

Dirac's "Holes" Are the True Antielectrons and Real Particles of Antimatter

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Abstract

Experimental and theoretical studies performed by the author showed that electric and magnetic spinor particles as spinors, *i.e.* particles of Matter so and Antispinors, particles of Antimatter, are structural components of atoms and substance. Together with electric spinors, for example, electrons in the structures of atoms and substances in same quantities, there are real electric antispinors, *i.e.* the true antielectrons, which are not to be confused with electronic vacancies or positrons. Atomic-shaped electromagnetic structures, consisting of electric and magnetic spinor particles, such as nucleons and atoms, represent a Physical Mass. A characteristic property of all varieties of Physical Mass is the ability to emit a gravitational field which is a vortex electromagnetic field. Sources of the gravitational field are joint orbital currents of electric and magnetic charges in the compositions of atomic or nucleon shells. The main reason that the real antielectrons turned out in the Physical sciences under the guise of Dirac's "holes" or vacancies of electrons, is the Physics of the confinement of these particles in atoms and a substance that is fundamentally different from the confinement of electrons. So, namely Physics confinement of the magnetic spinor particles and electric antispinors in atoms is the main "culprit" creating a fallacious concept of purely electronic atomic shells. The main contributions to the formation of the above-mentioned misconceptions did as J. C. Maxwell with its primitive-surface electromagnetic concept so and P. Dirac, with his erroneous theory of electronic vacancies or "holes".

Keywords

Magnetic and Electric Spinorial Particles (Spinors and Antispinors), Antielectrons, Magnetons, Antimagnetons, Bispinor, Physical Mass, Vortical Electromagnetic (Gravitational) Field, Energo-Medium, Dark Energy

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1. Introduction to the Physics of the Real Spinor Particles and Physical Triad of the Real World

The problem existence of the true antielectrons *i.e.* positively charged electric antispinors in atoms and substance arose as a result of years of experimental and theoretical researches by the author of the real magnetic charges (magnetic spinor particles) [1]-[4]. It should be noted that the initial experiments, which prompted the author to study the problem of participation of magnetic spinor particles in the structures substance were his experiments with magnetic scattering of neutrons in ferrimagnetic crystals [5] [6]. A list of the main effective experiments of the author on the problem of real magnetic spinor particles in atoms and substance is given below (see [Appendix I](#)) and their description can be found in the publication [3] [4].

Magnetic spinors in the compositions of the atomic shells (the author's name—**magnetons**) are fundamental material particles, which by their physical parameters are the magnetic analogs of electrons, *i.e.* have a magnitude of charges and spins, equal to the corresponding values for electrons. Magnetons, like electrons, are charged with a negative sign (g^-); they belong to the class of leptons and their statistical properties to the fermions (spin 1/2).

Magnetic antispinors, for example, **antimagnetons**, are true antiparticles to magnetons. They have a positive charge (g^+) and belong to the class of antileptons. According to its statistical properties antimagnetons are antifermions with spin ($-1/2$) in relation to spinors. The main physical parameters of the magnetic and electric spinor particles (magnetons, antimagnetons and antielectrons) constituting together with electrons of atomic shell, are contained in [Appendix II](#).

Namely magnetic **bispinor** (magnetic spinorial pair: magneton and the corresponding him antimagneton) under rotation in the lattice conductor will be created in the plane rotation of the well-known vortical magnetic field, which is determined by the axial vector $\text{rot}\mathbf{H}$. Process of formation of the latter field is described by equation: $k \text{rot}\mathbf{J}_g = \text{rot}\mathbf{H}$, where $\text{rot}\mathbf{J}_g$ is the vortical current of magnetic charges and in model representation is the rotating magnetic bispinor, k —the proportionality factor. Role of the electrical current in this process consists solely in “organizing” the vortical motion of magnetic bispinors. As noted above this process is written in the following form: $k \mathbf{J}_e = \text{rot}\mathbf{J}_g$, where \mathbf{J}_e is the vector of the density linear electric current. Thus, the sequence of the actual physical processes in a conductor with a constant electric current, which leads to the formation of a vortical magnetic field, can be written as: $\mathbf{J}_e \rightarrow \text{rot}\mathbf{J}_g \rightarrow \text{rot}\mathbf{H}$. We will notice that in Maxwell's electromagnetic (EM) concept in which real magnetic charges were ignored (unintentionally), the sequence of processes at formation of a vortical magnetic field round the conductor with electric current is represented as follows: $\mathbf{J}_e \rightarrow \text{rot}\mathbf{H}$.

