Science and Spirituality - The Relationship of Light, Ether and Akasha

This text is a short synopsis of the texts [1-5] that I presented at the conference: "Synthesis of Science, Spirituality, Art and Culture for World Peace, September 30, 2023 Anton-Graff-Strasse 75, 8400 Winterthur."

If we look around us at the world we live in - looking "outward" we will see planets, our sun and millions of other stars, galaxies, clusters of galaxies ... In our nearest surroundings we will see houses, trees, seas, mountains etc... If we - in our minds – look "inward", to the opposite side, in the direction of "smallness", toward the infinitely small world, we would see the tissues of our bodies, for example, then molecules, atoms, nuclear particles, protons, electrons...

However - all these phenomena - from the smallest to the largest objects are part of one and the same reality and that's why there would have to be something - some common connection, some rule or law that would be identical in all aspects of reality – from macro to micro.

I thought about this for a long time - and then - one day, it occurred to me that it could be energy density of object. Those thoughts and subsequent analyzes resulted later in the Quantized Energy Density Model¹.

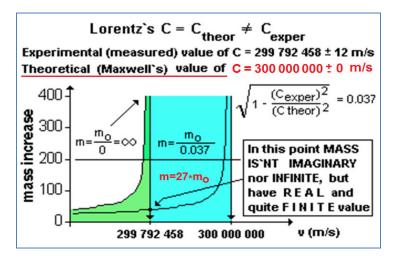
But - at the very beginning I saw that there is a limit in the macro structure of our world - the so-called "Luxon wall", velocity of light, which corpuscular objects with real rest mass cannot reach ...

But – I found a solution. Here's how².

The modern interpretation of Maxwell's constant beta $(\beta = sqrt(1/\epsilon_0\mu_0))$ that is based on the values of permittivity (ϵ_0) and permeability (μ_0) of the vacuum is equated with the measured value of the speed of light in the vacuum (c). And then the value of electrical permittivity $(\epsilon_0, epsilon zero)$ was calculated from that relationship - and then the initial value of Coulomb's constant "K" was corrected and calculated on the basis of this (new) ϵ_0 value: K=1/4 $\pi\epsilon_0$ so – in essence - Coulomb's law³ was corrected - which is extremely illogical - because the value of the constant in the law that is precisely defined and valid only for stationary charges to be determined on the basis of the moving object - photon speed in free space !

Using the empirical values of that time, J.C. Maxwell himself obtained the value of the beta coefficient of about 310,000 km/sec as a theoretical value of some electromagnetic radiation speed in vacuum.

However, if we return to the original Maxwell interpretation of his constant beta whose theoretical value derives from the structure of the vacuum, then value of magnetic permeability of the vacuum have the value which follows from the International System of Units and the <u>value of electrical permittivity that is not based on measured speed of light, but is obtained from the original value of the constant K in Coulomb's law, than we get <u>real theoretical value of Maxwell's constant beta</u> that is exactly 300,000 km/s.</u>



This quantitatively small change in the definition of Maxwell's constant has extremely large consequences.

Namely, this constant, which represents the relationship between electrical and magnetic phenomena and which in dimensional terms represents speed - is actually the real theoretical value of the speed of EM phenomena, which is not and does not have to be identical to the measured speed of light.

If we, in accordance with that, enter the Lorentz coefficient - as the basis of the theory of relativity - the theoretical value of the highest possible speed in nature interpreted in this way and the really measured photon speed in free space c -

we get a huge qualitative difference because now the mass of any phenomenon that moves at the speed of light is no longer infinite, but only 27 times greater than its rest mass !!!

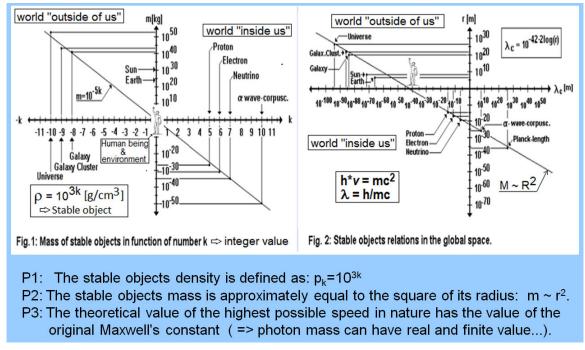
¹ Energy Density Quantization model, http://users.beotel.net/~gmarjanovic/

² Speed of light and Maxwell's constant, http://users.beotel.net/~gmarjanovic/G_Rel_Relativnost.pdf

³ Coulomb's law, https://en.wikipedia.org/wiki/Coulomb%27s law

Unbelievable but true. So a photon - which science is now forced to define as a massless particle can have a real and finite value of mass - so de Broglie's relation ($h^*v = mc^2$) takes on an absolutely rational meaning and now particle and wave phenomena can be considered quite equally.

In the first preliminary considerations, I calculated the density of several objects from the macro world and a few from the micro world. For the sake of simplicity, I calculated the mechanical density, but due to the equivalence of mass and energy, that mechanical density is completely correlative with the energy density.



Pic.1, **Energy density** as the connection between the world outside us, our closest environment and the world inside us.

What I got as a result was an exceptional regularity (all objects are on - or immediately next to the line: $m\sim10^{-5.2k}$ (k is an integer, the "quantization level") and quite obvious "quantization" ($\rho_k=10^{3k}$) of objects expressed both graphically and mathematically. Based on deBroglie's relation, I presented the same law in the "energy-space diagram" (Fig.2 on Pic.1), where the ordinate is the real or fictitious diameter of the object and the abscissa is the energy expressed by deBroglie's wavelength.

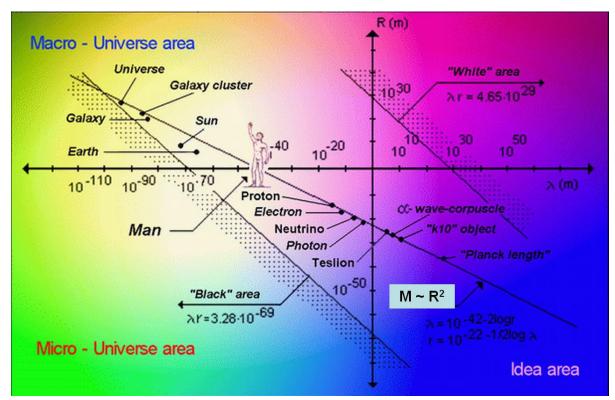
The law which was clearly demonstrated, and which is identical for both macro and micro structure, was very simple. It has been shown that all objects that exist permanently exist in some "resonant" state where the amount of energy and the part of space that fills that energy is in a precisely determined relationship where the mass of some "Stable object" is always approximately proportional to the square of its radius (m~r²).

