

MAJORANO EFFECT AND MAJORANA PARTICLE
 SELF CONJUGATION OF THE ELECTRON
 J.W.A.Zwart

Abstract

The Majorano effect of the electron not as particle but related to the ultra fast and light dark matter medium, discussed made plausible.

Par 1 Introduction

In the science literature prognoses circulated about the existence of Majorana particle, the theoretical physicist who predicted the possibility of a rather obscure quantum particle adhering to the electron. At present the search for this particle is highly effective in both areas of high energy physics and superconductivity research.

The association of the Majorano 'particle according to the theory of pseudo neutrino vectors is a consequence for the existence of the ultra light dark matter medium. Just because this medium predicts the existence of the self conjugation of the electron and in a step further even so self conjugation of the proton because both are subjected to the same ultra fast medium [hyperfine structure](#) of proton (*ref 2*). So the statement is that the self conjugation of the electron is the Majorano effect and a consequence of the existence of the dark matter medium. This effect is also easy to understand. In zero state only normal pseudo e-neutrinos act on the electron but in random collision exchange the anti pseudos are activated like the idea of a quantum sea of repulsive electrons giving Lamb's shift in the medium due to the relativistic momentum of the medium at $\frac{1}{2} c_{\text{eff}}$ collision exchange. Lamb shift (*ref 1*). For the positron the effect is reversed: the anti pseudo neutrino is zero state and the normal pseudo e-neutrinos give relativistic random relaxation exchange.

In the following the question is why the Majorano effect cannot be observed by a Cooper pair of electrons in superconductive materials.

Par 2 Why the Majorano effect of the electron is not easily observed

The definition of the Majorano effect of the electron is the self conjugation for this particle. However the same should be valid for the proton, so the proton also has self conjugation.

The reason why this effect of self conjugation cannot be observed is that the magnetic filament of the electron has to be squeezed or stretched over a length of the Lamb shift of $5.1 \cdot 10^{-7}$ m. Maintaining the squeeze can be reached in a Cooper pair for the electrons. However then the squeeze is encapsulated in a superconductive substrate while the open end of the magnetic squeeze seems extremely difficult to observe.

A combination of the proton and electron having opposite electric charge the squeeze to the magnetic filament to the Lamb wave length should be easier to reach in the coherent state of a group of H atoms. However a single squeeze lasts only about half the time of Bohr's radius over c .

To show this one has to make some suppositions for the self conjugation of the electron. Which is based on the internal structure of the electron. Then the electric unit charge is alternating in an enclosed torus of magnetic field or doughnut symmetry. Through the inner ring of the torus the electric charge carried by dark matter medium gives an interaction between electric and delayed magnetic induction according to Maxwell electromagnetic laws maintaining the alternation. Without the dm medium this process cannot exist.

The guess in steady state without the squeeze of the electron is that the magnetic field is subjected to the quantum magnetic flux ϕ which is related to the uncertainty constant h giving $\phi/2e = h$ with e the unit charge. It is this relation that determines that the magnetic field in the small radius of the torus can be assessed due to flux conservation while the greater radius of the torus is the electron uncertainty length of λ_e .

Further the Lamb shift in relation to the torus conservation and the cylindrical filament geometry is the quantum gap wavelength between the first orbit of the Lyman spectrum and is based on the Lamb relativistic exchange from the repulsive sea of the electrons at the Lyman state. The supposition is that the dark matter medium replaces the relativistic interaction because this medium never exceeds the $\frac{1}{2}c$ effective momentum even after strong acceleration.

So by magnetic flux conservation of the toroidal symmetry the filament radius based on the Lamb length can be calculated which turns out to be greater than the small torus radius but with a weaker magnetic field showing that the self conjugation of the electron itself is energy demanding.

In case of a Cooper pair of electrons, repulsive in charge is considered then the supposition is that the zero energy state of self conjugation of the pair can be reached following a head to tail condition for the cylinder symmetry. Consequently the electrons have to rotate giving a current which has to drive the superconductive matrix of atoms in the pair. Obviously the Cooper ring current is perpendicular to the observed magnetic field in the super magnetic material and cannot be observed as self conjugation of electrons..

In considering Bohr's radius to electron self conjugation with opposite electric charges then the reciprocal magnetic flux conservation based on the Lamb elongation should be valid. This is for reasons that the self conjugation energy of the squeeze should be a little bit less than the zero, Hartree potential (*ref 1*). If it is greater than Lyman exchange happens. Therefore in a coherent cycle of gravity generation between a fast network of electrons and the dark matter medium the magnetic self conjugation is excited while at the inertia state the state of electric charge for Hartree is activated as the relaxation of the cycle.