Note 1. It should be added that the mere detection of magnetic spinor particles (of magnetic charges), which managed to make the author of this article should not be seen as something unique. Merit of the author is only in the fact that he showed participation of the real magnetic charges in the structures of atoms, substance and, in general, in the compositions of the Physical Mass (PM). Of course, this is a very important conclusion. This was followed by a chain of physical findings and experiments, in the end, and led the author to his Gravito-Physics and Gravto-Technics [4] [7]. As for the fact of detection of real magnetic charges, then it is a merit, first of all, a wonderful **Felix Ehrenhaft**, who made his discoveries in the early 20th century, and his numerous followers [8]. The reasons, which are more than a hundred years, block the recognition of fundamental experiments and informed conclusions F. Ehrenhaft, discussed in detail in the publications of the author [3] [4] and noted in this article.

All that has been said above relative to the magnetic charges directly concern of electric spinor particles, the most prominent representative of which is electric spinor-electron. According to the research of the author, the true antiparticle for the electron, in fact, is the real antimaterial particle with a charge of e^+ , which is neither the positron nor the Dirac's “hole”. Fortunately, unlike from real magnetic charges, the presence of positive electric charges in substance is not a surprise for modern physical science. The merit of the author in solving the problem with the real “status” the positive charges in the atoms and substance is possible to consider so-called “antimaterialization” Dirac's “holes”. In addition, the author showed why the observed universally positive electric charges have not been entered in the category of real elementary particles (antispinor), and almost a hundred years, in accordance with the erroneous opinion P. Dirac, necessarily consider in modern physical theory as quasi-particles, so-called “holes” or vacancies of electrons [9].

The results of years of research real magnetic spinor particles allowed the author to formulate the conception of the Physical Triad (PT), according to which the real World consists of three fundamental phases: Matter, An-

timatter and Energo-medium [10]. Phases Triad self-sufficient and their conservation laws to eliminate any mutual transformations between particles of different phases. For example, the law of conservation of Matter, denies the existence of any pre-matter particles. Material particles can only turn in the material particles with more or less significant content matter. All material particles are spinors and antimaterial particles—antispinors. Spinors and antispinors referred to as the General title: spinor particles.

Note 2. For greater clarity, we note that the term “spinor particles” used in the article should be attributed solely to a fundamental charged particles with electric and magnetic charge, and the term “spinor particle” are synonyms of the term “charged particle”.

The particles Antimatter constitute approximately half of all real spinorial, *i.e.* charged particles in the World, and their absence in the physical representations is determined by the Physics of their retention in substance or conditions of their confinement. The law of conservation of Antimatter eliminates any possibility for transformation antispinors in particles of other phases of the Physical Triad, answering the law of conservation of Antimatter in the real World. The process of pair annihilation: spinor-antispinor, is accompanied by a strong compression (pressing) of these particles to one another by forces “Dark Energy” and, in principle, not lead to the humiliation of the particles. In such processes is only possible transformations, for example, antispinors in other antispinors with great or less quantities of Antimatter in them.

As shown by the author in his numerous publications (see, for example, [1] [4]) all true spinor particles in the real World are massless. Therefore, any attempt to link the acts of their various transformations with a Physical Mass cannot be considered as successful. It is important to note that as a result of ignoring the real magnetic spinor particles of the physical theory, were closed all reasonable approaches to clearing up the essence of Physical Mass. General-physical concept of the real Mass, developed by the author with due regard existence of real magnetic charges in the atoms and the substance set forth below in this article.

