Journal of Environmental Hazards

Review Article Open Access

On the Possibility of Experimental Detection of Virtual Particles in Physical Vacuum

Anatolii Pavlenko*

Open International University of Human Development, Ukraine

Abstract

The article that you are about to read may surprise you because it looks at problems whose origin is little known and which are rarely taken into account. These problems are real and it is logical to think that the recent and large-scale multiplication of antennas and wind turbines with their earthing in pathogenic zones and the mobile telephony induce fields which modify the natural equilibrium of the soil and have effects on the biosphere. The development of new technologies, such as wind turbines or antennas, such as mobile telephony, induces new forms of pollution that spread through soil faults and can have a negative impact on the health of humans and animals. In the article we share our experience which led us to understand the link between some of these installations and the disorders observed in humans or animals. This is an attempt to change the presentation of the problem of protecting people from the negative impact of electronic technology in public opinion by explaining the reality of virtual particles and their impact on people. We are trying to widely discuss this propaganda about virtual particles. This is an attempt to deduce a discussion on the need to protect against the negative impact of electronic technology on the living in the realm of the radical.

Keywords: Pollution; Longitudinal waves; Virtual particles; Torsion field; Physical vacuum; Electron-positron pair; Geopathic zones; Virtual chain

Introduction

What is a physical vacuum?

The modern doctrine of torsion fields has a completely phenomenological character, manifesting itself in the complete absence of an explanation of the very nature of the subject matter of study and confining itself only to the description of phenomena and processes. Until now, there is no clear idea of the torsion field's carrier nature [1,2]. Engineering thought, using the assumption that virtual particles are carriers of torsion fields, allowed to develop and introduce into everyday practical activity a whole complex of devices and systems designed to solve the problems of protecting the population from the negative impact of torsion fields of a certain type [3-6].

The engineering approach in resolving such a situation is realistic and practical and demonstrates abstractness from the lack of a physical understanding of the essence of the processes that occur, insisting on the need for their practical use. However, there is an urgent need to shed the light on the nature of the carriers of the torsion field. Torsion fields are also called Tesla scalar waves [7], longitudinal waves, a Tachyon field [http://www.fostac.ch/en/kontakt/kontakt.html] etc.

Virtual electron and positron are extremely small physical units, which are technically not measurable in non-disturbed state. As with all components of matter, they are endowed with consciousness. Undoubtedly, the unity of the world is of an informational nature. The particle's strategy - the wave function- is in the consciousness of the particle and is the result of the work of this consciousness over known information about the world. Thus, the particle solves the quantum-mechanical problem. When new information is received, the particle corrects its strategy, that is, it corrects its wave function.

It is a known fact in physics that he atom is not the smallest of all particles and that each particle in matter can be directed by the thoughts. It has been shown that the investigator's thoughts alone are so strong that they can influence the experiment, which will then often falsify the result. Let's turn to the modern concepts of Physical Vacuum. In the Maxwell-Dirac electrodynamics, a physical vacuum is a «boiling broth» of virtual particles and antiparticles - electrons and positrons, that is, virtual particles constantly appear and disappear in a vacuum. They are considered ''virtual" because their lifetime is too short and limited by the Heisenberg uncertainty relation.

In other words, in quantum field theory, fluctuations are interpreted as the creation and annihilation of virtual particles (i.e., particles that are continuously generated and immediately destroyed or virtual quanta of a given field). In a vacuum, different pairs of particle - antiparticles are produced, and these pairs can be based on electrons, protons, neutrons, quarks, etc. Virtual particles participate in the same way in interactions, as real ones. For example, a virtual photon is capable of generating a virtual electron-positron pair, similar to the production of a real photon of a real electron-positron pair. Electrons, for example, constantly emit and immediately absorb virtual photons. It should be noted that the content of the concept of «virtual particle» has undergone a significant change from the introduction of such a concept by R. Feynman. Between interacting objects, «virtual» particles produce impulse or energy exchange in short time intervals. Previously, virtual particles were understood to be, as a rule, such particles in virtual states (e.g., photons, electrons, pions) that were well studied in real states. A class of particles (quarks, gluons) appeared that cannot in principle exist in real states because of the confinement property in quantum chromo dynamics and are manifested experimentally only as hadronic jets as in a certain sense, virtual particles have acquired the status of observables.

