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Medical Science

MATERIALIZATION OF ELECTRONS IN AN ELECTRON TUBE

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ABSTRACT This article presents the author's view, which is fundamentally different from the one that exists in a modern science. A revised version of electrons appearance in an electron tube in terms of the Physical Vacuum is provided. It was previously believed that the electrons appear in an electron tube as a result of thermionic emission, in which the electrons seem to evaporate from the cathode.

It is shown that the electrons in an electron tube appear as a result of materialization of virtual electrons present in the lamp bulb, and not as a result of the electrons evaporate from a cathode.

KEYWORDS : electron tube, electrons, virtual electrons, materialization

INTRODUCTION

The electron was discovered at the end of the 19th century. The discovery of the electron for the first time made it possible for researchers to begin concretely and definitely to study the properties of the Physical Vacuum, (PV) or, as they said, ether.

We now turn to a brief review of one of the most epoch-making inventions of mankind - the electron tube, which the American inventor Edison invented relatively randomly (Fig. 1).



Fig. 1

He wanted to investigate the work of an electric lamp and soldered a piece of metal into it. Immediately it became clear that a current could be started through the emptiness between a filament and a soldered metal piece. And after that, the second phenomenon became clear, namely, that the current could be started in one direction only when the plus was fed to the soldered piece, and the minus - to the filament. With the reverse turning on of the voltage did not work. The air from the electric lamp is exhausted almost all; the lamp is almost empty. How can a void carry current and why does it conduct it only in one direction?

A version of the answer to these questions was soon found [1]. And the emptiness was, as it were, nothing to do with it. When the filament was switched off, the current flowing between the filament and the piece of metal immediately stopped. It became obvious that the solution to this strange phenomenon is hidden in the filament.

It was previously believed that in the case of the thermionic emission we observe emitted electrons from a metal due to it high temperature. Mobile electrons in metals, also called the valence electrons, are responsible for electric current conduction. If we increase the temperature of the metal, electrons start to move faster and some may have enough energy to escape (evaporate) from the metal. The higher the temperature, the higher will be the current of escaping electrons. This temperature induced the electron flow and it is called thermionic emission. If we use a hot cathode from which theelectrons evaporate, since the cathode has a higher temperature, and there is a potential difference between the cathode and the anode, then the electron emission can be measured as the anode current [2].

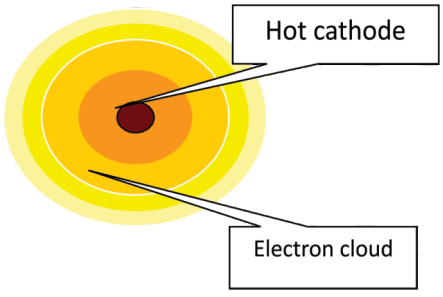


Fig.2

Historically, it turned out that scientists and users of the electron tube technology were forced to consider the operation of the electron tube as the theorists suggested (Fig.3). This happened because everyday life forced a person to take very specific actions when developing devices on electronic tubes, and this gave quite specific results.These results directly led to the idea of the description's fidelity of the electronic tube operation. Some scientists guessed that everything is not so simple.

Unknown electron's properties

Now we can proceed to the consideration of the electron's properties, which were not previously paid attention to. Consider the picture of the "electron cloud" described in all textbooks and existing around the cathode until the moment when a positive voltage is applied to the anode.

The color drawing shows a cross section of the cloud (Fig.2), with a light yellow color here corresponding to a low concentration of electrons, and the orange color to a high concentration of electrons immediately near the heated cathode.

If all the properties of the electron are as described in all textbooks, then that picture, as shown in Fig.2, cannot exist, since such the picture corresponds to the complete absence of charge any electron.

