

## INCONSISTENCY OF SPACE PAIR TAU-LEPTON ATOMS

Melibaev M.

Uzbekistan, Kokan State Pedagogical Institute

### ANNOTATION

It's okay space pair of neutral currents in  $\tau$ -lepton systems under the influence unwanted effects learned. Asymmetry of the photon beam  $\sim 10^{-8} \div 10^{-4}$  Tart i bda an iql angan.

**Keywords:** lepton sector, diagram, phase zhuflliga, zhuflliga charge, quantum.

The effects of parity nonconservation in decays are considered.  $\tau$ -lepton systems due to neutral weak currents. Degree asymmetries radiation R have order  $10^{-8} \div 10^{-4}$

Parity non- conservation effects in the decays of  $\tau$ - lepton systems arising in the presence of neutral weak currents are considered. The degree of the emission asymmetry P is of order  $10^{-8} \div 10^{-4}$  for photon emission.

Atom and core in systems the space couple neutral vines influence under  $b_{\tau}$  processes the last and so on co. p in the literature it is organized [3,4,5]. Fermi force affects neutral currents the space couple not to be saved issue experimental in a way approved.

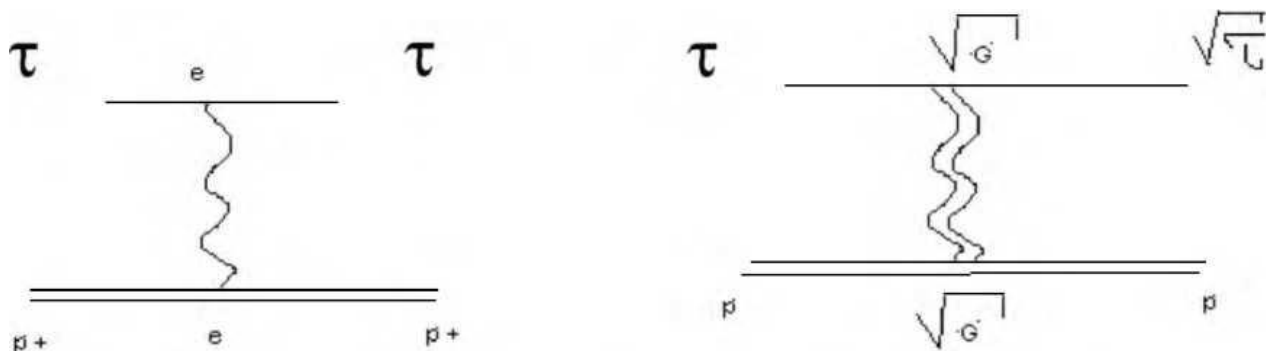
In this article this is research into the lepton sector expansion in terms of scientific methodology based on and k is considered a profitable plow. That is until today  $\tau$ - the constants of neutral currents in the lepton sector and the problem of its space-time symmetry will remain open.

In progress work in this direction on this getting dressed movement he will die. Traditional Fermi effect current i vector and axial organize from the doer consists of in this direction movement if he does, he will die.

This the problem the last at the time generalized electromagnet and powerless impact both strong effective the only impact based on car driver Weinberg - Salam - Gleshaw to the model based [1]

neutral currents based Feynman diagram according to the tune represents will be

Figure 1. Feynman graphs based on neutral currents.  $\tau$  –leptons, r-nucleons.



the nucleus is spinless, the potentials between  $\tau$ -lepton and nucleon, which do not preserve the space pair, can be written as follows [3,5]  $\tau(\hbar=c=1$  in units).

$$V^{en} = \frac{G}{\sqrt{2}} \left( g^{en} \cdot \gamma_5^{(e)} + g_2^{en} \alpha^{-(e)} \sigma^{(n)} \right) \delta(r) (1)$$

$$V^{en} = \frac{G}{\sqrt{2}} \left( \gamma_5^{(ie)} \cdot \gamma_5^{(2e)} + \alpha^{\rightarrow(ie)} \sum^{(2e)} + \alpha^{\rightarrow(ie)} \sum^{\rightarrow(ie)} \right) \delta(\vec{r}_{12}) \quad (2)$$

$\gamma_5, \vec{\alpha}, \vec{\Sigma}$  – Dirac matrices  $\alpha$  – are Pauli's matrix,  $G$  - F is Ermi's weak constant.  $g_1, g_2$  - impact parameters

These potentials have a short range and do not heal the couple. In many works, ideas of non-conservation of space pair in mesoatoms were built.

antilepton  $\tau$  are connected.

Fermi constant measure unit  $G = 10^{-5} (m_\tau/m_p)^2$  that he found for  $\tau$ -lepton in the system space pair effect  $i(m_\tau/m_p)^2 = \left(\frac{1,78}{0,51} \cdot 10^3\right) = 10^7$  He will die when he grows up.