***Corresponding author:** Anatolii Pavlenko, Open International University of Human Development of Ukraine, Spinor International Ltd., Svyatoshinskaya, Kiev, Ukraine, Tel.: +380 44 452 88 66; +38 066 109 73 82; E-mail: spinor.lab@gmail.com

Received December 18, 2017; **Accepted** February 16, 2018; **Published** February 23, 2018

Citation: Pavlenko A (2018) On the Possibility of Experimental Detection of Virtual Particles in Physical Vacuum. J Environ Hazard 1: 101.

http://darkenergy.narod.ru/ mhpicru.html. I.e., if a separate virtual particle of physics cannot be detected, then their total effect can be seen clearly (Casimir effect, 1965). The concept of virtual particles plays an important role in understanding their internal structure, which has a complex structure, especially hadrons. The picture of the structure of hadrons uses the concept of «fur coats» from virtual particles that «clothe» the corresponding «bare» particle. We use the concept of «fur coat» from virtual particles in the future, considering the physical vacuum consisting of virtual electrons, positrons and photons, i.e. we use only a small part of a more complex reality (Figure 1).

In Figure 1 shows the «virtual chain» of transformations. Events from left to right occur as follows (http://darkenergy.narod.ru/mhpicru.html). A virtual photon, after passing a certain distance, becomes a virtual electron-positron pair. The electron and the positron are made half a turn in opposite directions, drawing a circle in space. At the junction they disappear and generate a virtual photon, which moves further.

A virtual electron-positron pair creates an annular current, and the ring current creates a magnetic field B, the configuration of which is similar to the configuration of the strip magnet field. Such elementary virtual magnetic dipoles arise in a vacuum constantly and everywhere. They are randomly oriented and therefore the total magnetic field in a vacuum is zero. We use the possibility of a hypothetical approach and consider a simplified system consisting of only one electron. We believe that there are no real photons in such a system, but fluctuations in the Physical Vacuum lead to the appearance of a «cloud» of virtual photons near this electron and after them virtual electron-positron pairs (Figure 2).

Such pairs manifest themselves like bound charges in a dielectric: under the action of the Coulomb field, they are polarized in such a way as shown in Figure 2, i.e., virtual electrons participate in the same way in interactions, as real ones, i.e. repel from real electron. Figuratively

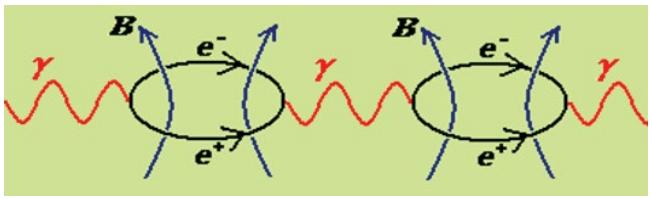

Figure 1: The «virtual chain» of transformations.

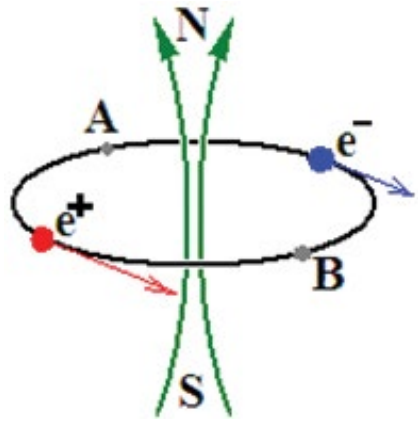

Figure 2: Bound charges in a dielectric: Under the action of the Coulomb field.

speaking, in small space-time regions the vacuum is similar to «boiling broth», consisting of elementary particles. Until recently, direct experimental observation of this fundamental phenomenon was not considered possible. Scientists proceeded from the fact that vacuum fluctuations always manifest themselves in nature indirectly, leading to a wide range of effects.

Physicists from the laboratory of Professor Alfred Leitenstorfer [7] found vacuum fluctuations, and access to the ground state of the quantum system was obtained without any intensification of its intensity. Until now, direct experimental observation of this fundamental phenomenon was not considered possible.

They demonstrated a first direct observation of the so-called physical vacuum fluctuations by using short light pulses while employing highly precise optical measurement techniques (Figure 3).

Earlier it was pointed out that in quantum field theory vacuum fluctuations are interpreted as the creation and destruction of virtual particles (that is, particles that are continuously generated and immediately destroyed), or virtual quanta of a given field. In a vacuum, different pairs of particle-antiparticles are produced, and these pairs can be based on electrons, protons, neutrons, quarks, etc. Virtual particles participate in the same way in interactions, as real ones. A virtual photon is capable of generating a virtual electron-positron pair, analogous to the production of a real photon of a real electron-positron pair.

The existence of virtual photons cannot be doubted, since Christopher Wilson and his colleagues at Chalmers University of Technology in the Swedish city of Gothenburg, together with colleagues from Australia and Japan, «embodied» virtual photons. This occurred near a waveguide made of aluminum connected to a superconducting quantum interferometer (two Josephson tunnel junctions, connected in parallel to a closed loop). The experimenters changed the inductance of this circuit, passing a magnetic flux through it, oscillating with a frequency of the order of 11 GHz. The inductance oscillations affected the electrical length of the waveguide, which oscillated with a completely relativistic velocity (about a quarter of the speed of propagation of electromagnetic waves in the waveguide, which was approximately 40% of the speed of light in a vacuum). The waveguide, as expected, emitted photons extracted from vacuum fluctuations.