For example There are hundreds of particles in the micro world, but their life is very short (micro/nano/pico seconds) and only seven of them (proton, neutron, electron, three neutrino particles and photon) are stable and exist permanently building this world. In the macro structure of this reality, the same regularity is noticeable - all stars, galaxies, clusters of galaxies have very close average values. It is incredible but true that all suns in cosmos have a mass of the order of 10³⁰-10³¹ kg, just like "our" Sun...

Subsequent analyzes for more objects and with more precise data from the Institute of Physics, the Astronomical Observatory and other scientific institutions confirmed the observed laws, and it was clearly shown that all phenomena of the macro world are in the second quadrant, objects from the domain of the micro world are situated in the third, while man is located right in the middle between the macro and micro segments. The area of the fourth quadrant, which obviously belonged to some "sub-photonic" phenomena, that is to objects of extremely low frequencies, looked more than interesting...

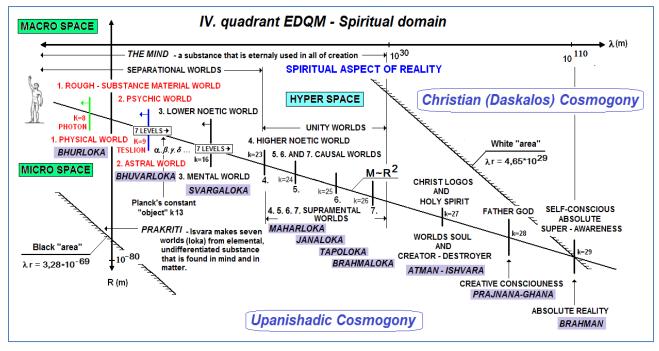
This area belongs to objects that are more subtle than photons, the last measurable-detectable phenomenon of today's science since quarks, dark mass and dark energy are just hypothetical phenomena.

When it comes to objects of a wave nature, what is known to science in this area of few Hz and lower are the so-called the frequencies of brain waves that our brain emits in certain states of consciousness. And that was the first argument that pointed to the possibility that the area of the 4th quadrant belongs to the spiritual aspect of reality. Considering that this area also includes a spectrum of much lower frequencies that escapes classical scientific thought and experience, I looked for possible explanations in theosophical and philosophical teachings.



Pic.2, Energy-space diagram

In the article "States of Consciousness in Esoteric Practice" [6], I found a parallel presentation of Christian, Daskalos, cosmogony and Upanishadic cosmogony, where the spiritual aspect of reality is shown in great detail in all its segments. The analysis showed that these segments are completely identical, although described by different words, but the corresponding levels had a completely identical structure. Based on that, I map that hierarchy of spiritual phenomena into my diagram. To my great surprise, the last phenomenon of the spiritual world - the physical world according to the Upanishads or the material world according to the Christian cosmogony finished at the position of the quantum level k+8 - which belongs to the photon - a particle/wave that represents the last brick of the material world. That fact was a strong motive for me to consider all the phenomena of this spiritual world from the 4th Quadrant as equally valid as those from the physical macro and micro segment of the Same Reality.



Pic.3, IV quadrant of "Energy-space diagram"

| Theosophy Plane / dimension | Upanishadic cosmogony Loka | | Christian (Daskalos') cosmogony Heaven | | Quantization level | |
|--------------------------------|----------------------------------|--------------------|---|---|------------------------------------|--|
| 7 - Auric /Atmic | 7 - Brahmaloka / Satyaloka | | 7th, 6th and 5th Heaven | Worlds of Oneness. | K+26 Spirit (Atman) | |
| 6 - Alayic | 6 - Tapaloka | Supramental worlds | Causal worlds | These higher heavens contain purified Souls and perfected | k+25 | |
| 5 - Mahatic | 5 - Janaloka | | | | k+24 | |
| 4 - Fohatic | 4 - Maharloka | | 4th Heaven The Higher Noetic world | Spirits, former human beings after self-realization. | K+23 | |
| 3 - Jivic | 3 - Svarloka | Mental world | 3rd Heaven The Lower Noetic world | Worlds of Separateness are the poorest kind of worlds, | K+16 - K+22 Soul=k+16 (Jiva) | |
| 2 - Astral | 2 - Bhuvarloka | Astral world | 2nd Heaven The Psychic world | even as they give us the greatest heaven and the greatest hell. | K+9 - K+15 Astral | |
| 1 - Prakritic | 1 - B <mark>h</mark> urloka | Physical world | 1st Heaven The gross Material world | They include the gross physical world, psychic and noetic worlds. These are the worlds of forms, images, and impressions. They are called Worlds of Separation because in them a person sees himself as a separate entity that receives impressions and interprets them. That self is something other than our true self. | K <=+8 Physical body | |

Pic.4, Levels of different forms of existence

Further research in this area enabled me more detailed insights into the structure and contents of certain segments of this spiritual aspect of Absolute Reality. According to various philosophical and theosophical teachings this "levels of different forms of existence", named Planes, "Heavens" (Daskalos) or "Lokas" (Upanishads) actually represent appropriate levels of consciousness. In both cosmogonies different terminology was used for describing certain levels of existence or consciousness levels, but their contents were very similar. At the same time, the postulates of the Model enabled us a direct connection between them via the corresponding quantum levels, which give us the corresponding physical parameters of

official science: mass, radius, frequency etc. Although **these parameters are mostly virtual**⁴, they still enable us to compare them with the physical world known to science.

