



Super quantum space structure and motion in the ultrarelativistic limit

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Abstract

An approach and new vision in the primary structure around the universe from past up to now are an integral part of the different science, especially in physics. The scholars and experts in the area of elementary particles and fields have generally submitted a model and structure for matter that through them would be able to compare the experimental results with theoretical calculations. In other words, the structure and definition of the primary particles not provided that could be described and integrated all characteristics, nature and Properties of fields or particles from bosons up to fermions. Coherent and detailed view of this paper are describing the particle phenomenology of existence and development and set out a new space for further studies around the Big Bang and it will provide (partly based on own vision describes) a new interpretations of the particles, symmetries, elementary particles and fields in modern physics.

Keywords: particles and super quantum space, mass and energy quanta in super quantum space, creation and the ultrarelativistic speeds.

Interdiction

Topics for discussion about space and super quantum field has been written due to justify physical fields and particles. In general, the transfer particles, fields and particles produced (bosons and fermions) have been established in this approach. Targeted system of the primary particles with the transcendental inner comprehension, energy and mass which was created universe in the special space named after super quantum space (SQS) is established. We are loaning “*quantum*” term here because in these particles the packet or energy and mass quanta¹ exactly are embedded [1, 2]. We are slightly reviewing Science in today's world; the famous physicists in the field of particle physics and cosmology are imagining that the Big Bang is the starting point of universe, but taken a step further and the structure of particles before the big bang and the beginning of time by super quantum approach would be described and investigated. A diagram to show the concepts of range in contemporary physics is diagram1- right side and the range under investigation by super quantum approach [3] is diagram1- left side. As we can see in diagram1-right side, with today's observations and some of theories, the space before the Big Bang should be have a much higher linear velocity than speed of light. The production process and creations of particles, nuclei and atoms is formed by reducing linear velocity and superimposing rotational velocity (circular movement) where it is slowly entered into the Big Bang border. We have extremely widespread space in the Primordial creation of universe which all of extend galaxies in compare with this space like to electrons, quarks and furthermore is small and smaller. So in the super quantum space, the super quanta of this space (particles inside the super quantum space) with a definite mass and a constant linear speed $v_q \gg c$ which moves uniformly forward in a straight line (its properties very soon will be described). The points mentioned in the article [3], the super quantum space quanta, contains only the mass, energy, transcendental inner comprehension and intelligence. Transcendental inner potential and comprehension of these quanta (particles inside the super quantum space) in the slow evolution and reducing speed are forming the unique properties of fundamental particles and structure of particles and universe. It should be noted here that in this super quantum space all properties of the particles in the present world, by transcendental inner and inherent with comprehension, knowledge and wisdom inside them (which is the third element) are internalized.

Principles of quanta and super quantum space

Discussed space is an isotropic and having has the same properties or characteristics in all content and volume. In this space, the basic principles and axioms have been established and based on three elements: mass, energy, transcendental inner

¹ Definition of quanta in this space is the particles with minimum available mass and energy in the universe. The mass and energy unites is determined and defined in this article.

comprehension and intelligence [3]. The super quantum space is extremely large in size and numerous dimensions (it means infinite but limited space). In this space, the primary particles of world and creation with linear velocity just have invariance speed much higher than the speed of light. So we have to determine the low level quanta speed of in super quantum space because speed of light and even ultralight has no place in our thoughts and observable sciences. Therefore there is not any limit in the high level, scale and size. In this infinite space, we are defining the basic mass and energy for super quantum space quanta which is always limited to a fixed (invariant) amount. Now we are explaining the basic point and reason of nomination this space as “super quantum space”. We presented and named this space as “super quantum space” just due to definitions the basic unites quanta of mass/energy in this space. We presented new universal quanta exist inside the substructure of fields and particles of the universe therefor we called it as “super quantum space”. According to the above descriptions and explanations of super quantum space, the quanta properties and numerical values of this super space is summarized as follow (In the future articles will provide calculations of numerical values and units):

- 1- Super quantum space has infinite size with limited space and numerous dimensions, but it is homogenous and isotropic space.*
- 2- Super quantum space quanta are moving with ultralight and linear speed.*
- 3- The mass quanta is the minimum mass unites is defined value in this space.*
- 4- The energy quanta or the minimum energy unite is defined value in this space.*
- 5- The charge quanta or the minimum charge unite is defined value in this space.*
- 6- The quanta of super quantum space move just with linear speed. It means the quanta move without any kind (spin or orbital) of motions.*

In addition to reducing speed quanta would be taken the different amount of velocity which symbolized in inner spin and/or orbital rotation, therefor the particles well-known today's are identified.

Conclusions

The news was officially out with the CERN press said “the neutrinos is emitted at ultra-relativistic speed”, we should wait for confirming and proofing about this observation, but until then can gradually evolve and expand approaches mentioned above and try to renew and develop theories and progress in physics. So according to the official CERN press about the so called “God Particled”² [4] in 2012 its structure will be found [5]. By

² It is the Higgs boson, the so called God Particle by physicists. (the recently concluded Euro physics Conference 2011)

using a points of view which is said above, we might be determined its nature and basic structure.

Diagram 1- The creation path of particles and the universe.

Creation of the universe in super quantum space approach	Creation of the universe in today's theories
<p>Super quantum space contain mass-energy quanta (Single quanta, without any interaction $v_q \gg c$)</p> <p>↓</p> <p>Decrease the linear speed $v_q > c$ Turn up the nonlinear speeds(rotatory speeds)</p> <p>↓</p> <p>Transform part of the linear speed to rotatory and formation of photon $v_q = c$</p> <p>↓</p> <p>Creation of elementary particles with different spins $v_q \ll c$</p> <p>↓</p> <p>Creation of stars, galaxies, nebulas and all particles exist in the universe</p> <p>↓</p> <p>Creation of black holes</p> <p>↓</p> <p>Black hole rotation and absorbing everything around him</p> <p>↓</p> <p>Gravity is absorbed by black hole and the black hole collapses into inside its own</p> <p>↓</p> <p>Absolute black hole</p> <p>↓</p> <p>Start a new Big Bang</p> <p>↓</p> <p>Cosmological inflation theory $v > c$</p> <p>↓</p> <p>The first chart will periodically be repeated</p>	<p>Very hot plasma of elementary particles</p> <p>↓</p> <p>The moment of the Big Bang and expanding universe</p> <p>↓</p> <p>Cosmological inflation theory $v > c$ (Higher speeds of light and inconsistent with the concepts of relativity and todays physics)</p> <p>↓</p> <p>Creation of stars, galaxies, nebulas and all particles exist in the universe</p> <p>↓</p> <p>Creation of black holes</p> <p>↓</p> <p>Black hole rotation and absorbing everything around him</p> <p>↓</p> <p>Gravity is absorbed by black hole and the black hole collapses into inside its own</p> <p>↓</p> <p>Start a new Big Bang</p> <p>↓</p> <p>?????</p> <p>(There are different theories and different perspectives)</p>

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