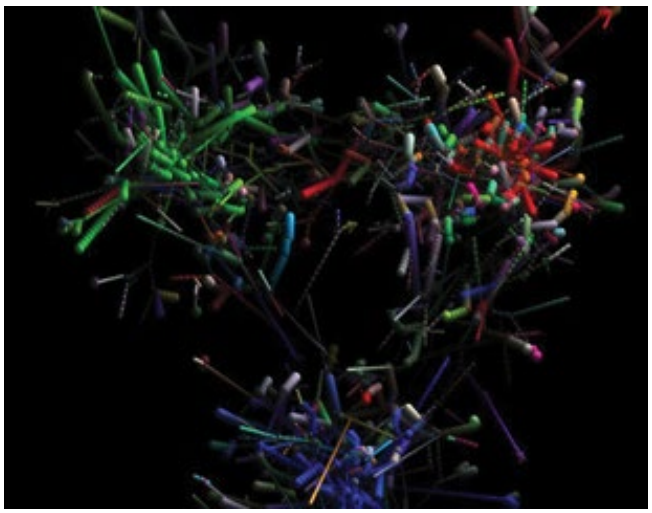

Figure 3: Physical vacuum fluctuation.

Two forthcoming European Physical Journal D papers challenge established wisdom about the nature of the physical vacuum. In one paper, Marcel Urban from the University of Paris-Sud, located in Orsay, France and his colleagues identified a quantum level mechanism for interpreting vacuum as being filled with pairs of virtual particles with fluctuating energy values. In other words the vacuum fluctuations may be thought of as a flickering of the quantum [8].

It is obvious that the description of the state of virtual particles of physical vacuum in an unexcited state is very complicated, since virtual particles have a very short lifetime, undergoing transformations. It is known that any item shown in the world, including living creatures, polarizes the physical vacuum.

For a general understanding of the essence of the phenomenon, it is necessary to address some theoretical questions about the interaction of real and virtual particles.

Materials and Methods

Model of the physical vacuum polarization

The model of polarization of the Physical Vacuum, connected with the perturbation of its electron E, appeared in 2007 in the book of Roger Penrose [9]. Let us consider the process of polarization in more detail. We shall assume that the electron E (Figure 4) is a point charge located at a certain point in space. In this case, the effect of polarization of the Physical Vacuum can be represented as follows. Suppose that at a certain point in the space located near the electron E, a virtual pair of particles, the electron and the positron, is produced, which, after a very short time, annihilate with each other, i.e. the birth and subsequent annihilation of a pair must occur in an external electric field produced by the electron E (Figure 4).

The effect of this external field is that the born virtual electron is slightly repelled by the electron E, whereas the positron that is borne is slightly attracted to it, so that there is a physical separation of these charges during their short-term existence, i.e. symmetry of phytons is broken. This phenomenon occurs all the time and everywhere around the electron E, which leads to a net effect called the charge polarization of the Physical Vacuum. Previously, this model was proposed by [1]. Torsion field can also be viewed as a flux of left- handed and right-handed virtual electrons and positrons within the Physical vacuum.

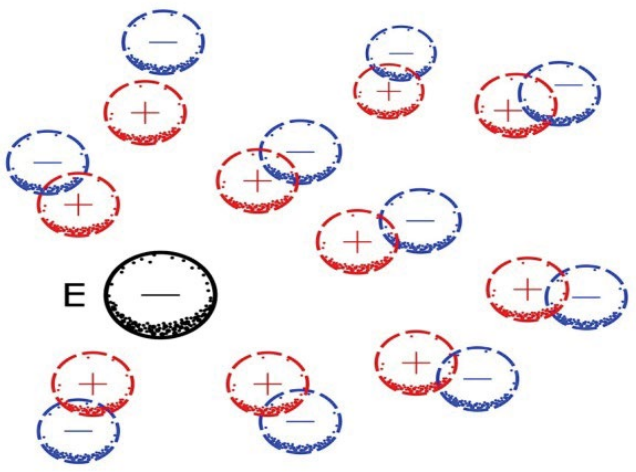

Figure 4: Demonstrates the process of charge polarization of the Physical Vacuum (Virtual electrons have a blue color, virtual positrons have red colour).

In most normal materials the spins of virtual electrons and virtual positrons are distributed randomly. They point in many directions with no organization or order (Figure 3). Virtual electrons and virtual positrons are unique in that it is possible to use a certain pattern to control their position in space and in the substance.