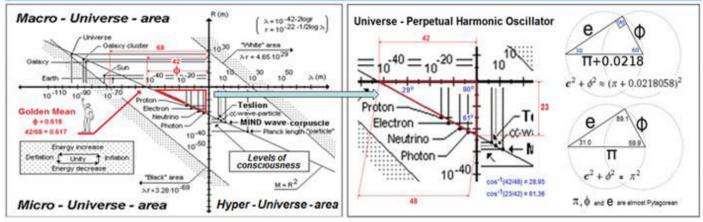
| Worlds of Existence | Quantization level (k) | Energy layers of being that surround the soul | | | | Vital | |
|--|---------------------------|--|---|--|----------------------------|---|--|
| | | Three body concept | Five "Koshas" (Sheats) | Elementary quantum | Medium | principle (energy) | |
| Supramental worlds 4,5,6, and 7th Lokas | k+23 - k+26 | Non-dual states of pure Love, Cause, Principle, Law, and Idea of Creation in their archetypal state. | | Mulaprakrithi | Akasha | | |
| The Mental /Causal/ world 3. Loka | k+16 - k+22 | Anandamaya Kosha (The causal body, the body of bliss made of the latent impressions of love and other forms of happiness.) | | (k+10) | | Fohat | |
| Astral world 2. Loka | k+9 - k+15 | Sukshma Sharira | Linga Sharira /Astral (Etheric) Double/ (Pranamaya Kosha - energy body made of prana Manomaya Kosha - mental body made of thoughts Vijnamaya Kosha - body of wisdom made of knowledge and intelligence) | Teslion (k+9) /Etheron, Microlepton/ | Ether (Astral light) | Astral Prana light) El-Mag. phenomena, | |
| Physical world 1. Loka | k <= +8 | Sthula Sharira | Annamaya Kosha (physical body made of food) | Photon (k+8) | Vacuum | | |

Pic.5, Energy levels of the being

correlation of its structure at various levels of existence with the corresponding energy forms or vital principles. In short - the established correlations allow us to join physical parameters to the phenomena from spiritual area which are completely inaccessible to science and thus make comparisons with the real material aspect of Reality.

The part related to the energy levels of the being (Pic.5) turned out to be particularly interesting due to the possibility of

 $^{^{-}}$ phenomena of the "mental-causal level" and higher (k >15) are in "non-manifested" form.



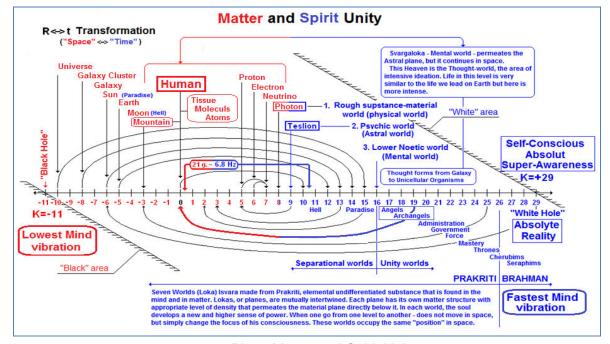
Pic.6, Cosmic matrix of creation

As the ancient peoples knew, everything created by the God or Nature is characterized by symmetry, beauty and simplicity – and is described by golden mean. The fact that man is placed in a special position (Pic.6, left) - at the intersection of the evolutive-involutive line and the abscissa, exactly in the position of the golden mean between the "black area" and the ordinate - points to the very important role of man in the Manifestation of the Creator.

What is really fascinating is the "distribution" of material-spiritual phenomena along the evolutive-involutive line, which with the ordinate (space) and abscissa (energy) forms the "Pythagorean triangle" so that the entire material-spiritual manifestation has completely IDENTICAL matrix of growth and development, evolution and involution characterized by three elementary cosmic constants: the number Pi, the golden ratio and the base of the natural logarithm "unified" in the "Pythagorean triangle", so three transcendental numbers confined into one finite form (Pic.6, right).

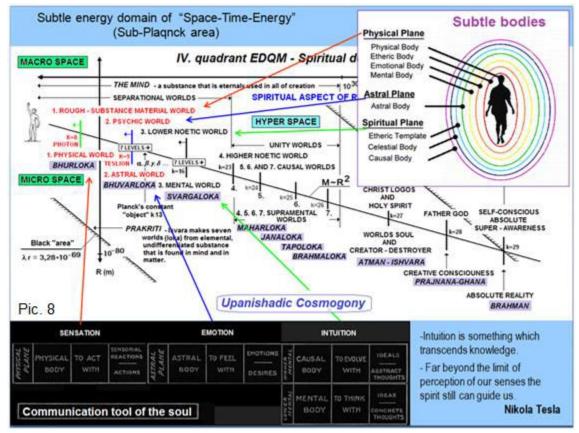
Ancient cultures recognized that certain patterns or geometric shapes are repeated throughout nature and are expressed by figures of sacred geometry, Vesica Pisces and Platonic solid as the basic building matrix of the world. Plato, ancient Greek philosopher, associated each of the four classical elements: earth, air, water, and fire with a regular solid. Earth was associated with the cube, air with the octahedron, water with the icosahedron, and fire with the tetrahedron. Aristotle added a fifth element, "ether" and postulated that the heavens were made of this element...

This fact - that the entire structure of Reality is based on an identical structural matrix based on the same elementary cosmic constants, as indicated by QEDM with its graphic-mathematical structure - is also expressed by a famous message of Hermes Trismegistus, Lord of Mysteries, Keeper of Records, Mighty King, Thoth the Atlantean: "As above, so below, as within, so without, as in the universe, so in the soul".

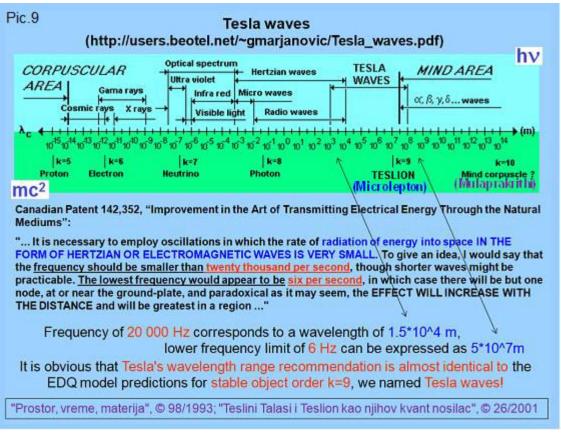


Pic.7, Matter and Spirit Unity

Picture 7 shows a slightly more detailed presentation of the matter and spirit unity, where it is clearly seen that material and spiritual phenomena represent a mirror image of each other, and that each material phenomenon has its own complementary spiritual form, so that a mutual comparison offers us a much clearer picture of the structure and role of both - material known to science and spiritual known to ancient teachings and various theosophical and philosophical schools (For a better view of fig.7, use the zoom option).



What's more - the combination of deep esoteric knowledge and the cosmogonies presented here with the QEDM offer us concrete insights into the structure of Reality to the finest details - the hierarchy of spiritual phenomena and the pattern of their connection. Concretely established correlations clearly indicate a direct connection of esoteric phenomena such as "soul vehicles" (Pic.8) as communication tools on the appropriate levels of existence such as e.g. physical senses on the material level, emotions on the astral level or intuition on the mental-causal level.



