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Virtual and reality space-Time

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Abstract
The research paper utilized Dirac's concept of space-time and modified it into the L transformation approach based on quantum mechanics. In mirror space and time, everything is either connected or disconnected. However, in the realm of reality spacetime, when we adhere to the law of energy conservation, the real spacetime is partially shifted into the mirror of spacetime due to the shift in light energy.

Keywords: Virtual spacetime, reality spacetime, reality space~time, mirror space

Introduction

The difference between space-like and time-like The distinction between space-like and time-like intervals is determined by the connectivity of the Lorentz group. Time-like intervals feature upper and lower surfaces that are demarcated by light cones, while space-like intervals are interconnected.

If the commutator is always equal to zero, then we will not get any quantum theory. Quasi-spacetime is actually light cone spacetime. The difference between it and real-time spacetime is that one is "real," and the other is "virtual."

In Dirac's concept of space-time, virtual space-time must rely on real space-time for reflection. The principle is like a mirror, which reflects real space-time with light. So, its shape becomes a light cone.

In the basic principles of quantum physics, the chaff is peeled off and energy is transferred, which is the movement of (shift). It is not a concept of movement along, but a concept of separation of chaff and chaff in the particle state, which is the conversion of energy.

Parallel movement, that is, a translation of space-time concept, is a virtual movement in reality. However, the concept of energy includes transfer. Although some scholars believe that light particles do not carry energy, this is not the case. In fact, some studies have shown that light particles carry energy.

Therefore, the translation of the light cone is a concept of conversion, so it is (shifted) because the energy has been converted. It's not just specular reflection and translation between virtual and real.

The solutions can be express in the modification of, free-space Dirac equation of quantum field theory and the properties of γ matrices are instrumental in elucidating the aforementioned condition. So we denote a changed form as represent the wave shift transformation potential.

$$\Delta S = \nabla \int d^4x \left[\psi \left(i\gamma^{\mu} \partial_{\mu} - m_0 \right) \psi \right]$$

The classical equation of motion satisfied by a spinor field is the (free) Dirac equation, which this research paper considers a change in potential in a proton's behaviour. The spin field governs the potential behaviors of particles.

$$\Delta \psi(x) \left(i\gamma^{\mu} \partial_{\mu} - m_0 \right) = \nabla 0$$

This equation 1 to be expressed in terms of left & right handed Weyl spinors, no matter it is left or right, has the potential change to unlocking new possibilities.

$$\Delta\left[\begin{pmatrix} -m_0 & i\sigma.\partial \\ i\sigma.\partial & -m_0 \end{pmatrix} \cdot \begin{pmatrix} \psi_L(x) \\ \psi_R(x) \end{pmatrix} \right] = \nabla 0$$

Since a change in momentum means a change in the possible position, this may lead to the creation of a super-extra position, which will have the potential significant in creating an extra dimension. So, in other words, the conversion of reality and the virtual realms has been facilitated by the energy particle shift. To simplify, we can use a slash kernel to represent the condensation of the four-vector (e.g. four-momentum) or the four-vector operator (e.g. four-dimensional gradient operator ∂_μ) and the γ matrix.

$$\Delta p \equiv \nabla[\gamma^{\mu} p_{\mu}] \,, \nabla \partial \equiv \Delta[\gamma^{\mu} \partial_{\mu}]$$

We modify it by adding an extra triangular $\Delta\nabla$ symbol to reflect the transformation of Space & Time. To the four-vector symbol into a new notation which we can understand there is a changed in shift, that represent the condensation of the four-vector (such as the four-momentum) or the four-vector operator (such as the four-dimensional gradient operator ∂_μ) and the γ matrix, so the modify model will be:

$$\Delta ip \equiv \nabla i[\gamma^{\mu} p_{\mu}] \,, \nabla i\partial \equiv \Delta i[\gamma^{\mu} \partial_{\mu}]$$

Utilizing this new add notation, the Dirac equation in unbounded space can be succinctly denoted as: $\Delta\nabla$ (i∂ - m_0)ψ = $\nabla\Delta 0$. Initially, we will address the solution of the Dirac equation in unbounded space.