The spins of magnetic materials are aligned by their mutual interaction; the spins of most materials have no pattern to them. If we apply a pattern to their spins, it can impose a new "structure" to a substance, where there was nothing.

Spin information imprinted in the nucleus of atoms can last for years, potentially. The nucleus of an atom is much heavier than the electron, so it has more spin inertia. It takes more energy to change its spin. The nucleus sits in the center of the atom, far away from the effects of neighboring nuclei. It has a cushion provided by its electron cloud. Consequently, once the spin of the nucleus has been set in a certain way it will retain this direction for a long time, unless acted upon by torsion impact [10].

This pattern of spins can encode information. It can later be detected by the torsion meter VEGA-12M or another individual [4]. Let us proceed directly to the proof of the existence of virtual particles by means of the processes of charge and discharge of nonmetallic and metallic objects by these particles.

No process has previously been known. Despite the fact that scientists have long considered skepticism, this process also seems to be explained on the spins basis patterns held in the object. Objects have spin-patterns of virtual particles representing a torsion field. In the rest of this article, we will explain how dielectric and metallic objects can be charged.

The diagram for charging a glass sheet by virtual particles is shown in Figure 5, where 1 is a glass sheet, 2 is a POROG-3M device, 3 is a power supply for the device 2, 4 is a connecting material for recording a torsion field (both conductors and non-conductive materials can be used), 5 is the zone of the right torsion field, and 6 is the zone of the left torsion field. As a spinner pattern, which will control the spin polarization of the glass, is the POROG-3M. This device is a generator of extremely high frequencies, and it is used in medicine as a medical device. The device is also a generator of torsion fields, and the left torsion field is radiated from the end of the device, and the right field is radiated from the front of the device. The therapeutic effect is carried out by the right torsion field, and not by electromagnetic radiation of extremely high frequencies (Figure 5).

As mentioned above, the POROG-3M is the source of torsion fields, radiation from the opposite parts of the device. The recording process is carried out in accordance with the law of interaction of torsion fields: Zone 5 is connected to the radiation zone of the right torsion field and the virtual positrons of the glass and, possibly, of the surrounding space, is attracted to this zone, having identical spins. A similar process occurred in zone 6. Such a polarized state of the glass may persist for a while, but when the glass is irradiated with sunlight, it quickly becomes neutral.

In order to eliminate the polarization of zones 5 and 6 very quickly, it is sufficient to connect these zones with a wire or a fabric rope. However, when trying to defuse the glass using a circuit consisting of a simple rope and a diode connected in the forward direction (+ the diode is connected to zone 5 and the other end of the rope is traced to zone 6), the virtual electrons and positrons will not be discharged, i.e. the diode in the forward direction prevents the discharge of the

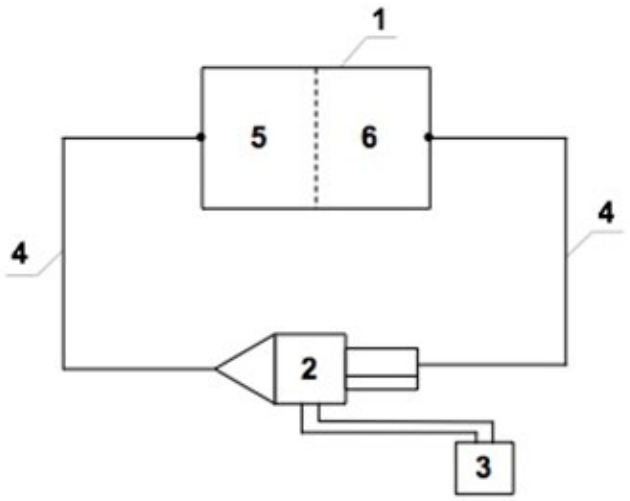

Figure 5: Charging a glass sheet by virtual particles

glass. When the polarity of the diode changes, the glass is discharged, i.e. zones 5 and 6 become neutral. The fact that virtual electrons and positrons are rapidly disappearing from glass indicates that only virtual electrons were polarized, which are located near the surface of the glass and they were repulsed by real electrons of the glass. The scheme for charging a metal by virtual electrons and positrons was proposed by A. Kinderevitch (Figure 6).

The existing theory of the electronic conductivity of metals could explain many phenomena, taking into account the presence of virtual particles in the Physical Vacuum. The scheme of charging a MB2 is quite simple. Simplicity is a necessary condition for proving the reality of virtual electrons and positrons and the physical properties of these new virtual charge carriers. For this reason, the description of the process is particularly important because its amazing simplicity, which can convince any opponent.