If we separate and magnify a segment of the electromagnetic spectrum from Absolute Reality (Pic.2) we can see (Pic.9) that each maximum particle energy of the micro-segment in the sense of mc² corresponds to a border area of a qualitatively different form of electromagnetic waves in the sense of photon energy (hv) - from radio waves to cosmic rays. The exception to the established correlations was the area of frequencies below 30 kilohertz to several hertz for which I could not find anything until the moment when I came to Nikola Tesla's patent where he says that he "does not work with Hertzian waves" whose quantum carrier is a photon...

Photon is on the quantum level k+8 - but Tesla said that he works with different waves and recommends to use waves from 20 thousand hertz to 6 hertz. This was exactly the area of the Stable Object k+9 which I - considering this Tesla's statement - called "Teslion" - and the associated area of energy vibrations - Tesla's waves. This was the key motive for me to become more interested in the legacy of Nikola Tesla and his ether technology, that is, the technology of scalar phenomena.

Comparation of phusical and subtle energy phenomena

=< K8 ~ 1. Bhurloka, The Physical world 1st Heaven, Gross Material World

(Photon / Quantum vacuum)

Matter

Spirit

K9 – K15 ~ 2. Bhuvarloka; Astral world 2nd Heaven; Psychic World (Teslion? / Ether?)

K16 – K22 ~ 3. Svarloka, The Mental world 3rd Heaven, Lower mental world (Mulaprakrithi? / Akasha?) Tesla waves area, quantum level k+9 acc. To QEDM, is of extremely importance because this is the part of Absolute Reality where matter and spirit meet, and where the transition from the physical to the spiritual world that takes place between the first and second heaven according to the Christian cosmogony, that is, between the first and second loka according to the Upanishadic cosmogony.

The key phenomenon of "Matter/Spirit Transition Zone" is the Stable Object k+9, I named Teslion which other researchers call microlepton (Dr. A.F. Okhatrin) or "Etheron" (Prof. I.L. Popescu), etc. For quantization level position (energy density) k+9 the Quantized Energy Densities Model offers the appropriate parameters: expected mass values for the particle form and wavelengths for the wave form [2].

Based on Tesla's recommendations (Patent No. 142352) QEDM offers us a phenomenon Stable object k=+9 named "Teslion" whose mass is 10^{-47} - 10^{-49} kg, diameter ~ $5*10^{-25}$ m and energy density of the order of 10^{27} g/cm³. Its wave form, "Tesla waves", have Compton wavelength of λ_c =2*10⁷ [m], i.e. frequency of 14.8 Hz.

In his research, Nikola Tesla determined the theoretical value of the density of the etheric fluid based on analogies between light and sound because - for Tesla, "*light is sound in the ether*". He experimentally measured the density of ether fluid and obtained a value that is very close to his theoretical predictions [2].

Through a mathematical analysis of the density of the ether performed by analogy with the speed of sound waves in air and the ratio of elasticity and density of air and ether as a medium, Tesla obtained the theoretical value of the density of the ether:

 $r_{\text{eth,Tesla,theor}} = 1.9*10^{-27} \, \text{g/cm}^3$ that acc. QEDM correspond to quantum level k-9 that is inverse value of Stable object k+9.

According to the experimental measurements of Nikola Tesla, the density of ethereal gaseous medium is: $r_{exp,Tesla} = 2*10^{-26}$ g/cm³ - which is very close to his theoretical prediction.

Specifically, according to QEDM, Tesla's "gaseous medium", k=-9, whose energy density corresponds to the density of galactic clusters is the "ETHER FLUID" made up of ELEMENTARY QUANTUMS OF ETHER, k=+9 - "quantum carrier" of Tesla Waves – longitudinal, compressive-expansive disturbances of the etheric fluid (k-9).

The value of the density of ether fluid which Tesla determined theoretically and confirmed experimentally corresponds to the density of galactic clusters, which are located at the k-9 level. The inversely-opposite values of the quantum levels k+9 and k-9 clearly indicate that the etheric fluid (k-9), Tesla's gaseous medium, is composed of elementary quanta of ether (k+9), which is a confirmation of Tesla's interpretations according to which he do not use Hertzian waves (EM field/photon – transversal vectorial EM waves) but "waves of different kind" - his "Non-Hertzian" waves that are scalar waves, that is "longitudinal, compression-expansion disturbances of the etheric fluid" 5 whose elementary quantum phenomenon is k+9 and not transversally vector vibrations of the electric and magnetic field whose quantum carrier is the photon (k+8). So, regarding QEDM, Tesla's statements really make sense.

⁵ Tesla Sees Evidence Radio and Light Are Sound, https://www.rastko.rs/rastko/delo/10883

Since the electromagnetic field meets all the criteria of both matter and substance definitions and the "medium" is the substance that carries the wave, it can be said that electromagnetic fields are the medium for EM waves. As is commonly known, the quantum carrier of EM waves is a photon so we can establish the following relationships and their hierarchy:

EMW quantum carrier (Scientific definition) => photon; QEDM -> k+8
EMW medium (Scientific definition) => EM field; QEDM -> k-8
Elementary quantum of ether (Tesla's recommendations, Can. Patent No. 142352) => QEDM -> k+9
Ether fluid, (Tesla's "gaseous medium", theoretical/experimental) => QEDM -> k-9

The next phenomenon in the direction of higher levels of awareness and subtlety is the k+10 phenomenon. According to information given in the book "Secret of Sankhya" [7], the most fundamental phenomenon of Reality, the Root of Nature or the root of substance is Mulaprakrithi. It is the Precosmic root-substance, main cause of material nature, the original root of matter that makes a initial homogeneous substrate from which the cosmos was created.

According to Vedic axiomatic principles [7], the mass of Mulaprakrithi is $1.3*10^{-51}$ kg which, acc. to the EDQM postulates, corresponds to a stable object: k = (log 1.34e-51)/(-5.2) = +9.78 => k = +10

So it is obvious that Mulaprakrithi mass corresponds to the "Stable Object" k+10 of QEDM.

On the other hand, the Sanskrit term Akasha [2] arise from the root "kas" which means "to be" with the generic meaning of "open space, emptiness". In the classic Sanskrit, this word may express the concept of "heaven; the atmosphere and essential fluid" that permeates the cosmos. So - the term "akasha" perfectly corresponds to the phenomenon at the quantum level k=-10 – which is "Universe" (QEDM) and which is the inverse form of the object k+10 - Mulaprakrithi. So, by identical analogy of EM field-photon and Ether-Teslion, we can say that Mulaprakrithi could be an elementary quantum of the subtle fluid Akasha:

Mulaprakrithi, root of matter (Sankhya axiomatic principle) => k+10 elementary quantum Akasha, open space, emptiness (Sanskrit: atmosphere and essential fluid) => k-10 Subtle "fluid"

So it is quite clear that ether and akasha are not the same phenomenons and are not synonyms as many translators of the Vedic texts believe. Akasha is an ether's proto element, a phenomenon that is more subtle than ether and represents an even more primary substance or an forerunner of ether [2]!

