point of space as a locally extractable event.

Essentially, this means that every possible phenomenological condition exists at each point of the area as a locally extractable - that is, a recognizable, detectable, ... phenomenon or event. The holographic arrangement and the general intertwines and connection of everything with everything, as modern quantum physics says today, obviously agrees with the ancient cognitions. So - according to the teachings of Sankhya:

9.4 <u>a particular state</u> of interactive phenomenon need not be physically conveyed over a distance but an appropriate set of informative signals can recreate the original phenomenon locally through transmigration of <u>stresses</u> in the connected continuum of space.

This process can be described as the transmission of interactive stresses at the sub quantum level in physics, where the concept of velocity is replaced by an internal phase change or transmission of phase velocity. In addition, as is well known there is no limiting velocity value for stress propagation in a medium. There is no known law in physics that prohibits a truly rigid rod of infinite length from transmitting a movement, induced at one end, to the other instantly. The local 'perpetual oscillators' in space are triggered by quantum level tunneling signals to sustain a three dimensional holographic reality of a particle.

9.5 <u>Electro-magnetic signals hop externally ("outside") across the local oscillators in space, at the velocity of light.</u> Whereas the **phase-changes** in the three modes of stress **tunnel internally** ("within") **INSTANTLY** - across the perpetual oscillators in space <u>as transmigratory phase-velocities that has no limit</u>.

When the components in the space accelerate rapidly they act like a solid rod - but real PHO components can never be directly detected because they do not "radiate" in contrast to non-coherent and non-synchronized substrate components (stress-gaps) such as, for example, photons.

The exposed concept of Sankhya defines the dual nature of Reality and explains its structure as a <u>coherent wave</u> <u>packet identified as a "particle" or an unsynchronized wave ensemble as a "ray or photon"</u> depending on the interactive state of the observer. What's more, the principle of "Three Gune" and the strictly defined principles and laws of sequential (which are detectable) transformations in simultaneous (undetectable) processes, makes it possible to recognize the structure of the NON-MANIFESTED phenomena which, although non-detectable, are still real objects. This is a really tremendous advantage over conventional physics, because it enables us to provide a much clearer insight into the true structure of Nature - in particular of the "Thaamasic" - coherent, simultaneous states that characterize the nucleus, gravity, ..., and - the spiritual aspect of Reality - which evade modern physics even today.

The Sankhya Principles outlined in this section, in particular points 9.1, 9.4 and 9.5 are completely in agreement with Tesla's statements given in 1.3, 1.4, 1.5 and 1.6 that define the basis of his ETHER TECHNOLOGY and represent very solid arguments in support of his ideas and interpretations.

10. Tesla's "Non-Hertzian waves" from the aspect of the "Energy Density Quantization" Model

All research in the field of theoretical physics done in the past century has shown that energy is quantized. This fact offers the possibility of "energy density" quantizing and, in essence, some kind of "space-time" quantization", which is manifested in nature through the existence of "Stable objects" [13] as material agglomerates and/or time cycles.



The EDQ Model is based on strictly scientific data available for the macro and micro segment of Reality and the average energy density of really existing objects (particles/real and waves/virtual). The "Space-Energy" diagram (picture above) shows the layout of all the "Stable Objects" existing in our world. The macro-universe objects are located in the second quadrant, the Micro world in the third quadrant and the fourth quadrant, the Hyper-World region, belongs to the spiritual aspect of Reality.

The diagram clearly points to great harmony along the huge dimensional scale of mathematical quantities-values for different entities. As a curiosity we emphasize that the "Human" is "placed" in the "center" of the material world - at the "border" between the macro and micro universe, just at the point of the golden cross-section of the ordinate and the "black area".

According to the Model postulates given in [13], the "Stable object's" "quantization order" is expressed with the number "k", so for example, for the electron k = 6, for the electron's neutrino is k = 7, for the photon is k = 8, etc. At the quantization level k = 10 there is a "object" whose "waveform" includes a spectrum of frequencies below 10 Hz that corresponds to the mental activities of a human being. Electromagnetic - the so-called. "brain waves" that characterize the appropriate mental states of a human can be registered with an electroencephalogram (EEG) and are classified into seven groups/types of frequencies (α , β , γ , δ , θ , λ , ε waves).

During the initial research and considerations of the Reality structure in all its material (wave-particle) and spiritual aspects, the Energy-space "position" that corresponds to a stable object k=9 has been unfulfilled for a long time.