However, in these experiments, there is a problem of multiplying such systems. Nevertheless, due to the fact that the particle-antiparticle space pair is not maintained in these systems, the effect of transition to special enhanced states can occur. This  $(\tau^+ + \tau^-)$  charge pair in the system and quantum number  $b$  or  $l$   $C = (-1)^{S+L}$ , this on the ground  $S, L$  - system spin and orbital moments. That's why for a quantum  $2^3S \rightarrow 1^3S + \gamma$  tooth  $S$  couple recovery  $q$  to ten basically  $q$  at 'iy banned. Photon charge  $b$  to  $q$  particle. But space if the pair  $R$  is not saved (combinatorial  $SR$  couple saved case)  $1^3R$  and  $2^3S_1$  situations interference as a result above mention  $q$  is attached tooth possible will be Atoms simple different from teeth this on the ground interference  $x$  and  $y$  arrow (weak effect under transient to the amplitude interference the recipient of 'tish  $y$  or 'k because  $ta' q$   $i$   $q$  constant) and the effect is quadratic.

$$W_{MI} = \left(\frac{\langle V \rangle}{\Delta E}\right)^2 W_{EI} \quad (3)$$

Therefore  $\tau$ , due to the large mass of  $\tau$ -lepton, the levels of the  $m_\tau = 1,782$  GeV  $(\tau^+ \tau^-)$  system are  $2^3S_1, 1^3S_1, 1^3P_1$  consists of situations.

$\Delta E = E(2^3S_1) - E(1^3S_1)$ . This systems effect is small banned it's a tooth level  $10^{-8}$  constitutes Tau is a lepton - nucleon bound system, and the  $\tau$ -lepton atom is in the  $x$  - axis thought conduct possible [ 2 ].

This in systems the space pair the effect of not being saved simple atoms as it is possible. This the situation  $\tau^+ + \tau^-$  is exotic It is different from the system powerless impact constant  $b$  or  $y$   $cha$  first it is possible to order it. This hydrogen in atoms and like the effect in mesoatoms only electron, muon and  $\tau$  occupies a lepton.

See the previous  $(\tau^+ + \tau^-)$  system  $\tau^-$ , i.e. hydrogen we will pass. This is to the hydrogen atom  $\tau^-$  entering the lepton when the system dies, from the electronic cloud  $\tau^-$  lepton to the nucleus very near located  $\tau^-$  since the lepton mass is  $3.4 \cdot 10^3$  times greater than the electron mass "shielding effect" of electrons is very low. Tau lepton atoms hydrogen to atoms very similar and from the charge He did n't die for effect in case laugh.

Space of the couple not to be saved level increases with increasing  $\tau$ -lepton mass. So, electronic and to the muon the effect will be relatively large. Bohr orbit radius  $a_\tau = h/(\alpha m_\tau c) = 1,7 \cdot 10^{-12}$  equal to  $b$  for  $ga$ -lepton and  $t$  or  $l$   $q$  in function amplitude in the nucleus big  $b$  will die. Nuclear charge change with productive  $b$  dying experimental competing processes decrease have a chance.  $\tau$ -lepton atoms have high energy levels that he has died because of random to outdoor areas indulgence little  $b$  will die.

$\tau$  Advantages of the experiment on  $\tau$ -leptons  $\mu - e$  Fermi neutral currents universality in the  $\tau$ -lepton

sector check of opportunity new is a method . This taste it \_ \_ \_ the most q shoulder side it 's big \_  $\tau$ -preparation of leptons and atoms and obtaining the desired statistical results are calculated.

Atom is very thin effect attention didn't get in case - see the  $\tau$ interaction of the lepton with the nucleus we will pass .

This is in case - in  $\tau$ the potential between the lepton and the nucleus  $\tau$ - to the lepton spin  $\vec{S} = \vec{a}/2$  proportional hadni . \_ \_

$$V = \frac{Gh^3}{2\sqrt{2}m_\tau c^2} Z \cdot q_\tau \vec{\alpha} [\vec{p} \delta(\vec{r}) \vec{p}] \quad (4)$$

$$q_\tau = g_{1p} + \frac{N}{Z} g_{1n}$$

Here is  $m_\tau$  –  $\tau$ the given mass in the lepton atom, Z is the number of protons, N is the number of neutrons in the nucleus. Space pair don't hold back and electromagnetic transition formulas to the hydrogen atom it will be similar . \_

Space of the couple not to be saved level  $P = -2Fr$

$$F = \frac{G\sqrt{3}}{32\sqrt{2}} Z q_\tau \frac{m_\tau^2 c^2 (Z\alpha)^4}{E(2S) - E(2P)} \quad (5)$$

$$r = \sqrt{\frac{W_p}{W_s}} = \frac{2^s}{3\sqrt{3}} (Z\alpha)^{-3} = 1,6 \cdot 10^7 \cdot Z^{-3} \quad (6)$$

$2S \rightarrow 1S + \gamma M1$  transition and  $mix 2P \rightarrow 1S + \gamma E1$  transition probabilities accordingly

$$W_s = \frac{1}{2^2 3^5} \cdot \alpha (Z\alpha)^{10} \cdot \frac{m_\tau c^2}{h} \quad (7)$$

$$W_p = \left(\frac{2}{3}\right)^8 \cdot \alpha (Z\alpha)^4 \cdot \frac{m_\tau c^2}{h} \quad (8)$$