Energo-phase (Energo-medium, Power-medium) is a global phase, which executes all acts of force on the particles and masses in the real World. In the basic (undisturbed) state the Energo-phase is an isotropic high-density gaseous (possibly also quasi-liquid) medium formed by its own spinless and massless fundamental particles—energions. Energions are very small; they move in all directions at speeds close to the speed of light and can only be of two types: the Left (ε_L) and Right (ε_R) energions, which should be linked with the appropriate direction of their own rotation. General state of energions within the Energo-medium is determined as doubly degenerate. Superhigh mobility and inertialess behaviour of energions allow the particles and masses to move relatively freely in the Energo-medium when this medium is in basic (undisturbed) state.

Note 3. It can assume that if energions, *i.e.* particles of Energo-phase, stop moving, all spinor particles and masses, including planets and stars, will be “concreted” in a static world environment, which in this case cannot be called the Energo-medium. Such a scenario can be defined by the term of “exotic death of the Universe”. Fortunately, this can’t be, because the main properties of the Universe are: the Eternity and Infinity.

According to the Physical Triad Concept all power acts in the real World are executed by the Energo-medium through contact pressure of its particles—energions on the spinor particles and consequently on the masses (bodies). Forces direct action on the particles and masses, which are implemented in the Energo-phase are the forces of the so-called “Dark Energy”, which represent the zones of nonequilibrium States in the Energo-medium in the form of oblasts of local pressures which are creating particles—energions. The formation of “Dark Energy” in the Energo-medium induced spinor fields, *i.e.* fields of charged particles. In so doing all variety of spinor fields including gravitational fields don’t have any real power significance. They only play the role of intermediaries exerting influence on the Energo-state of the Energo-medium and inducing formation of “Dark Energy” in it.

Namely “Dark Energy” is real power factor, performing the whole dynamics of particles and bodies, as the scale of the Universe (the movement of galaxies, stars, planets and other objects) so and in the microcosm (for example, the dynamics of spinor particles within a physical mass, such as in atoms, nucleons, etc.). In detail, the concept of Physical Triad of the real World is contained in the two editions of the author’s book [10].

2. Electric and Magnetic Spinor Particles Are Real Structural Components Shells of Atoms

On the basis of his own experimental and theoretical investigations [1]-[4] the author has shown that the atomic shells, consisting from electric and magnetic spinorial particles (magnetic and electric charges), will be electro-

magnetic, but not purely electronic as it is generally accepted, with the number of magnetic particles in the atoms approximately equal to the number electrical particles. Namely electromagnetic shells of the atoms are the natural sources (generators) of gravitation field, which in really are a vortical electromagnetic field. The elementary source of the gravitational field is a spinor electromagnetic quasi-particle which was given to the author's name *s*-graviton (*s* = source). Composition of the *s*-graviton: two spinors (electron and magneton) and two antispinor corresponding to them. Figuratively speaking the *s*-graviton is a combination of electric and magnetic bispinors rotating in antiphase on the same atomic orbit. This quasi-particle can also be represented in the form of two orbital currents, electric and magnetic charges, which in opposite phase revolve on one atomic orbit. Model representation of the vortical orbital EM-current, *i.e.* *s*-graviton, must be written in the following form: $\text{rot}[\mathbf{J}_e - \mathbf{J}_g]$, where \mathbf{J}_e and \mathbf{J}_g vectors instantaneous current density electric (*e*) and magnetic (*g*) charges corresponding to their vortical (circular) flows. Then the equation of the process of gravitational field formation by *s*-graviton can be presented in the form:

$$k \text{rot}[\mathbf{J}_e - \mathbf{J}_g] = \text{rot}[\mathbf{E} - \mathbf{H}] \tag{1}$$

where \mathbf{E} and \mathbf{H} are vectors of instantaneous strength of electric and magnetic fields in the composition of the vortical electromagnetic (gravitational) field, *k* is the proportionality factor. Minus signs put in the above equation of the process gravitational field formation correspond both to reciprocal antiphase of orbital currents electrical and magnetic charges so and antiparallel orientation of vectors of instantaneous strength of electric and magnetic fields in every point of the gravitational field. As follows from the above Equation (1), the gravitational field is a vortical electromagnetic field, which is characterized by changes in the direction strength vectors (\mathbf{E} and \mathbf{H}) electric and magnetic fields that are equal in magnitude and opposite in direction to each point. Unlike the vortical magnetic field of each point of which corresponds only one vector instantaneous strength of \mathbf{H} , every point of the elementary gravitational field is answered two vectors of instantaneous strength of the fields of \mathbf{E} and \mathbf{H} equal by value and oriented antiparallel each other.