According to EDQ Model postulates the expected rest mass (real or fictitious, L.de Broglie) of this object is approximately 1.1*10⁻⁴⁹ kg. The corresponding frequency is 14.8 Hz and the associated spectrum is 1 Hz -30 kHz. For a long time I could not find any phenomenon of Reality that is characterized with these parameters until I came across very interesting - and for me very significant - words of Nikola Tesla ...

10.1Tesla's Canadian Patent 142,352 - "Art of Transmitting Electrical Energy through the natural Mediums", "...To give an idea, I would say that the <u>frequency should be smaller than twenty thousand per second, though</u> <u>shorter waves might be practicable. The lowest frequency would appear to be six per second</u>, in which case there will be but one node, at or near the ground-plate, and paradoxical as it may seem, the EFFECT WILL INCREASE WITH THE DISTANCE and will be greatest in a region ..."



<u>The frequency of 20 kHz have a wavelength of 1.5*10⁴ m and for a frequency of 6 Hz wavelength is 5 * 10⁷ m.</u> On the expanded segment of the "Energy-Space" diagram, which cover the electromagnetic spectrum area, it can be clearly seen that the expected values of the EDQM for the quantum level k=9 are almost identical to the frequency range that Tesla recommends for work !!!

<u>This was the main motive for me to Nikola Tesla's "Non-Hertzian Waves" denominate in: "Tesla's Waves"</u> and their corresponding particle-form phenomenon - a quantum carrier- I call "Teslion" [15].

According to the EDQM postulate, Tesla's (Non-Hertzian) waves are a dimensionally richer and more complex energy form than the classical (Hertzian) EM wave. The detectable part of their energy spectrum that we measure in the

form of EM waves - are their dimensionally lower "part", i.e. their "projection" or 3D "shadow" in the detectable and measurable form of Reality.

The expected form of Tesla's Waves – originate from the synthesis of the EDQM concepts and a few generally valid cosmic laws (Walter Russell, P.D.Uspenski, E. Shire H. Hesse ...) and as a result of my observations during a series of a little bit non-standard experiments based on Tesla's technologies [16]. So:

10.2 Tesla's (Scalar) waves basically are LONGITUDINAL electrodynamic vibration and essentially are MULTIDIMENSIONAL oscillation (4D "breathing"), whose projection into "our" (3D "space" + 1D "time") Reality is the most similar to form shown in the picture below:



According to EDQ model postulates, expected form of Tesla waves basically is longitudinal "ethereal" vibration, but in essence – it is multidimensional oscilation (4D "breathing") of quantum field, whose projection in "ours" Reality 3D "space" + 1D 'time") is similar to alternating-ascendingly-descending, cyclical, oposite-helically structure ...

10.3 EDQM confirms the visionary words of Nikola Tesla (1.3): "It is necessary to apply oscillations in which the percentage of radiation energy in the form of Hertzian electromagnetic waves is very small".

<u>His experiments in Colorado Springs and later in "Wardenclyffe Tower</u> - "World Radio Station" with which Nikola Tesla intended to send speech, images and transmit energy wirelessly, <u>Tesla performed generating JUST THAT</u> - <u>NonHertzian electrodynamics vibration form</u> because he was fully aware of the inadequacy of the "Hertzian" "transversal-vector" waves for that purpose (1.2). Unfortunately - even today there are few who truly believe in Tesla's interpretations and respect his instructions given in [12] or patents, interviews ...

On the illustration given in Section 10.1 it is clearly visible that the **Stable object k9**, **"Tesla Waves"**, has a **higher energy-hierarchical position than the "Hertz waves"** (k8), predefined by their "energy density". Physical parameters that characterize the k9 object indicate much more space-time-matter "resolution", completely different qualitative properties and propagation possibilities.

The experimental measurements I performed in my laboratory for Tesla Technologies [16] and the analyzes done in this section, and more specifically in [14 and 15], convinced me to the great agreement between the EDQM expected values and form of Tesla's Waves with Tesla descriptions and with ancient Vedic interpretations [9].

11 Ether

In science, it is an abstract substance, and in alchemy and philosophy are the fifth element (besides water, earth, fire and air) in which all elements of the cosmos are spread. The word "aether" means "shine" in Greek. The aether's existence was widely accepted in science until the early 20th century, when the Michelson-Morley experiment was chosen to "prove" that such fluid does not exist.