Under such a scheme, a charge of a MB2 by virtual electrons and positrons takes place. It is obvious that real electrons participate in a charge of the mentioned MB2 by virtual particles (Figure 6). The charge of the MB2 1 takes place with the closed keys 4 and 5. It should be noted that such an inclusion does not lead to a short circuit, although the positive and negative terminals of the source 1 are grounded at some distance from each other. The real electrons move from the minus the clamp of the power supply unit through the resistance R and the closed key 5 to the metal blank MB2, pushing the virtual electrons to the left side of the MB2. On the right-hand side of the MB2, there are virtual positrons that are repelled by positive charges of the positive terminal of the power supply 1 and the virtual electrons themselves on the left side of the MB2. Obviously, it is necessary to further study the processes of charging the MB2 by virtual particles, since in this case the information parameters of the surrounding space change, and the non-electromagnetic electric process itself has the character of both ordering the position of virtual carriers inside MB2 and transferring virtual electrons and positrons from the surrounding space to the MB2 and a conductor with a current.

It is obvious that in the process of charging the MB2 by virtual particles, there are two oppositely directed electric currents - the real electron current and the current of virtual particles. The problem of separating the oppositely directed electric flows are a complex technical

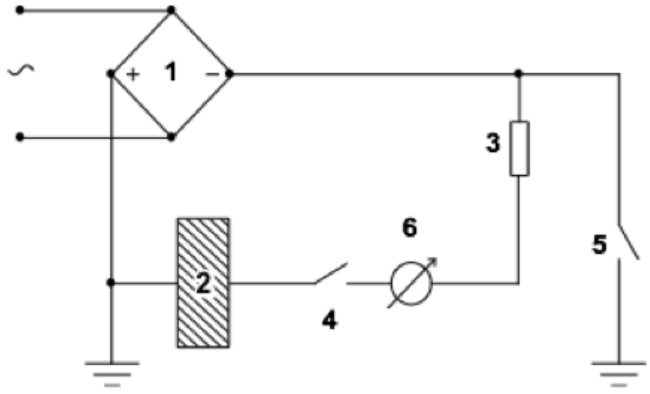

Figure 6: Shows: Power supply 1, metal blank 2 (MB2), resistance 3, key 4, key 5, measuring device 6.

problem. In this paper, this issue is not considered precisely because of its complexity. In the opinion of the author, it is important to show the possibility of charging a metal with virtual particles and to involve other researchers in verifying the possibility to charge of a metal with virtual particles at this stage of research. During the charging process the ammeter 6 shows a certain amount of current - note -in amperes, and the arrow of the measuring device deviates to the right from the zero mark of the device. It should be noted that in this case, when the charging circuit was disconnected from the power supply unit, the virtual particles were «frozen» at opposite ends of the MB2. In the first case, the virtual particles from the opposite sides of the glass were assembled together with a simple application of the left and right torsion fields. The charge of the MB2 according to scheme 6 is realized by real electrons and positrons, which allows us to accumulate a significant supply of virtual electrons and positrons. No process has previously been known which can produce charge of the metal by virtual particles. The discharge scheme is shown in Figure 7.

Virtual positrons from the right end of the MB2 with the closed keys 4 and 5 go through a microammeter 6 (when charging an ammeter was used), resistance 3 and a closed key 5 and drain into the ground. There are many virtual positrons that attract virtual positrons of the earth. A similar procedure occurs with virtual electrons. The discharge current is hundreds of times less than the charging current, but the arrow of the micromammeter deviates from the zero position in the opposite direction in comparison with the charging process. As a result, the MB2 becomes completely neutral. It is clear that the discharge current in general will depend on the mass of MB2 and the time of its charge. It was practically recorded that if a small MB2 is charged for 5-7 minutes, and after 1-1.5 hours the MB2 is moved to another location and discharged from the circuit in Figure 7, a current of 400 μA can be obtained (Figure 7).

Modern electrodynamics considers the direct and the reverse connection of a semiconductor diode. In this case, its reverse connection is locked for real electrons. But for virtual electrons such an inclusion will be direct. Discharge of the MB2 passes with closed keys 4 and 5. The discharge process can be considered using the space harmonization law briefly described [11].