Vectorial-vortical analogy between magnetic (a) and gravitational (b) fields display on **Figure 1**.

In addition, on **Figure 1** shown that the vortical magnetic field is product of the revolving magnetic bispinor or, that too, of the revolving spinorial magnetic dipole. The source of the elementary gravitational field is the *s*-graviton that yet can be defined as dynamic EM-dibispinor, *i.e.* two combined bispinors (electric and magnetic) circulating in antiphase on one atomic orbit. The classical equations of processes formation magnetic and electromagnetic (gravitational) vortical fields are also down on **Figure 1**. Gravitational fields corresponding vector condition: $\langle \text{rot}[\mathbf{E} - \mathbf{H}] \rangle \neq 0$, by analogy with the ferromagnetism can be called **ferrogravitational fields** (FGF) and the fields corresponding to the condition: $\langle \text{rot}[\mathbf{E} - \mathbf{H}] \rangle = 0$, by analogy with the paramagnetism can be called **paragravitational fields** (PGF).

Between the masses (bodies) that emit paragravitational field, is implemented by a well-known attraction. The physical masses which emit ferrogravitational fields will push off from masses-sources a paragravitational fields, for example, from Earth, that constitute open by author present article **Gravito-levitational effect** [11].

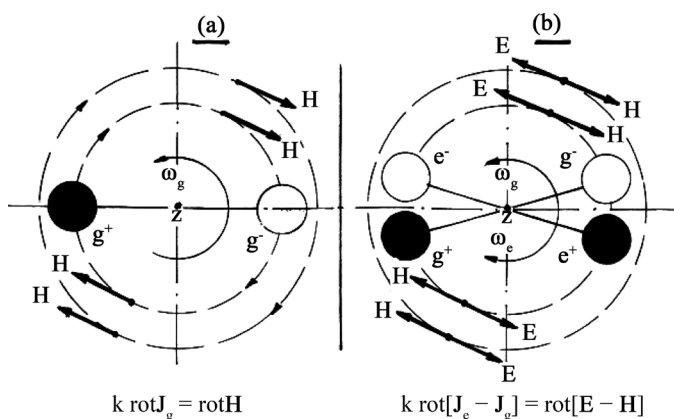


Figure 1. Schemes of mechanism the formation of the vortical fields: magnetic (a) and electromagnetic (gravitational) (b). White circles on the **Figure 1** showed negative charged electric and magnetic spinors: electron (e^-) and magneton (g^-) and black circles—positively charged antispinors corresponding to them with charges e^+ and g^+ .

Note 4. Results of experiments author with magnetic charges and their currents in superconductors will allow him to develop technology to produce of the technical ferrogravitational field. Technical FGF and **Gravito-levitation forces** formed by them can be used in transport, lifting and space engineering, power engineering, as well as in numerous gravitophysical and gravitochemical technologies (publications author's [7] [12] [13]).

It should be noted that the magnetic bispinors which inhabit on the outer orbits in the shells of the so-called magnetic atoms (Fe, Co, Ni and others) are carriers of the so-called atomic magnetic moments and are responsible for all known magnetic phenomena in atoms.

In complete analogy with the process of formation of the vortex magnetic field is formed and the vortex electric field, which is described by the vortex vector $\text{rot}\mathbf{E}$. In this case, the source of such a field is a rotating electric bispinor with components: electric spinor, for example, an electron and the corresponding him real antimaterial particle—antispinor, which is the true antielectron. The main conclusion that follows from all stated above, is the author's assertion that the positive charges in the atoms and substance are actually real particles of Antimatter with their natural positive charge. It is important to emphasize that the electric antispinors, for example, antielectrons in substance are neither “holes” of Dirac, nor positrons.