Otherwise, such an invisible – fluid like source of universal energy - has long been a hallmark of the world's secrets and mystery schools. In ancient India they spoke about "prana" and "Akasha" and in the Orient, it was known as "chi" or "ki" as most commonly used terms.

11.1 Research of Dr. Nikolai Kozyrev [17]

One of the first scientists who gave evidence about the existence of invisible physical matter related to the term "ether" was the famous Russian astrophysicist, Dr. Nikolay Kozirjev (1908-1983), who showed that such form of energy really exists.

According to exact scientific analyzes, the Sun was supposed to burn long ago, but it continues to emit huge amounts of energy in the form of radiation of a wide spectrum (light, heat, etc.), but also in the form of particles - in the form of "Solar wind", like all the past millions of years. In his doctoral dissertation, one of the most controversial scientists of modern physics dr. Nikolay Kozyrev proved that thermonuclear processes can not provide such an amount of energy. That is, it receives energy from some unknown source. According to Nikolai Kozyrev's interpretation: "The sun is a machine that turns the flow of time into light and heat"!

In his research and looking for this unknown source of energy, he concluded that its source is - the time !? Working on his "Theory of Time" - certainly one of the most fantastic theories of modern astrophysics - Kozyrev also performed some extremely unusual experiments based on research of unconventional energy forms in which he succeeded to receive signals from the Sun and other stars INSTANTLY!

11.1.1 So according to N.Kozyrev: "<u>mysterious energy</u>" that the Sun and other stars "transform into known energy forms: corpuscular radiation, light and heat – that N. Kozyrev managed to detect - spread out with unlimited velocity - INSTANTLY!

Due to the great but limited speed of light propagation, we see the stars only in the past because - as the light (EMW) arrives to us - the star has already moved ... For very distant stars or galaxies it's about thousands or even millions of years. But <u>Kozyrev's special devices reacted at the same moment when his (modified)</u> telescope was directed to the position where the star really was at the moment of observation.

11.2 Contemporary research

The latest scientific breakthroughs involving "dark matter," "dark energy", "virtual particles", "vaccum flux" and "zero-point energy,",..., point to a necessity of the modern science to accept existence of an "etheric", invisible energy medium in the Universe.

Anyhow,

- 11.2.1 Quantum theory predicts, and modern world labs experiments verify, that empty space (the vacuum) contains an enormous residual background energy known as zero-point energy (ZPE).
- 11.2.2 However, there are exact measurements done by modern technologies that prove the existence of an <u>ether</u> such as, for example, experiment Martin Grusenick: "Grusenick Experiment Proves the Existence of the Ether" [19].
- On the other hand
- 11.2.3 <u>there are numerous modern scientific studies, that is, analyzes that point to a certain "inconsistency" in</u> <u>the interpretation of the results of the Michelson-Morley Experiment</u> - which was crucial for the removal of the ether from science.

One of them is eg "Statistics Excerpts", 1993 [20]) which shows that – from the aspect of statistical analysis - the hypothesis: "the speed of light depends on the direction of travel through the ether" can not be rejected - allowing the existence of ether - most strangely - based on the same experiment ...

12 Conclusion:

Bearing in mind great accordance of Nikola Tesla's explication of the "Non-Hertzian waves" phenomenon he was utilize in his researches (1), as well as his interpretations of experimental settings forms and structure of energy processes that took place in the used apparatus with:

- the original Dmitry Mendeleyev interpretations of Nature (2),
- Anatoly F. Ohatrin Theory of microlepton fields (3)
- the original version of Maxwell's theory (4, 5)
- Vladimir LJ. Bychkov equations of hydrodynamics analogous to the macroscopic electrodynamics (6)
- the axiomatic principles of Sankhya (7, 8, 9)
- EDQM postulates (10)
- modern astrophysical research (11)

it is absolutely indisputable that Tesla's "non-Hertzian" waves exist. Their parameters and properties can be determined by the synthesis of insights outlined in Sections 1-11 and, in particular, according to the expected values of the EDQM for the "Stable Object" of the quantization level k=9, named "Teslion", which makes the future of TESLA'S ETHER TECHNOLOGIES much more certain!

"Let the future tell the truth and evaluate each one according to his work and accomplishments. The present is theirs; the future, for which I really worked, is mine." Nikola Tesla



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