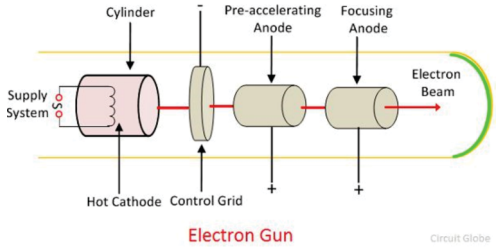


Fig.3

Coulomb repulsion forces of negatively charged electrons should substantially distort this distribution pattern of the distribution density of the electrons around the cathode, since no matter how large the cathode pull (which seems to have acquired a positive charge), the

Coulomb repulsion forces of electrons from each other should have the greatest value the cathode

Coulomb forces in the presence of a charge from an electron would force them to scatter from the cathode at tremendous speed, and the cloud of these electrons would disappear. The most paradoxical in this situation is that at the same moment, as we give a positive potential to the anode, the electron seems to have a negative charge, because its behavior becomes exactly as it is written in textbooks.

For some reason, physics may suggest that these extra electrons in the cathode of the radio tubes are abundant.

It can be assumed that the "excess" electrons are somehow generated by the applied thermal energy, but then the famous Einstein formula relating the mass and energy becomes doubtful. A more definitive conclusion about this formula of Einstein - it is a result of mathematical equilibristic and is in no way connected with reality.

We will try to prove that real electrons appear in the volume of the electron tube as a result of the materialization of virtual electrons under the influence of thermal energy, and these are not allegations. It is during the excitation of a PV by particles with high energy that the electron and positron acquire what is commonly referred to as charge. The charge of a real electron and positron arises when they are materialized from virtual electron and a positron with the corresponding excitation of the PV For example, in special experiments, when a plasma discharge between the electrodes is created in the presence of water flow, the synthesis of elements of almost the entire beginning of the periodic table is fixed. The purity of the experiment (control) is observed.

Consequently, the materialization of real electrons from the Physical Vacuum under the influence of thermal energy is the real thing that all radio engineers encountered. However, this effect was not explained at all.

In other words, the concept of PV today embraces a much greater sense of the expansive type.

Today many scientists admit that the vacuum is not just some physical structure, but also a meaningful formation, i.e. there is some information in the physical vacuum, and it is associated with the "consciousness" of virtual particles. Nikola Tesla spoke about this in 1906 at a meeting with Vivikananda, an Indian philosopher. However, information in this case should be understood as a completely different semantic content than that adopted, for example, in computing. Several proofs of the presence of a virtual particle of its own, different from ours, consciousness will be given below.

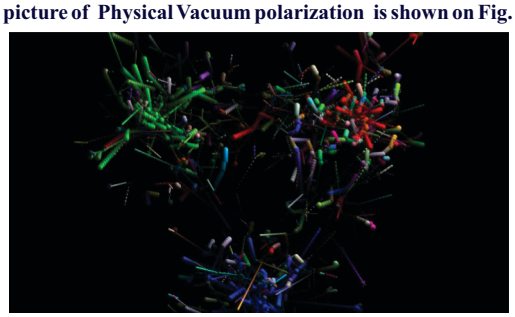
Physical vacuum and its polarization

Having recognized the physical vacuum as an informational structure, we can put with a certain degree of confidence that it is information "hidden" "inside" the physical vacuum and reflecting the consciousness of elementary and virtual particles that somehow "holds" the energy hidden in the vacuum.

PV is an environment in which there is no, and there cannot be any cyclic processes if in the considered part of PV there are no sources of its excitation. There is only a constant movement of virtual particles (Fig.4). This paradox of the PV properties shows that it is pointless to try to somehow describe it by equations.

It is obvious that the description of the virtual particles state in PV in non-excited state is very complicated, since virtual particles have very short lifetime, undergoing transformations. It is known that anything emerging in this world, including living creatures, polarizes the PF.

The picture of Physical Vacuum polarization is shown on Fig. 4.