3. The Physical Essence of the Physical Mass

The discovery by the author of the real magnetic spinor particles (magnetic charges) in the atoms and substance, as well as translation in the category of real particles the electronic vacancies or “holes” Dirac, allows to figure out the essence of such mysterious for physical science concept as the Physical Mass. Since 2001 [1], the author in all his messages tried to explain that the Physical Mass, for example, atoms or nucleons, is a electromagnetic spinor structure, consisting of four independent fundamental particles: two spinors (electric and magnetic) and two antispinors, corresponding to them. Without this quartet of Physical Mass cannot be formed. Recall that the main characteristic feature of all varieties of Physical Mass is their ability to the emission gravitational field, which is vortex electromagnetic on his nature. It is important to note that namely “thanks” the Physics retention (confinement) of spinor particles in atoms and substance, as magnetic spinor particles so and electric antispinors, *i.e.*, the true antielectron, has been “buried alive”, that, in fact, close any reasonable approaches physical theory to real the essence of Physical Mass. The latter circumstance, according to the author, determined the occurrence of the famous “divine” of the Higgs boson which is the quantum of the Higgs field. The very same Higgs field is fictitious, exclusively mathematical, “donor” Mass in Nature.

All spinor particles as spinors so and antispinors are massless, since the mass is the result of their joint “activity” in the atomic-shaped structures. It is also important to emphasize that massless are not only electric and magnetic spinor particles, for example electron and magneton, but also and weak spinor particles, for example neutrinos of all types. To ascribe spinor particles mass is absolutely absurd, because they are able to emit only their characteristic the spinor fields: electric or magnetic (**electromagnetic block spinor particles**), or the electroweak and magnetoweak (**block weak spinor particles**) (see [1] [4] [10]).

4. Antielectrons Is Not a Positrons, But Is a Real Particles of Antimatter, Hidden under the “Conspiratorial” Name “Holes” Dirac

To determine the real significance of the provisions of the author of this article relating to the determination of true antielectrons in the substance, is useful to provide a brief historical insight into the issue of the positive charges in the condensed state of substance. So, in 1930, P. Dirac suggested that electrons in a solid can exist in states as with positive so and negative energy [9]. In the collision of a photon with “negative” electron, in place of the knocked out electron, will arise a so-called “hole”, which behaves like a positive charge. Dirac claimed, that **“the ‘hole’ needs to be a new type of particle, unknown in to experimental physics. She must have the same mass as the electron, but charge is opposite in sign to the electron charge. We can call these particles antielectrons, because they quickly recombine with electrons”**. Namely P. Dirac introduced in the physical representations of the term “antiparticle”, postulating the possibility of natural existence in Nature of particles and their corresponding antiparticles.

However, it should be noted that the “holes” or as hurried to call them Dirac-antielectrons, it's not real particles and quasi-particles, which are also called as electronic vacancies.

In 1932 the discovery was made by C. Anderson positively charged particles in cosmic radiation, which was named the positron [14]. The magnitude of the charge of the positron was equal to the charge of the electron and

the positron was later confirmed as the antielectron, *i.e.* as a true antiparticle for the electron. Recall that shortly before the opening of Andersen, the possibility of the existence of positively charged particles with charge equal to the charge of the electron, was predicted theoretically by P. Dirac. Since the positron was the first real elementary particle with a positive electric charge, it was agreed that the positron is the antielectron. Himself Dirac actively was support by the above-described allocation of roles in the world of particles and antiparticles, moving their “holes” in the category of quasi-particles and, in fact, depriving them of the status of the real antielectrons. This distribution is saved in physics up to the present day. According to modern concepts, of the electron, by definition, has two particles, which is elevated to the status of his antiparticle: the positron as the real antiparticle, *i.e.* positively charged electron and the “hole” as a quasi-antiparticle of the electron. As know, the prefix “anti” with regard to these particles is solely determined by the signs and magnitude of their charges.

The electron is an electrically charged spinor particle, which is capable of emitting exclusively an electric field. Unlike the electron, the positron is a form of mass which participate in gravitational interactions, *i.e.* it emits its own (positron) gravitational field.

