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Quantum energy of background electrons 3.73 keV - Rimiliy Avramenko

One of the outstanding Russian researchers in the field of fundamental physics was Rimiliy Fedorovich Avramenko (1932 - 1999). The author of more than 100 scientific papers and more than 40 inventions and patents, Rimiliy Fedorovich was a member of the Russian Academy of Natural Sciences, was engaged, among other things, in theoretical and experimental research in the field of energy, and the results of some of his observations were presented in openly published scientific articles.

Book: electrik.info/avramenko.djvu (in Russian)

In 2000, the book "The Future Opens with a Quantum Key" was published, after the title of the article of the same name by Avramenko on the topic of the energy potential of the vacuum, in which articles, speeches and notes of the scientist and his colleagues were presented. After performing many experiments and thoroughly examining the scientific material accumulated by physics, the authors of the book answered the question "what constitutes the bulk of the mass of the observable Universe?"

The answer was this: the world is filled not only with "warm" relict photons, but also with "ultra cold" electrons, the total mass of which is many times greater than the mass of the observed galaxies, planets, stars, and simply intergalactic gas.

The apparent unobservability of this set of real "parts" is explained by their quantum properties - the electrons of the Universe, possessing wave properties, prefer to combine into pairs (such as Cooper pairs for superconductors), forming the so-called electron Bose condensate (EBC) - a state with the lowest energy.

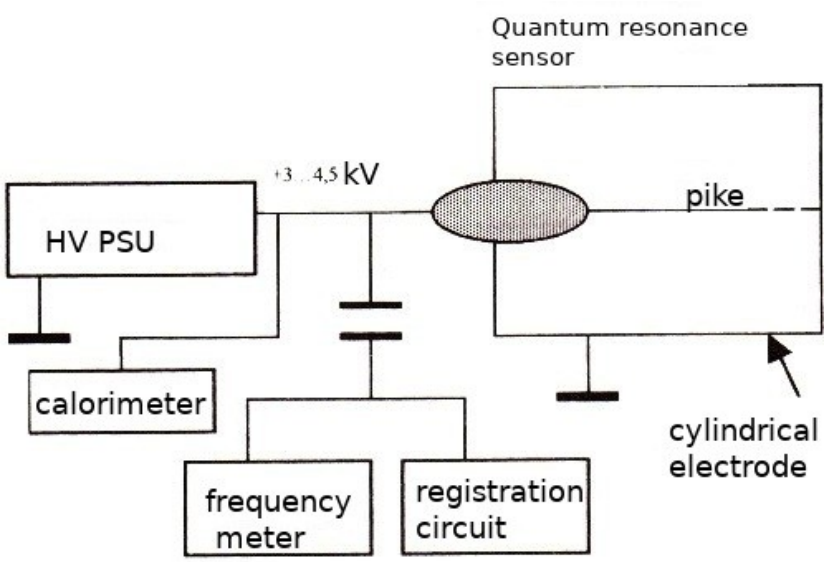
Electrons in this state can have enormous sizes - a soccer ball, a planet, a galaxy, the Universe, and this in no way contradicts the proven principles of quantum theory, because an electron is a multifaceted entity, it can manifest itself both as a "microparticle" and as a wave process filling any conceivable volume.

$$W_c = \frac{e^2 mc}{\hbar} = 3,73 \text{ keV}$$

In the well-known Feynman’s lectures on physics, the energy side of the quantum potential is noted - a special quantum energy - a force that cannot be reduced to either mechanical, electrical or other forces and energies. At the same time, it is customary in physics to characterize different types of energies by characteristic constants.

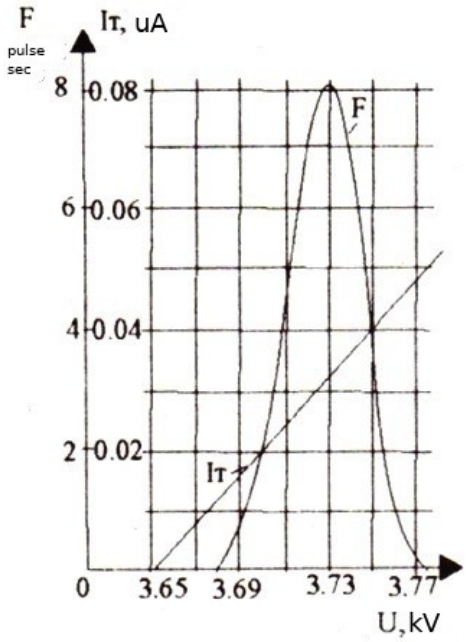
For example, chemical combustion of fuel is of the order of magnitude less than 1 eV, the nuclear energy range starts from 115 keV, etc. The calculations of Avramenko and his colleagues showed that the quantum energy of electrons in the background electron Bose condensate is characterized

by a constant of 3.73 keV. What practical sense does this energy have? It is known, for example, that at energies greater than a certain threshold value, the generation of electrons is possible in nuclear processes. However, direct experiments were needed to confirm the authors' calculations regarding the electron energy of the background electron Bose condensate.



And direct experiments were set up by researchers. Under the conditions of the laboratory, a setup was created on which electrons could gain or give up energy Wc = 3.73 keV. An electric potential of about +3730 V was applied to the tip of a thin conductor. This tip was located in the air inside the cylindrical cavity of the second electrode, the dimensions of which were many times larger than the diameter of the tip.

With varying voltage current was recorded between the electrodes. At a voltage close to 3730 V, plus or minus 20 volts, characteristic pulses were observed against the background of the "dark current" of the ionic wind. With large deviations of the voltage from the theoretically found value, the additional current pulses disappeared completely. Thus, this is the quantum resonance, since the dependence of the frequency of microdischarge pulses from the tip had the character of a typical resonance curve.



Thus, the development of quantum concepts and experimental studies regarding the absence of a void in the Universe, its filling with a powerful wave field of electrons, open up broad practical prospects for creating new "instant" communication means and nuclear-free environmentally friendly energy sources - "quantum" power plants and engines for vehicles. including space.

Based on the book by R.F. Avramenko "The future opens with a quantum key"

Andrey Povny