Physicists from the laboratory of professor Alfred Leitenstorfer found vacuum fluctuations [3], 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 (Fig. 4). Substantially physicists from the University of Konstanz in Germany have found a way to manipulate nothingness by controlling how virtual particles interact with a pulse of light.

The torsion fields, with which we have to somehow interact, determine the form and type of interaction of the FV with the world in which we are.

Such an understanding of the physical vacuum and torsion fields allows us to find out that PV is a living entity that is in continuous interaction with us and with the physical world through informational, i.e. the torsion fields.

The properties of the surrounding world are set by the infinite information richness of the PV and its large energy saturation.

All this allows us to consider the physical vacuum as a living and rational entity.

The model of the PV polarization, linked to the perturbation of its electron E, appeared in 2007 in the book of Roger Penrose [4]. Fig. 5 demonstrates the process of the PV charge polarization. On Fig. 5 virtual electrons have a blue color, virtual positrons - red. Let us consider the process of polarization

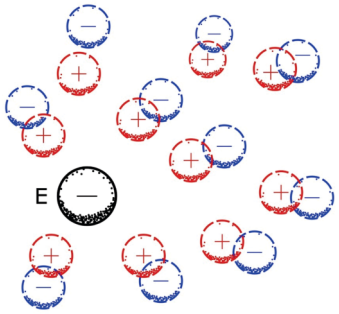


Fig.5

in more detail. We shall assume that the electron E (Fig. 5) is a point charge located in a certain point of space. In this case, the effect of polarization of the Physical Vacuum can be presented in a following manner. Suppose that in a certain point of the space next to the electron E, a virtual pair of particles, the electron and the positron, is formed and after a very short time they annihilate i.e. the birth and subsequent annihilation of a pair must occur in an external electric field generated by the electron E. We shall assume that the electron E (Fig. 5) is a point charge located in a certain point of 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 next to the electron E, a virtual pair of particles - the electron and the positron is produced and after a very short time, annihilate i.e. the birth and subsequent annihilation of a pair must occur in an external electric field generated by the electron E. In the future, we will use this model in explaining the processes in the electron tube.

We will consider the Physical Vacuum as a system of ring wave packets of electrons and positrons, and not actually electron-positron pairs (Fig.5) [5].

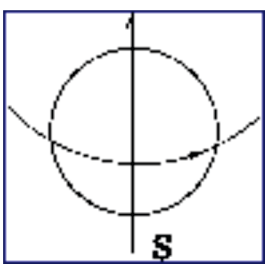


Fig.6

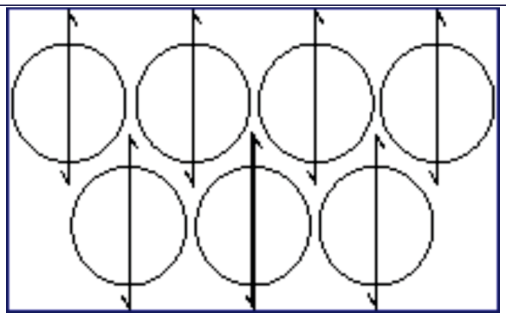


Fig.7

Therefore, the generally accepted view that vacuum is a state without particles is correct. The phyton model starts from the assumption that the vacuum contains not the particles themselves but vortex structures corresponding to the particles and antiparticles. A system of particles and antiparticles with these properties is called a "phyton" (Fig.6), and a medium formed by a dense packing of phytons -PV (Fig. 7).

We emphasize that with this approach we obtain a convenient, though different from modern concepts, a simple model of the Physical Vacuum, which makes it possible to explain many phenomena inexplicable from the standpoint of the traditional approach.