In its publications, the author has repeatedly stressed that the spinors are showing negative charge, and positive charge—always a sign of antishpinors, *i.e.*, particles of Antimatter [10]. Thus, in the structure of the positron there is a real antispinor with a positive charge, equal in magnitude to the charge of the electron, which is true antielectron. It is important to understand that in addition to antispinor (real antielectron) in the structure of the positron implemented other mini-spinor particles, so as to radiate EM-gravitational field can only EM-education such as a Physical Mass. The above conclusion is confirmed by such a process as annihilation of pair: an electron-positron. As a result of this annihilation is the unification of spinor (electron) and antispinor (antielectron) and all the extra “throw overboard” in the form of mini-particles and γ -quanta. In this process is implemented compression of particle and antiparticle in spinor pair with each other, which is accompanied by a spin-shorting. In this case, the spinor pair goes from active (polarized) state in depolarized and not manifest around any spinor fields. It is important to note that in this process does not occur the destruction of the spinor particle pairs, *i.e.* not implemented generally accepted “destruction” of matter and “transformation” her in field. Just spinor particles in such a pair, as a result of “spin short circuit”, are practically not observed.

5. Electromagnetic Device of Atomic Shells on the Example of an Atom of Ordinary Hydrogen

Most vividly real (electromagnetic) device of atomic shells with electric and magnetic spinor particles, as spinors so and antispinors, can imagine the example of the atom of ordinary hydrogen, which diagram is shown in **Figure 2**. In the center of atom is located nucleus, *i.e.* proton (p) and small circles represent spinorial electric and magnetic particles. White circles denote spinors, *i.e.* electron and magneton, respectively, with charges e^- and g^- and black circles—the positively charged antielectron (not to be confused with positrons) and antimagneton with charges e^+ and g^+ . Instantaneous velocity vectors v indicate the direction of motion of the magnetic

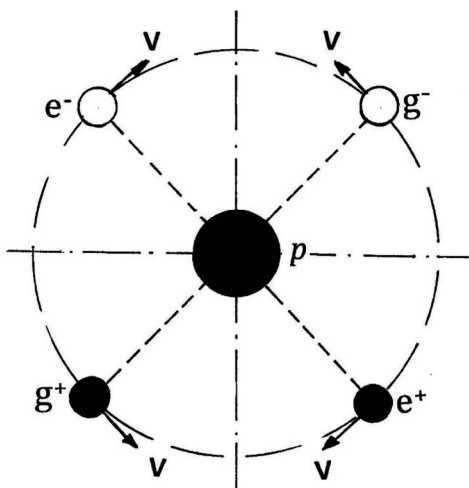


Figure 2. The electromagnetic structure of the atom of ordinary hydrogen.

and electrical bispinors in the same orbit of the hydrogen atom. The unification of electric and magnetic bispinors, *i.e.* one s-graviton (see **Figure 2**) form the shell of the hydrogen atom.

The concept of EM-shells of atoms, developed by the author, involves the specification of the known Pauli principle, which was invented for purely electronic atomic shells. In general, the Pauli principle for electromagnetic shells of atoms should be treated: **at one atomic orbit may be only one s-graviton**. It should be noted that this principle has an exception for so-called magnetic atoms (iron, nickel, cobalt, etc.), in which the outer atomic orbits occupy magnetic bispinors, that define all known atomic magnetic manifestations.

Note 5. The author came to the conclusion (see [1] [3]) that the nucleons (protons and neutrons) is “small” atoms with own electromagnetic shell and nucleus. The nucleons participate in the gravitational interaction, *i.e.* they emit their own gravitational field. As proves the author of this article (see, for example [4]), to form own a gravitational field can only atomic-shaped electromagnetic structure or Physical Masses. In this case, it is possible that the positrons in the role of mini-proton is included in the cores of nucleons. The latter is quite possible, given that the positrons most often observed in β -decay of atomic nuclei.

6. Physics Confinement of Spinor Particles in Substance and Such Theoretical “Prosthesis” as Magnetic Moments and Dirac’s “Hole”

As noted above, the main reason that the real magnetic spinor particles constituting about half of all real spinor particles in Nature, as well as electric antispinors, *i.e.* true of antielectrons, were not recognized in physical science, determined by the Physics of their retention (confinement) in the atoms and the substance that is fundamentally different, for example, from the confinement of electrons.