The confusion most likely arose because there is no word ether in Sanskrit - which was introduced by the ancient Greeks as a term for "flaming air in which the stars float and the gods live". But now it is clear that ether is the crudest form of akasha, as claimed by the famous theosophist Helena Petrovna Blavacka, that is, that akasha is the proto-element or precursor of ether. By the same analogy etheric fluid is a subtler form of EM field, Teslion is more subtle than photon and Mulaprakrithi is a subtler phenomenon than Teslion.

According to the previously established analogy and the hierarchy of quantum levels to which they belong ether is a proto element of electromagnetic fields, a phenomenon that is more primary substance, more subtle form or forerunner of EM field - so we can say that **EM field** ("medium") **is coarser form of ether.**

By the same analogy and established hierarchy we can say that "Mulaprakrithi" is the forerunner of the "Stable object k+9", I named "Teslion" that is a quantum carrier of Tesla waves - longitudinal disturbance in the ether medium.

Quantum carrier: k+8, Foton << k+9, Teslion << k+10, Mulaprakrithi
Fluid (medium): k-8, EM field k-9, Ether k-10, Akasha

From everything that has been said here, it is quite clear that the interactivity of the "elementary quantum" and the propagating medium (of which it is the basic element) is proportional to the ratio of their (energy) densities, i.e. the difference in the quantization level hierarchy: Vacuum -photon; Ether-Teslion; Akasha –Mulaprakrithi [3].

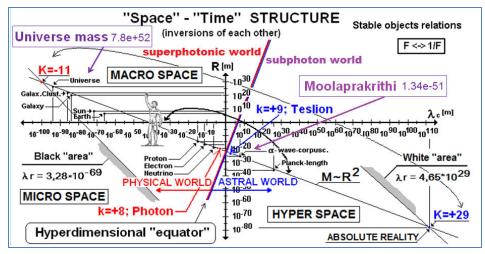
Therefore, it is quite logical that the last phenomenon of the material world - the photon ("*vrithi*" in Sankhya [7]), the "Stable object" k+8, has the greatest limits so - photons propagation speed is the fastest velocity in material domain but it is much lower than the speed of phenomena in the "sub-photon" part of Reality. Maximum value of the EM wave (Hertzian wave) speed (speed of light) is in vacuum (k=-8), the "rarest" domain of ponderable (detectable, measurable) Reality and decreases with the density of the ponderable medium (glass, resin …). For example for the Earth conglomerate, the EMW propagation speed 7 is 7.8 times lower than the speed of light in vacuum.

⁷ C=sgrt($1/\epsilon\mu$); ϵ - electrical permittivity, μ - magnetic permeability.

⁶ https://physics.stackexchange.com/questions/441466/

The "boundary phenomenon" of the matter-spirit area – Teslion, Stable object k+9, is a phenomenon more subtle than photon and his propagation speed have to be a highest in the subtlest structure of Ether fluid (k=-9) - which, according to the QEDM postulates, have to be notably above the velocity of light. The latest scientific research⁸ reported the discovery of unusual "non-local field effects" and demonstrated that phenomena connected with the 5th Force - which can be interpreted as a manifestation of torsion fields - propagate with the velocity of the order of 10⁹*c. The fact that torsion waves belong to higher levels of quantization implies that they belong to higher levels of consciousness, which was experimentally confirmed by numerous researches that confirmed that "subtle phenomena" of "non-electromagnetic" and "non-gravitational" nature possess elementary consciousness⁹ ... which is logical because they belong to the 2nd Plane.

The first phenomenon of the Mental world (3rd Plane), observed in the direction of involution (increasing level of consciousness), Stable object k+10, Mulaprakrithi, that is undifferentiated protocosmic primordial substance, spiritual essence of matter, an elementary quantum of Akasha (k=-10), ether's proto element, which obviously belongs to the higher levels of consciousness and more subtle aspect of Reality than ether - so it should not have any space-time limitations or "communicativeness" in the sense of the 4 interactions known to science (EM, weak, strong gravitational) but would have the possibility of "non-inertial, non-gravitational"..., movement at unlimited speed, including infinite value. According to information in Sankhya [7] such a phenomenon exists and is called "Instantaneous transmigration of stress...".



The numerical values of the physical parameters for objects from spiritual domain indicate the perfect symmetry of the material and spiritual elements, super and sub photon world - even when it comes to the extreme values of the ultimate phenomena: Universe (10+52 kg) <-> Root of substance (10-51 kg) ... which also cannot be a coincidence...

The part that completely eludes science are the functions and qualities inherent in living beings and some life-giving energy that connects us to the entire universe and is the basic force behind our physical, mental and spiritual well-being. According to the Upanishadic teachings, the elementary vital principle or life force that fills reality at all levels of existence is Prana - a hypothetical force to which the functions and qualities peculiar to living things are sometimes ascribed. This life-giving energy is what connects us to the entire universe, and is the underlying force behind our physical, mental, and spiritual well-being. Prana (Wiki) is the Sanskrit word for "breath", "life force", or "vital principle" which permeates reality on all levels including inanimate objects. According to Hindu teachings, it originates from the Sun and connects the elements.

The immortal living substance that is characterized by individuality is Jiva, which is the Sanskrit word for individual soul. Jiva (Wiki) is a living being or any entity permeated with a life force in Hinduism. The word itself originates from the Sanskrit verb-root $j\bar{i}v$, which translates as 'to breathe' or 'to live'. In the Vedanta philosophy of Hinduism, "Jiva" almost exclusively means the reincarnating soul.

The Bhagavad Gita 2.20, Upanishads, describe the jiva:

- "The soul is unborn and eternal, everlasting and primeval. It is not slain by the slaying of the body." So, the closest translation of the Sanskrit term *Jiva* would be "immortal living substance" or "individual soul".

According to the theosophy of H. P. Blavatsky ["Transactions of the Blavatsky Lodge" p. 71] man is an "energetically multi-layered" being, so that in addition to the physical, there is also a more subtle, invisible, astral body (Linga Sharira in Sanskrit) which is the "blueprint", "framework" and "mould" upon and around which the outer shell of our physical body is built.