We should remember that the elementary particles themselves have a consciousness, perhaps quite different from ours. Many people can doubt this approach, but on the existence of virtual particles of his own subconscious pointed out in his time Nikola Tesla. The author believes that the behavior of elementary particles is purposeful and when the

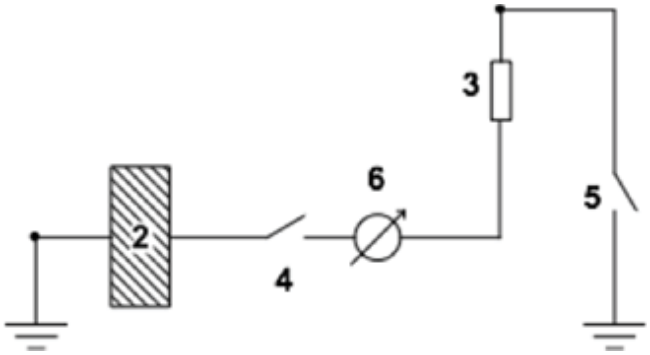

Figure 7: The discharge scheme (after 1 hour -1.5 hours)

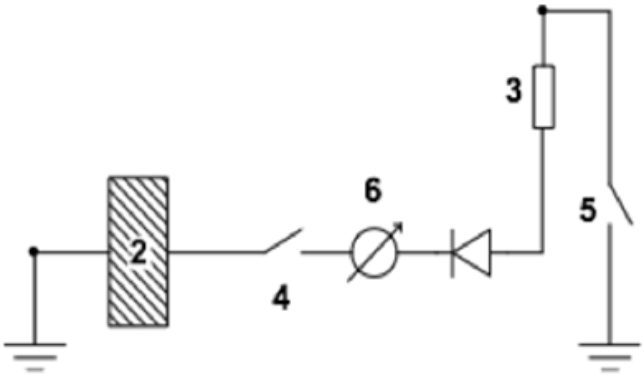

Figure 8: Shows the diagram of the discharge of a metal blank (MB2) using a diode.

particles interact, they exchange information. They must have corrected ideas about space and time, and in this sense one can speak of a certain system, like Greenwich.

Undoubtedly, the unity of the world is of an informational nature. Information management is understood as an action where the controlling influence on the physical vacuum with the aim of its harmonizing has an implicit, indirect information influence. The information influence is provided by the device which has two regions where the right and left torsion fields are recorded, and these areas are connected together. In this case, virtual particles get the command to become embedded or enter into one. A physical vacuum consisting of virtual particles is oriented toward this information influence. Virtual electrons and positrons go into the mode of «phytons» when these virtual particles put one into one, i.e. the components of the Physical Vacuum are in a symmetric mode. In this case, there is no negative impact on the environment and people. It is understood that self-organization is carried out using the subconscious of the virtual particles themselves. The particle's strategy - the wave function- is in the consciousness of the particle and is the result of the work of this consciousness over known information about the world. Thus, the particle solves the quantum-mechanical problem. When new information is received, the particle corrects its strategy, that is, it corrects its wave function. A striking example of such correction is the fact that if you identify the nodes of left and right Geopathic zones in a closed space, for example, in an apartment, and connect these nodes themselves with a conductive wire or a non-conductive rope, then space harmonization takes place in accordance with A. E. Akimov's model. In this case, virtual electrons and positrons are embedded in each other, forming a «phyton» in accordance with A.E. Akimov's model [1].

In the considered version of the electric discharge of a metal blank, we create conditions for the harmonization of its state by joining the left and right parts of the mentioned bar with an electrical circuit consisting of the elements shown in Figure 8, i.e. the left side of the metal blank containing virtual electrons, the first ground, the second ground, the switch 5, the resistance 3, the diode switched in the forward direction of the virtual particles, the key 4, the right side of the metal blank MB2. As a result of such a connection, a gradual decrease begins in the number of virtual particles in a MB2 and after a while the metal disc becomes neutral (Figure 8).

But we do not yet know how virtual particles behave inside a metal blank MB2, whether they pass through the chain of transformations depicted in Figure 1. It was found that under the external influence of the source of torsion fields it is possible both to increase the discharge time and to decrease. If the right torsion field of the external generator is acted on the right side of the MB2 where the virtual positrons are concentrated and the left torsion field is on the left side of the metal blank, then the discharge time increases. This increase in the discharge time is caused by the fact that when the right torsion field is applied to the right side of the metal blank MB2, the inflow of virtual positrons from the environment to this part of the metal increases, and this seems to extra recharge the metal disc. The application of the left outer torsion field to the left side of the MB2 causes an increase in the number of virtual electrons in this part. If the direction of application of the left and right torsion fields of the external source changes, the discharge time decreases due to an additional discharge of the blank with these fields. When the right field of the external source is applied to the left side of the metal blank, the process of harmonizing the metal with virtual positrons in this part is faster. A similar phenomenon occurs on the right side of the MB2, where the presence of virtual electrons contributes to the harmonization of virtual metal particles in this region. Thus, in the course of the conducted studies, the dependence of the duration of the discharge of a metal blank, charged with virtual particles, on the way of connecting the external source of the torsion field was found.