Hypothesis confinement of fundamental particles was put forward to explain the retention of quarks inside hadrons, and also to explain the negative results in the search for free quarks. The notion of confinement, with much more base than for quarks, needs to be expanded on hold magnetic charges and the real antielectrons in atoms and substance, and also for explaining the ban on their free exit from substances. It should be noted that the conditions of confinement of the magnetic spinor particles and of the true antielectrons in the substance substantially softer than the conditions confinement of quarks in hadrons. On the other hand, the conditions hold (confinement) of antielectrons and magnetic charges in substance are substantially more rigid in comparison with, for example, confinement of electrons.

Figure 3 shows the layout of levels of electrons, magnetic charges and the antielectrons in the condensed state of substance on the scale of energy. It is well known that the electronic levels are located in a potential pit and for going out of an electron in a free state is necessary to increase the internal energy of a substance, for example, to heat him.

Unlike electrons, the energy levels of antielectrons, as and the levels of magnetic charges are under potential cupola and for the implementation of the free state these particles substance need cooled, that is, to reduce its internal energy. The deep stages of cooling there arises the superconductivity effect what probably is an evidence of transition of the magnetic spinorial particles, as and antielectrons into the condition free from bonds

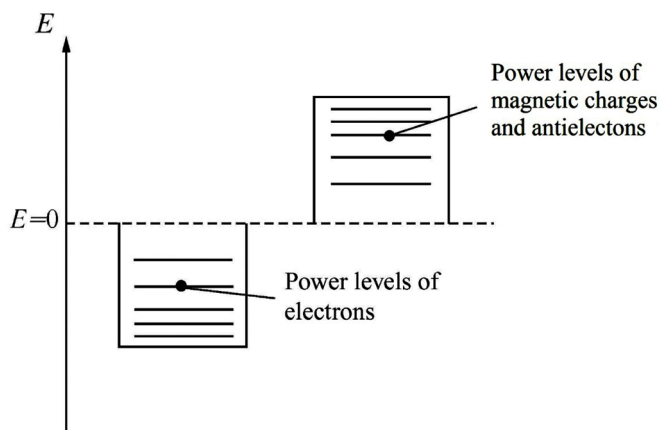


Figure 3. Location on the scale of the energy levels of the electrons (in the potential “pit”) and magnetic charges with antielectrons (under potential “cupola”).

with the lattice of superconductor. In this case, the electric current passes through the superconductor without resistance, since the free magnetic charges, which revolve around the current lines, do not experience friction on the lattice of the superconductor. Any pumping energy of the substance (radiation, heat, etc.) will push magnetic charges to a higher energy level, that is accompanied by a sharp increase in the electrical resistance of the conductor.

Thus, under “sanctions” confinement, *i.e.* under the cupola (see [Figure 3](#)) there were three real spinor particles of the four components of the atomic shells, *i.e.* a pair of magnetic particles with charges g^- and g^+ and antielectron with a charge of e^+ . Recall that the magnitude of the charges particles in the atomic shells meet the condition: $e = g$. Paradoxically, but these three real spinor particles is still not recognized modern physical science. Real magnetic charges have been spoofed in the theory such physical prostheses as the magnetic moments of the electron, atom, neutron and so on. “Theoretical fate” of the true antielectrons, *i.e.* the real particles of antimatter was “solved” by P. Dirac, who “buried” this particles under the mistaken concepts of electron vacancies or “holes”. Is it any wonder after all this complicated state of the modern physical theory.

7. Conclusions

As noted in this article, under the Physics confinement in atoms and substances there are not only magnetic charges, but also true antielectrons (e^+), which should not be confused with the positrons. Namely the Physics confinement of antielectrons in the atoms and substance is responsible for the paradox with the lack in physical representations of real positive spinor particles. These real particles are replaced in the theory such of theoretical prostheses as electron vacancies or “holes”. On the role of the “true” antielectron, by mistake, was “assigned” of the positron.