Par 3 The calculation

The small radius of the torus is: $a_1 = \lambda_e / 21.81$ $137.036 / 2\pi = 21.81$ related to the reciprocal of the fine structure constant of the electron. The torus volume is $2\pi^2 a_1^2 \lambda_e$ m³ with λ_e the major torus radius and $\lambda_e = 2.4263 \cdot 10^{-12}$ m. See also (*ref 1*)

Further the magnetic flux is supposed to be subjected to the uncertainty constant h, making:

$$B_o^2 / \mu_o \times 2\pi^2 \lambda_e^3 / 21.81^2 = 1.37 \cdot 10^{-46} \text{ Joule} \quad \text{while} \quad B_o (\lambda_e / 21.81)^2 = h = 6.627 \cdot 10^{-34}$$

$$B_o = 1.704 \cdot 10^{-8} \text{ T} \quad \mu_o = 4\pi \cdot 10^{-7} \quad \text{Bohr radius } a_o = 21.81 \lambda_e \text{ deviation } 0.0001.$$

Under magnetic flux conservation:

$$1.704 \cdot 10^{-8} (\lambda_e / 21.81)^2 = B_1 a_1^2$$

Magnetic filament energy balance: $B_1^2 / \mu_o \times \pi a_1^2 \times 5.1 \cdot 10^{-7} = 1.37 \cdot 10^{-46}$

$$a_1 = 6.481 \cdot 10^{-12} \text{ m} \quad B_1 = 1.589 \cdot 10^{-12} \text{ T}$$

$$a_1 / \lambda_e = 2.671 \quad 2.761/2 = 1.335 \text{ close to } \sqrt{4/3}.$$

The radius $a_1 > \lambda_e$ means that it is an excited state in need of external energy.

Similarly in combination at Bohr's radius.

Hartree potential (*ref 1*) at rest for H atom is $4.36 \cdot 10^{18}$ J. Bohr's radius $a_o = 5.292 \cdot 10^{-11}$ m

$$B_1^2 / \mu_o \times 5.1 \cdot 10^{-7} = 4.36 \cdot 10^{18} \quad B_1 = 3.278 \cdot 10^{-9} \text{ T}$$

Reciprocal flux conservation using the toroidal B_o of the electron:

$$(5.292 \cdot 10^{-11})^2 \times 3.278 \cdot 10^{-9} = 1.704 \cdot 10^{-8} \times a_1^2 \quad a_1 = 2.308 \cdot 10^{-11} \text{ m}$$

The filament radius $a_1 < a_o$ (Bohr) because it is a momentary magnetic state which cannot last with respect to zero Hartree condition.

$$a_1/a_o = 2.308 \quad 2.303/2 = 1.147 \quad \text{If } 1.147 > \sqrt{4/3} = 1.1547 \text{ then the}$$

squeeze state can be repeatedly activated by coherence in the group of atoms which is the situation for gravity alternation by dark matter or the medium of pseudo e-neutrinos surrounding a macro mass.

The relativistic state of the pseudo cells complies to $c = \frac{1}{2}$ giving $m/m_0 = \sqrt{4/3}$.

The Cooper pair of electrons has an enclosed conjugated state driving the opposed pair of equal charge in the squeeze mode determining the plane of current rotation in a direction perpendicular to the overall generated magnetic field of the superconductor.

Further flux conservation of the electron is based on $2e\phi = h$ the magnetic quantum flux ϕ . For the electron it means that the dynamics of electric charge moves through the inner ring of the torus geometry. The charge is accelerated to a momentum of $\frac{1}{2}c$ changing polarity of charge but the charge should return to its initial state through the inner hole then again changing polarity while the momentary magnetic torus flux within keeps the same direction. In a static sense the charge normalised to c is subjected to conjugated charge induction.

References

Ref 1: <https://vixra.org/abs/2305.0061> Sakharov's induction law for dark matter of an ultra fast and light medium

Ref 2: Website: <https://gravitation-levitation-physics.org/>

Website: <https://universal-creation.org/>

Metaphysics due to the impact of the mediating medium of dark matter on humanity.

<https://vixra.org/abs/2302.0135> Provisional proof between Planck's parameters to the giant groups symmetries of Monster, Baby monster and Fischer 24.

Foundation Cosmic Field Paradigm ©

..... introductory text on standard particle theory and cosmology, the phenomena explained by them, unsatisfactory features of that explanation, and an alternative approach by the Cosmic Field Paradigm which (supposedly) cures those defects