So - the physical body is (only) the "hardware" (tool, machine, vehicle) for the astral body, and the astral body is the vehicle for Prana. This "astral double" of ours phusical body is actually an energy body

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⁸ Torsion Field Mechanics: Verification of Non-local Field Effects, https://www.researchgate.net/publication/282862907

⁹ dr. Gennady Shipov, dr. Anatoly Akimov, dr. Klaus Volkamer, dr. Nikolaj Kozyrev, dr. Anatolij Ohatrin ...

because it is the vehicle through which prana (life energy) flows to the physical body - of course, transformed by the structure of the astral body to the appropriate level and form that the material body can receive without being damaged or even disintegrated ...

By the same principle (hierarchy), the causal body is the "hardware" (vehicle) for the Jiva - which actually is the real doer and enjoyer and which animates the "more manifested" astral body, which is the even rougher vehicle of the Soul for its final embodiment in the physical body - the crudest form of beings existence.

Based on the mentioned quotes, we can establish a hierarchy of sub-photon phenomena according to their subtlety: Prana is the vital principle appropriate to the astral level, that is the astral body, while Jiva is correlative to the causal level, that is the causal body:

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Physical body - > Astral body / Prana - > Causal body / Jiva (individual soul)
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So - in the simplest terms - prana is a hierarchically lower, that is more physical form of Jiva. On p. 176 of "The Key to Theosophy" H. P. Blavatsky explains that "Prana is, strictly speaking ... Jiva 's lower or rather (in its effects) more physical, because manifesting, aspect."

From here follows the analogy of the phenomenon of Prana with the phenomenon k+9, called "Teslion" (acc. to QEDM), and the phenomenon of Jiva with the phenomenon k+10 (acc. To QEDM) i.e. "Mulaprakrithi" (acc. to the Sankhya [7]). From the aspect of the structure of these phenomena and already established correlations of prana - astral body, and Jiva - Causal body, connection that is also logical is:

```
Prana -> correlative -> Ether and Jiva -> correlative -> Akasha.
```

In the same sense, it can be said that the <u>causal body</u> <u>develops through the idea: "I am the Jiva"</u> <u>and</u> <u>falls off when this idea weakens</u> in intensity <u>or is annihilated in the union of the real "I" - with Brahman</u>, while <u>Prana</u> <u>is the vital principle that corresponds to the coarser (more manifested)</u> - **astral level**, so it is obvious that:

```
Prana -> correlative -> astral body and Jiva -> correlative -> causal body
```

And finaly we can establish correlations in terms of: <u>Level of existence / medium-fluid / elementary quantum / vital principle</u> for the 2nd loka, Astral world, and for 3rd loka, Mental world:

```
Astral world / Ether / Teslion / Prana -> Mental world / Akasha / Mulaprkrithi / Jiva
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As an illustration of the advantages of comparing material and spiritual phenomena we give the following example.

Wanting to check the popular belief that the soul leaves the body after death, the American doctor MacDougall performed the following experiment¹¹. He placed the hospital bed with patients near the end of their life - on the very sensitive scales and determined that the mean weight loss after the death of the patient was 21 grams. This value is widely known as MacDougall's soul value. Our analysis shows that this value of 21 grams corresponds to the quantum level k+9 to k+10 which belongs to the area of the 2nd heaven, or to the Astral level.

```
MacDougall: 21 g; QEDM => m \sim r^2 => r = 0.145 m /R->T/ t = 0.145 s => f = 1/0.145 = 6.8 Hz (rez.fr. Kheops...) => k_{McD\_soul,invl} = 9.4.
```

On the other hand, according to the Upanishadic data on the size of the Jiva¹², the individual soul belongs to a much more subtle level -> k+16, which is the 3rd heaven or the mental causal level, which is the world of non-manifested phenomena.