Physics confinement as magnetic spinor particles so and electric antispinors in atoms and substance, played a “cruel joke” with the fundamental physical science. As a result, physical science ignores the existence in Nature three-quarters of the real spinor particles, leaving himself for of physical interpretations only electric and electroweak particles of Matter. In the end, physical theory was forced to “take the rap” for the existence of the four above mentioned real spinor particles (two magnetic and two electric), having in the Arsenal of available tools only real electric spinors, *i.e.*, essentially only electrons (hypothetical quarks are not taken into account). The most obvious example of the above mentioned vicious electro-material script can serve as a physically flaw, nevertheless, is accepted in physical science electronic shell of atoms.

It is important to note again that the author’s allegation concerning the real status of the electric antispinors and, above all, antielectrons, is based on the results of his long research of real magnetic charges in atoms and substance. In its publications the author emphasized that in addition to the natural Physics confinement of the magnetic spinor particles in atoms and substance, a very negative role in the acknowledgement of the real magnetic charges of physical science, played a vicious electromagnetic concept of J.C. Maxwell [15]. In the framework of this concept, published in 1873, Maxwell, in the absence of knowledge of the actual physical processes occurring in the conductor with electric current, *i.e.*, not knowing what in the conductors may have magnetic charges, deprives of a magnetic field of its own source: the magnetic poles or magnetic charge. Maxwell was the first who introduced in physical science vicious electromagnetic concepts, whereby the direct source of the magnetic field is the acts of a mechanical movement of electric charges. The above mentioned vicious EM—concept of Maxwell, which is called in the publications author as “vicious virus ‘Maxwell’ (VVM)”, can associate with the “cancerous” of education in “body” of theoretical physics, “metastasis”, which affects many areas of physical science, giving them a false and even mystical significance. Namely such directions are, for example: fallacious concept electronic shells of atoms and the erroneous replacement of real particles of Antimatter in substance on the Dirac’s “holes” or electron vacancies. It should be emphasized that the vicious model of the electronic shell of atoms, in the formation of which (indirectly) participated and P. Dirac, is one of the most malicious versions in the Physical science. Of course, but all this only is after **a globally fallacious EM—concepts of Maxwell**.

Note 6. Base provisions of general physics with real magnetic charges, developed by the author, were presented at the international PIERS 2009 Moscow Conference (Progress in Electromagnetics Research Symposium [16] [17]).

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Appendix I

The list of successful experiments of the author on a problem of real magnetic spinor particles (magnetic charges)

- Magnetic neutron scattering [5] [6].
- Experiments on the separation of magnetic charges in pairs + and – in a magnetic field, magnetostatic interaction of the bodies loaded with magnetic charges [1]-[4].
- Experiments on the generation of gravitation field using rotating superconductors [1]-[3].
- Experiments on creation of primary magnetomotive force (MMF) and direct current of magnetic charges in the superconductor [3].
- Experiments to elucidate the nature of the volatility of atoms (molecules) of gases on the example of the volatility of hydrogen gas (Gravito-Levitational effect) [3] [10] [12].

Appendix II

The main physical parameters of the magnetic and electric spinor particles (magnetons, antimagnetons and antielectrons) constituting, together with electrons of atomic shells

Charge: The magneton (magnetic spinor) and the antimgneton (magnetic antispinor) have a magnetic charges g the value of which is equal to the value of the electron charge ($g = e$). Researches of the author showed that the greatest possibility charge of a fundamental magnetic spinor particle is equal to electron charge, *i.e.* $g_{\max} = e$.

Sign of the charges: Like an electron a magneton has a charged with the sign “minus” (g^-). Antimagneton has a positive magnetic charge (g^+).

Mass: Like an electron a magneton, antimagneton and antielectron are a massless particles, because the physical mass is result of joint structural “activity” of electric and magnetic spinorial particles.

Class of elementary particles: The magneton is a lepton and the antimagneton and antielectron—an antileptons.

Statistical properties: The magneton is a fermion (spin equal $1/2$) and the antimagneton and antielectron—an antifermions (spin equal $-1/2$).