The quantum vacuum plasma engine really works, although scientists cannot yet explain why. http://hi-news.ru/wp-content/uploads/2015/07/emdrive.jpg

The EmDrive engine [12] was invented by the British Schoer and does not need fuel, because it uses energy, in his opinion, microwaves. The engine created by the Shoer is very light and simple in its design. According to Schoer, he creates the necessary traction «by oscillating microwaves around the vacuum container.» At the same time, electricity, which is necessary to create microwaves, can be extracted from sunlight. In other words, this engine does not require the use of fuel and can actually run forever or at least until a mechanical breakdown occurs. The tests showed that the unique design of the microwave engine really allows creating a force that cannot be described from the classical point of view of the electromagnetic phenomenon, and yet the installation assumes interaction with the quantum vacuum of virtual plasma.

Previously, we considered the structure of virtual plasma [13] in the excitations of which there is an axial symmetry of right and left rotation. A similar axial symmetry exists also in the polarization of the Physical Vacuum in accordance with Akimov's phyton model [1]. Harold White, the head of an advanced research team in the field of propulsion systems at the Johnson Space Center, suggested that the EmDrive thrust is generated by virtual particles in a quantum vacuum

that behave like fuel ions in magnetohydrodynamic propulsion systems extracting «fuel» from the space- time and eliminating the need for fuel (Figure 9).

Although many scholars have criticized White's theoretical model, others believe that he at least points in the right direction. In informal circles, a stormy discussion of EmDrive and similar suggestions for propulsion space installations like Cannae Drive broke out. We also want to participate in the discussion, since we have been studying the world of virtual particles for a long time and all devices of the company «Spinor International» are based on the principles of interaction of such particles.

It is known that the photo is in an entangled state with the original. Using the method of biolocation or using a device like VEGA-11, you can determine the location of virtual particles generated by the geometric features of the engine. The paradoxical specificity of this engine is that it lacks the right torsion field, which should be under normal conditions at the apex of the truncated cone, and virtual electrons emanate from the socket - from the bottom of the truncated cone. Virtual positrons attracted by the right field of several disks, which are the generators of the right field and are located behind the top of a truncated cone. The Physical Vacuum, which fills all space and manifested objects, contains a large number of virtual electrons and positrons, in an excited state these virtual particles can be represented as virtual plasma (Figure 3). Virtual electrons are located inside the engine cone and the most truncated cone of the engine, and their concentration increases as it approaches the bottom of the truncated cone. The virtual electrons of the cone and the virtual electrons existing in the volume are attracted by the virtual electrons of the Physical Vacuum, due to which the motion occurs. When moving, virtual positrons that are in space in the direction of motion are repelled by the virtual electrons of the engine, and the motion continues. A process similar to the processes in the Casimir effect occurs here. Let us consider in more detail the Casimir effect, which will help shed light on the principle of Shoer's engine.

According to Wikipedia - «Casimir Effect» - the effect is consisting in the mutual attraction of conductive uncharged bodies under the action of quantum fluctuations in a vacuum. Most often, we are talking about two parallel uncharged mirror surfaces located at a close distance, but the Casimir effect also exists for more complex geometries. It is believed that the cause of the Casimir effect is the energy vibrations of the physical vacuum due to the constant creation and disappearance of virtual particles in it. Hence, the effect is confirmed experimentally.

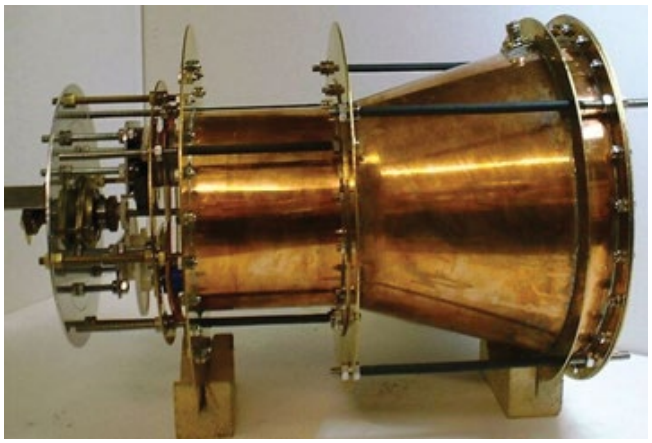

Figure 9: Quantum vacuum plasma engine.

It is known that the physical vacuum is not an absolute void. It constantly creates and disappears pairs of virtual particles and antiparticles - there are constant fluctuations. A virtual photon, after passing a certain distance, becomes a virtual electron-positron pair. The electron and the positron are made half a turn in opposite directions, drawing a circle in space. At the junction they disappear and generate a virtual photon, which moves further. In Figure 1 shows the «virtual chain» of such transformations. Thus, virtual particles and antiparticles are constantly in the physical vacuum. In addition, around any manifested object there is a halo of virtual electrons that are repelled by the real electrons of the objects mentioned.