```
Upanishad: hair \sim 0.03 mm = 3e-5 m => 3e-5/100=3e-7; 3e-7/100 => Jiva \sim 3e-9 m, QEDM => m\simr<sup>2</sup> => m\sim9e-18 kg; => k<sub>Jiva</sub>=+3.28; k<sub>jiva,inv</sub>=16 (m=6.3e-84, l=3.5e41, f=8.5e-34) Regarding QEDM:
```

K9 – K15 ~ Bhuvarloka, Astral world (Upanish.) or 2nd Heaven, Psychic world (Daskalos)
K16 – k22 ~ Svargaloka, Mental world (Upanish.) or 3rd Heaven, Lower Noetic world (Daskalos)

http://userhome.brooklyn.cuny.edu/anthro/jbeatty/Scotia/issue78/issue78a.html

¹⁰ Ether & Akasha Hierarchy: https://blavatskytheosophy.com/prana-tiredness-and-sleep/

 $^{^{}m 11}$ Dr. MacDougall, The weight of the soul,

¹² Śvetāśvatara Upaniṣad (5.9) / https://en.wikipedia.org/wiki/Shvetashvatara_Upanishad: "If the tip of the hair were to be divided in to one hundred parts and each part was divided into 100 more parts, that would be the dimension of the Jiva (soul)".

It follows that MacDougal's measurements do not indicate a change in weight due to the departure of the soul (Jiva) from the body, but rather the departure of the Astral Double, which is a more physical and more manifesting phenomenon than Jiva. In other words, the same effect could be registered if the subject does not die but only goes on a shorter astral journey - which is a common practice of those who have mastered states of deep meditation.

In order to make extremely precise measurements and verify the aforementioned assumption, my colleagues and I are currently prepare the appropriate technique, using modern electronic technology, in order to eliminate all possible disturbances and possible influences (air flow, temperature...) The results of the measurements - whatever they may be - will certainly help in better understanding of this "sub-photonic", non-electromagnetic, area which is currently quite inaccessible to official science ... For now.

From previous analysis it can be seen another very important thing. Analogous to what has already been said - that the term "akasha" is often translated as "ether", the soul (jiva - individual soul) is explained as a entangled bunch of EM fields which is acceptable just as "extremely strong transformation" and a kind of "shadow" of a real (subtle-) energy form for which modern science does not have an appropriate term.

As we have already shown ether and akasha are structurally quite different substrates – ether belong to the astral level, that is to the 2nd Plan (Bhuvarloka /Upanishads/ or 2nd Heaven, Psychic world /Daskalos/) and akasha to the 3rd Plane (Svargaloka, Mental world /Upanishsds/ or 3rd Heaven, Lower Noetic world /Daskalos/).

Jiva (individual soul) belong to the 3rd Plane and it can not be explained as a complex of electromagnetic vibrations which belong to the 1st Plane.

Namely, pic. 5 shows the energy levels of beings, where it is clearly visible that electromagnetic phenomena belong to the 1st Loka, i.e. to the Physical world which consists of (super-photonic) phenomena of the quantum level k=<+8. Astral world includes the levels of quantization k+9 ~ k+15. Mentally-causal world implies levels of quantization k+16 ~ k22. As it is shown in pic.5, to each of the Planes of existence (Lokas, Heavens) belong the corresponding energy forms or vital principles (pic.5, the last column on the right). The elementary quantum of EM interaction, the photon, belongs to the quantum level k+8. Jiva, the vital principle, belongs to quantum level k+16 which means that the jiva phenomenon is subtler than photon by an amazing 8 quantum levels. So - to connect the structure of Jiva (k+16) with EM phenomenology (k+8) would be analogous to explaining the structure of human being (k0) with tissues made of bunch of galaxies (k-8)?

The problem, of course, is the lack of appropriate terms for phenomena completely unknown to our experience, so that "light" - as a very often used term to describe the some "prime-substrate" (everything is light ...) can only be accepted as the lowest form of "Fohat" – that is of "primordial light", primordial cosmic substance, and the "(most) primitive" product of its differentiation into appropriate forms on different Planes of existence in the manifested universe.

Fohat¹³ can been considered as the universal energy which includes all the forces of nature. It is the energizing force of the universe. It is that which links spirit and matter in the first stages of differentiation. In the manifested stages of the universe, fohat is the force that causes the differentiation from the one to the many, while at the same time, it is the power that unites and combines the various units and atoms of the cosmos. It is possible to picture Fohat on a wide scale as a dynamic pulsating energy, not unlike electricity, but not identified with it. Unlike electricity, Fohat has rather been seen as some vast and cosmic intelligent potentiality, force, or power imbued with purpose that operates on every "level" of cosmos existence and connects each plane to the other; spirit to mind and mind to matter. In such a sense Fohat might be described as the "law-giver" of the universe.

The previous description illustrates all the wealth of qualities and properties of the phenomena of higher forms of existence that are very difficult (and the highest ones absolutely impossible) to describe with the terminology of the physical world, and especially with scientific terminology.

According to the QEDM hierarchy, each quantum level "k" implies a thousand times smaller dimension (R) but also a thousand times higher energy density (ρ). The physical aspect of human being is 10 quantum levels "below" the Universe (k-10). The human soul (Jiva, k+16) is 16 quantum levels "below" the physical aspect of man (k0), while the Spirit (Atman, k+26) is "subtler" than the soul by another 10 quantum levels... It is impossible for our mind to imagine such a wide range of sizes, but we can still get at least some idea of the grandiosity of God's Creation both "outside" and "inside". Therefore, it is quite logical that the Supreme spiritual Absolute, Brahman, Absolute Reality (k+29), is described in the Upanishadic cosmogony as the The highest God, in Its unmanifested state and undifferentiated unity, containing all possibilities before the divine creativity. Absolute self-aware intelligence in spaceless and

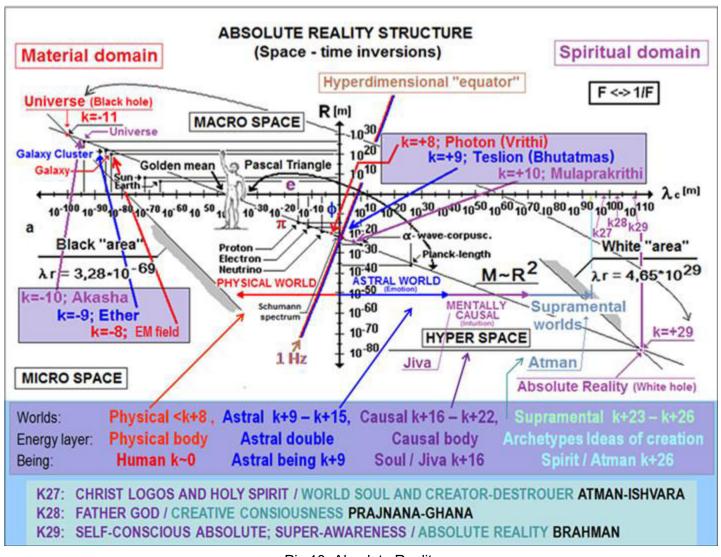
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¹³ https://www.theosophy.world/encyclopedia/fohat

timeless potentiality. Inaccessible to human cognition and comprehension while we are grounded in the lowest three worlds of manifestation. In the Christian cosmogony (Daskalos), the same phenomenon is described as Absolute Infinite Be-ness, Absolute Infinite Reality that is an aspect of Absolute lying beyond the reach of human comprehension. The Ultimate Source, fathomless, and inarticulate depths of the Divine, beyond the possibility of expression, the state when the vibration is not yet expressed but exists within the Absolute Being as a state not yet manifested, a vibration without any movement [6] ...

With the previous definitions and established correlations of the key phenomena of Absolute Reality, which we arrived at through a combination of scientific knowledge, deep esoteric knowledge and ancient cosmogonies, we defined a hierarchy of material-spiritual phenomena and the matrix of their entanglement - which offers us concrete insights into the structure of Reality down to the smallest details. A graphic interpretation of everything that makes up Absolute Reality is given in picture 10.

I called this picture "Everything" because it shows the structure of Absolute Reality which includes all forms and levels of existence from the material, macro (II quadrant), micro (III quadrant) and spiritual segment of Reality (IV quadrant) from the lowest to the highest level of consciousness, from the Universe (k-11) to the supreme spiritual absolute – Brahman (k+29) which represent a complementary pair, two sides of the One, exactly such as the physical body of man (k0) and his soul - Jiva (k+16) form the <u>unity of the material and spiritual aspects of one and the same being manifested in multiple energy layers, i.e. planes of existence, where each of them has its own structure, characteristics and qualities, which is described in detail in various theosophical teachings, cosmogonies and philosophic schools (pic.5).</u>