In hydrogen atom , the electron is private due to the energy difference to energy radiation correction contribution adds . \_ Tau lepton atom in case 2 S and vacuum polarization to 2R difference ( that is , electron and positron virtual product Radioactive \_ \_ if he doesn't fix it main contribution will fall This event to the nucleus  $r = (h/m_\tau C \cdot \alpha Z)$  in the distance b o ' lib b  $\tau$  – dies in the order of lepton orbit . Vacuum q polarization small of the nuclear effect charge at distances to increase cause b dies . \_ This - from the lepton nuclear charge bigger q the charge nice q \_ means and S level down moves because \_ S situation amplitude relativistic in the field very big \_ R case relativistic amplitude in the nucleus relativistic correction as a result ingredient to account increases but S situation not \_

Nuclear charge  $Z > 4$  b is the kernel size when dead gives the opposite effect . Energy is the size of the nucleus with shift \_ \_ \_ until the house of q

$$\delta E_s = \frac{1}{12h^2} (Z\alpha)^4 m_\tau C^4 \langle r^2 \rangle \quad (9)$$

$$\delta E_p = 0$$

here  $\langle r^2 \rangle$  The kernel is the mean square radius of the kernel distribution. Using the above formulas, it is possible to calculate the non-conservation of the transition pair for the hydrogen-simon  $\tau$ lepton atom  $2S \rightarrow 1S$  .

Hydrogen simon ( $p + \tau^-$ ) In the system, interference processes take place in the first order.

It is interesting to note that these two systems are very close to each other in terms of mass and charge, and the processes occur based on the first and second order of the theory of turbulence. The physical nature of these two disparate results remains unknown to the author.

nuclear radius ( $2p_{y2}, 2s_{y2}$ ), the probability of magnetic dipole and electric dipole transitions calculated for Hydrogen, Oxygen, Tungsten, Bismuth, Uranium isotopes, radiation asymmetry

coefficients are as follows.

$$P = +2Fr = 2 \cdot F \sqrt{\frac{W_1}{W_0}}; \quad (10)$$

$$P_H = 0,9, \quad P(^{16}O_8) = 1,02 \cdot 10^{-2}, \quad P(^{182}W_{74}) = 1,6 \cdot 10^{-4}; \quad P(^{182}W_{74}) = 1,6 \cdot 10^{-4}; \\ P(^{238}U_{92}) = 1,06 \cdot 10^{-4}; \quad \text{was equal to}$$

Tau lepton to live period to account take received the possibilities of experimenting with the results study the nature of the Tau lepton to open in the year its effect \_ gives \_

## REFERENCES

1. Salam A.. Nobel Symposium №8. Stockliolm, 1968.
- 2..Мслибоев М.. Ибрагимова Р. О спектрах -лептония и  $\tau$  -лептонных атомов. Тез.докл.респ.конф.молодых учёных-физиков ВУЗов 8-10 декабря. 1988 г. -Тошкент. 1988.
- 3.Москалев А Н. Рындин Р.М.. Хриплович И.Б. УФН. Т.118, вып. 3.1976.с.408.
- 4.Labzovskiy L.N.. Melibayev M.. Parity violation effects in decays of autoionisable states of two-electron atoms and and ions. -Journal of Physics B. England. London. №12. 1979. pg. 2115.
- 5.Л.Н.Лабювский. Эффекты несохранения четности в физике атомов. Известия академия наук . Серия физ. Т. 41. №12. 1977.С.2491.
6. Шамотова, О. Ш. (2022, July). ВЛИЯНИЕ МОТИВАЦИИ НА СТУДЕНТОВ В ПРОЦЕССЕ УРОКА. In INTERNATIONAL CONFERENCE: PROBLEMS AND SCIENTIFIC SOLUTIONS. (Vol. 1, No. 2, pp. 277-280).
7. SHUKURDINOVNA, S. O., & KIZI, K. D. I. Pedagogical Problems of Creating English Textbooks. JournalNX, 7(1), 109-112.
8. Sh, S. O., & Kazakbayeva, D. I. Pedgogical problems of creating English textbooks. Journal NX, 7(1).
9. Sh, Shamatova O., and D. I. Kazakbayeva. "Pedgogical problems of creating English textbooks." Journal NX 7.1.
10. Tukhtasinova, D. T. (2022, September). HOW TO TEACH ENGLISH LANGUAGE MEDICAL ENGINEERING SPECIALTY STUDENTS. In INTERNATIONAL SCIENTIFIC CONFERENCE" INNOVATIVE TRENDS IN SCIENCE, PRACTICE AND EDUCATION" (Vol. 1, No. 2, pp. 157-162).
11. Nozimjon O'g'li, S. S. (2022). CAUSES OF THE ORIGIN OF OSTEOCHONDROSIS, SYMPTOMS, DIAGNOSIS AND TREATMENT METHODS. Conferencea, 76-77.