In the space between closely located mirror surfaces, there is interaction of virtual electrons (like attracts like). The closer to each other the surfaces, the greater the force of attraction between them. Given the above, it seems reasonable to assume that the Shoehr engine uses the phenomenon of mutual attraction of virtual electrons in the bottom of the conduction truncated cone, as an integral part of the engine, and the virtual electrons of the Physical Vacuum, which always exist under the action of quantum fluctuations in the Physical Vacuum.

Indirect confirmation of the assumptions about the work of the Shoer engine can be obtained from the works of Okhatrin [14]. In the model of A. Ohatrin there are ultra-light weakly interacting particles-microleptons. A. Okhatrin and his colleagues found that in the excited state of microleptons (no conservation of a weak charge) around the bodies in the air, macro quantum spatial structures-macro-clusters-can form. Microcluster structures from microleptons, by analogy with Akimov's phytons, exist also in the bodies, influencing their characteristics. Macrocluster structures formed from ultralight weakly interacting particles around light bodies are fixed using torsion scales. Obviously, there is a field of attraction and repulsion forces acting on the arrow of the torsion balance, and this force field was found in a number of materials - metals, ceramics and others.

Taking into account the above, it becomes clear that the experimental results of studies of the Shoehr engine, inexplicable on the basis of the known laws of physics, can be explained using a microneptonic model of Okhatrin or using the Akimov's phyton model. Most likely, Akimov and Okhatrin in their studies encountered different aspects of the same phenomenon. When compared to other researchers, other than Akimov and Okhatrin, are almost similar phenomena appear under different names. Perhaps in the near future, one of the theoreticians will propose a simpler and more acceptable explanation for all.

In the future, a more rigorous explanation will be obtained of the principles of Shoer's engine operation, and the necessary key to such an explanation is associated with an understanding of the physical geometry of the Physical Vacuum and the specific nature of the laws that force interaction of virtual microword particles.

Conclusions

Although this first approach deals with relatively small values of virtual particle currents, it gives us good reasons to support further investigations regarding the virtual particles and the torsion field in the life world as an electromagnetically independent phenomenon. However, considering the scientific challenge virtual particle represent, it is natural that in the present stage of research there are more questions to be answered and more experiments to be made, than definite answers to be given. Nonetheless, it is fair enough to state that a milestone has been established in the study of the principle of interactions between real and virtual particles.

References

1. Akimov AE, Tarasenko VY (1992) Models of the polarized states of the physical vacuum and torsion fields. Russian Physics Journal 35: 214-222.
2. Shipov GI (1998) A theory of physical vacuum. A new paradigm. International Institute for Theoretical and Applied Physics RANS 312.
3. Pavlenko A (2014) Biosafe electronics. Step beyond the horizon of Official Science- Lambert Academic Publishing 226.
4. Pavlenko A (2017) Methods and Protection Devices from Torsion Radiation. Kyiv, Publishing house «Phoe-nix» 145.
5. Pavlenko AR (2016) Geodynamic Zones as Receptors of Solar and Techno Pathogenic in Infuences on Living Systems: Possible Ways to Neutralize Biopatogenic Radiation. 5th International Conference on Earth Science & Climate Change Bangkok, Thailand.
6. Pavlenko A (2017) Geodynamic zones as receptors of solar and techno pathogenic infuences on living systems: Possible ways to neutralize biopathogenic radiation. J Geogr Nat Disast 7: 188.
7. Riek C, Seletskiy DV, Moskalenko AS, Schmidt JF, Krauspe P, et al (2015) Direct sampling of electric-field vacuum fluctuations, Science 350: 420-423.
8. Urban M, Couchot F, Sarazin X, Djannati-Atai A (2013) The quantum vacuum as the origin of the speed of light. Eur.Phys.J.D. 67: 58.
9. Penrose R (2004) The ROAD TO REALITY. A Complete Guide the Laws that of the Universe- London, Jonathan Cape 912.
10. Swanson C (2008) Torsion Field and the Aura. Subtle Energies & Energy Medicine 19: 45-89.
11. Pavlenko A (2017) Possible Ways to Neutralize Biopathogenic Radiation. International Journal of Current Research 9: 53790-53799.
12. https://www.space.com/34797-impossible-space-engine-emdrive-study-published.
13. Kosinov N V, Garbaruk V I (2002) Fractals in plasma. Physical Vacuum and Nature.
14. Ohatrin AF, Okhatinin AA, Okhatrin FA, Lomonosov MN, Sizov V S, et al. (The method of energy-information communication and the device for its implementation. Patent of the Russian Federation No. 2159009.