Pic.10, Absolute Reality

It is more than interesting that "Man" is positioned at the intersection point of the evolution/involution line and the abscissa (energy), exactly at the position of the golden mean between the Black area and the

ordinate which indicates the importance of Man as the most perfect material-spiritual phenomenon of the Cosmos and his special, very important, role that the Creator intended for him in his Creation.

And the most interesting thing: the meeting of matter and spirit takes place at an energy-space position that I called the Hyperdimensional Equator and which corresponds to a frequency of 1 Hertz - which is the rhythm of the human heart beat... It's really hard to believe that it's just a "strange coincidence"...

So the meeting of matter and spirit takes place in the transition area where the smallest particles and most subtle forms of the EM field intertwine with the crudest forms of ether - Tesla's "gaseous medium", which the intuitive genius Nikola Tesla described as follows:

(quote¹⁴), "The primary substance, thrown into infinitesimal whirls of prodigious velocity, becomes gross matter; the force subsiding, the motion ceases and matter disappears, reverting to the primary substance."

According to the established hierarchy of "Stable objects" of the KGE model, this is the area of the most subtle form of "Tesla waves" and the position of the object at the quantum level k+9 called "Teslion" in honor of Nikola Tesla, who recommended this very segment of frequencies (Fig. 9) for the realization of his idea for wireless energy transmission...

Bearing in mind that the segment of Reality k+9 \sim k+15 is the area of the 2nd Heaven, Psychic world according to Christian cosmogony or Bhuvarloka, Astral world according to the Upanishadic cosmogony - it is absolutely unquestionable that Nikola Tesla is very important in this story about Absolute Reality according to which he is quite undoubtedly the Scientific Prometheus of the 21st Century.

In my deep conviction, Nikola Tesla is one of the most original thinkers in the history of mankind, a proven intuitive genius who lived far ahead of his time and one of the world's greatest inventor of all time

According to my theoretical and practical research he is the scientist who came closest to ancient Vedic knowledge and reached perfection in his machines because he copied the principles of the Creator or Nature into them. He was aware of the importance and significance of non-physical phenomena in the mechanisms of Nature that were completely ignored by official science.

In support of these claims, we quote his following statements:

Nikola Tesla, ""Man's Greatest Achievement", New York American, Jul, 6. 1930.

"All perceptible matter comes from a primary substance, or tenuity beyond conception, filling all space, the Akasha or luminiferous ether, which is acted upon by the life giving Prana or creative force, calling into existence, in never ending cycles all things and phenomena."

Nikola Tesla – Lecture at Columbia College, N.Y., May 20, 1891

"Nature has stored up in the universe infinite energy. The eternal recipient and transmitter of this infinite energy is the ether."

https://teslaresearch.jimdofree.com/the-book-of-nature/:

"The day science begins to study non-physical phenomena, it will make more progress in one decade than in all the previous centuries of its existence."

Unfortunately, today's official science has completely suppressed his technologies based on the concepts of aether, just like all scientific theories were until the beginning of the 20th century - from Newton's theory of gravity, through Huygens' wave and Bernoulli's particle theory of light to John Bell, who laid the foundations of modern quantum physics and correlated his interpretation of the EPR paradox with the ether.

The reason was very simple and Tesla was aware of the problem:

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 the theory of a gaseous ether, but it was rejected again and again because in such a medium longitudinal waves would be propagated with infinite velocity. Lord Kelvin conceived the so-called contractile ether, possessing properties which would result in a finite velocity of longitudinal waves.

¹⁴ Nikola Tesla, ""Man's Greatest Achievement", New York American, Jul, 6. 1930.

¹⁵ Copyright: Goran Marjanovic, BScE ("Unconventional Physics"), "Prostor, vreme, materija", ® 198./1993; "Teslini Talasi i Teslion kao njihov kvant nosilac", ® 26./2001. In the terminology of other researchers, a related phenomenon is called "Microlepton" (Dr. A.F. Okhatrin) or "Etheron" (Prof. I.L. Popescu), etc.

Namely, in his theory "A Dynamical Theory of the Electromagnetic Field" in 1865, Scottish physicist James Clerk Maxwell, in his 20 original mathematical equations given in form of quaternions, concerning electromagnetism, established the theoretical existence of scalar waves.

The analysis of these original Maxwell's equations showed that EM waves of scalar type cannot be limited in their propagation speed, which was a big problem for the emerging Theory of Relativity, whose key postulate was that the speed of light is the highest possible speed in nature, which no object with real rest mass cannot reach.

And so, unfortunately, ether was thrown out of science based on Michelson Morley's experiment and its existence is still denied despite numerous confirmations by contemporary researchers¹⁶. Even Michelson himself, repeated his measurements¹⁷ and proved its existence...

What's more - in addition to expelling the ether from science, after Maxwell's death his original theory was changed. Claiming that the original version was too complicated Oliver Heaviside, Gibbs and Hertz simplified the original version of Maxwell's theory that he published in 1865. They reduced his 20 quaternion equations to only 4 vector equations without the scalar part that existed in the original quaternion version using only its "vectorial part" - and therefore they significantly weakened its strength and the possibility of describing scalar phenomena in the way that was possible in Maxwell's original theory. In addition to declaring the ether non-existent, this is the main reason why Tesla's ether technologies and his scalar phenomena were suppressed from science ...

However, the human spirit cannot be limited by any theories or authorities, so in the 80s, Anatoly Akimov and Gennady Shipov introduce their concept of torsion fields. It has been experimentally shown that torsional fields travel at speeds a billion times higher than the speed of light, they affect biological processes, gravity and inertia - which are all characteristics of unconventional energy forms that possess elementary awareness, as is claimed by e.g. Dr. Anatoly Ohatrin or Dr. Klaus Volkammer.

In any case, Tesla's ether technologies are the basis of future technologies that will significantly improve and advance human's lives.

Knowledge of ancient civilizations are exceeded our present knowledge greatly - at least in some aspects. Nikola Tesla was one of the first scientists of this civilization that seriously approached to their skills and it is quite certain that Tesla's ether technologies - together with a scientific knowledge about natural energy phenomena - would contribute to significant improving of the human health, and in general to the living conditions of mankind.

His words¹⁸.

"Nature has stored up in the universe infinite energy. The eternal recipient and transmitter of this infinite energy is the ether."

point to the possibility of solving the crucial problem of our civilization - mastering clean energy, and energy is the basis of all aspects of life...

Any way, the synthesis of scientific and ancient knowledge can help us understand phenomena that cannot be detected by scientific methodology and equipment, and help us in understanding the complex structure of human beings and the world we live in, in more advanced communication with Absolute Reality and prosperity in various areas of life.

Belgrade, 5. November, 2023

Goran Marjanovic, BSc.

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^{16 &}quot;About Ether", http://users.beotel.net/~gmarjanovic/O_Etru_e.pdf

¹⁷ The Michelson–Gale experiment is a modified version of the Michelson–Morley experiment

¹⁸ Nikola Tesla – Lecture at Columbia College, N.Y., May 20, 1891