The virtual electron and the virtual positron, when examined autonomously, have a certain charge in accordance with A.Akimov's model of the PV [5]. The real question arises: are the charges of the virtual electron and the virtual positron the same? It is possible to assume that in this case the symmetry of our world is broken and the charges of the virtual electron and positron are not equal. One of the main results of this assumption is that, according to the charge conservation law discovered by Faraday, the charges of real electron and positron cannot destroy each other. In other words, electrons and positrons cannot annihilate other than when their masses are destroyed with the emission of photons, and certain charges remain and are included in the structure of virtual electrons and positrons of the PV[5]. It is during the excitation of the PV by particles with high energy that the virtual electron and positron acquire what is commonly referred to as charge. The charge of a real electron and positron arises when they are materialized from the virtual electron and the positron with the corresponding excitation of the PV.

In physics, this is perceived as the transformation of energy into matter without focusing on the process of such a transformation, although there is no direct connection between an energy and mass in Nature.

It should be noted that the production of electron-positron pairs by gamma rays with an energy of 1.022 MeV was first observed by Irene and Frederick Joliot-Curie in 1933 in a Wilson chamber placed in a magnetic field to separate the tracks of the electron and positron, i.e. The introduction of this energy into the PV results in the birth of completely material particles of the electron and the positron from virtual information components.

Consequently, it is believed that there is an unknown physical process that is obviously observed, but does not fit into modern physical laws and concepts, the birth of mass should have its own model, which is as yet unclear, but can be represented as a kind of vortex in the flux of magnetic induction inside the electron charge shell and positron.

The real processes in the electron tube.

We will not consider any variants of the appearance of real electrons by their “evaporation” from the cathode when it reaches the certain temperature. Earlier, we showed that such a phenomenon is impossible for several reasons. For some reason orthodox physicists may assume that these extra electrons in the cathode of the electron tube are abundant.

Plenty of virtual particles are in the flask of the electron tube, because they have high penetrating power.

It can be assumed that the “excess” electrons are somehow generated by the applied thermal energy, but then the famous Einstein formula relating the mass and energy becomes doubtful. A more definitive conclusion about this formula of Einstein - it is a result of mathematical equilibristic and is in no way connected with reality.

Any mathematics is powerless without a good physical model. The mathematical model can ignore important experimental data.

It is obvious that real electrons appear in the volume of the electron tube as a result of the materialization of virtual electrons under the influence of thermal energy. When the excitation of a PV by particles with high energy takes place that an electron and a positron acquire what is commonly referred to as charge. The charge of the real electron and positron arise when they are materialized from the virtual electron and the positron with the corresponding excitation.

As the cathode is heated in the gap, the cathode-mesh materializes real electrons, the number of which depends on the temperature of the cathode. The real electrons present on the control grid when a negative voltage is applied to it repels the electrons that appear to the cathode and in this case the picture shown in Fig.2 is possible.

At the cut-off voltage, the anode current will be 0. When a positive voltage is applied to the anode and a negative control voltage is applied to the control grid of the lamp, the current will flow in the anode circuit, as described in the textbooks.

There are works of biochemists, biophysicists who study the physicochemical processes in living organisms in cellular biochemical processes, then we see that the synthesis of various biochemically important compounds, for example, the synthesis of a riboflavins, RNA, gene regulation and other processes proceed spontaneously, and in fact, they are regulated by intracellular consciousness. Self-regulation in these biochemical processes occurring in cellular metabolism, in biochemical processes occurring in cells of living organisms, is an expression of the conscious role of atoms, molecules, precisely due to the intracellular consciousness.

Undoubtedly, the unity of the world is of an informational nature. The particle's strategy 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. A striking example of such correction is the fact that if you identify 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 this case, virtual electrons and positrons are embeded in each other, forming a "phyton" in accordance with A.E. Akimov's model.

CONCLUSIONS

It is shown that the electrons in the electron tube appear as a result of the materialization of the virtual electrons present in the lamp bulb.

Incredible as it may seem, the unity of the world is of an informational nature.

The numerous army of scientists who are not satisfied with the current state of physics sets itself the task of clarifying the mechanisms of the nature of the certain phenomena.

We have described the nature of these phenomena.

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