In order to solve the free Dirac equation for free space-time, we can use the fact that there must be a plane wave solution, which in this case is e^(-iωt). To make it easier to work with, we can categorize the solutions into two groups: positive frequency (corresponding to positive energy) and negative frequency. First, let's focus on the positive solution. By considering the trial solution.

$$\Delta[\psi(x)] = \nabla[u(p)e^{-i\omega t}]\, , \nabla p^2 = \Delta m_0^2\, , \Delta\nabla\, p^0 > \nabla\Delta 0$$

This paper adding an transformation L denote in the additional conditions indicates a positive energy solution (positive frequency solution): the condition increment δp^2 = δm_0^2 is called the mass-shell leave (shift) condition, which explains that the Dirac equation describes the energy-momentum of the particle satisfying the energy-momentum relationship of ordinary relativistic particles. Which cause 'Shift". The remaining steps only require solving the equations satisfied by the four-component spinor.

The modify model in Li~spacetime in reality and virtual will be:

$$Li\Delta\nabla[(p - m_0)u(p)] = Li\nabla\Delta 0$$

The differentiation changed between space-like and time-like intervals is established by the Lorentz group. Time-like intervals are identified by light cones, while space-like intervals are interconnected. Quasi-spacetime is fundamentally a light cone spacetime that depends on actual spacetime for reflection, thereby creating a light cone. In the field of quantum physics, energy transfer signifies a transition rather than merely a movement, representing the conversion of energy. The translation of the light cone indicates a transition resulting from energy transformation, not simply a reflection between the virtual and the real.

In the realm of quantum mechanics, Schrödinger's cat represents a well-known thought experiment exploring the concept of quantum superposition. This hypothetical scenario involves a cat that could exist in a state of being both alive and dead simultaneously while it remains unobserved within a closed box. This unusual situation arises from its fate being intricately linked to a random subatomic event that may or may not occur. Described as a paradox, this thought experiment was introduced by physicist Erwin Schrödinger in 1935 during a conversation with Albert Einstein, aiming to highlight the perceived challenges of the Copenhagen interpretation of quantum mechanics.

In the original formulation of Schrödinger's experiment, cat, a flask of toxic, and a radioactive source are placed in a sealed box. If an internal radiation monitor (e.g. a Geiger counter) detects radioactivity (i.e. a single atom decaying), the flask is shattered, emitting toxic, which kills the cat. According to the Copenhagen interpretation, the cat is both alive and dead until observed. This raises reality resolves into one possibility or the other.

Although originally a critique of the Copenhagen interpretation, Schrödinger's seemingly paradoxical thought experiment became an integral part of the basis of quantum mechanics. The scenario is frequently featured in theoretical discussions of quantum mechanics interpretations, especially concerning the measurement problem. Consequently, Schrödinger's cat has had lasting appeal in popular culture. The experiment is not meant to be carried out on an actual cat, but rather serves as an easily understandable illustration of atomic behavior. While experiments at the atomic scale have demonstrated the potential for very small objects to exist as superpositions, the technical challenges of superposing an object as large as a cat are considerable.

The Schrödinger's cat experiment definitively questions the duration and potential collapse of quantum superpositions. Various interpretations of maths of quantum mechanics have been proposed, presenting distinct explanations for this process. Nevertheless, Schrödinger's cat persists as an unsolved enigma in physics.

In contemporary terms, Schrödinger's hypothetical cat experiment serves to illustrate the measurement problem in quantum theory. According to this theory, the cat system can exist in a combination of two possible outcomes, although only one outcome is ever observed. The experiment prompts the question of when a quantum system ceases to exist in a superposition of states and becomes distinct as one or the other. In simpler terms, it inquires as to when the actual quantum state transitions from being a non-trivial linear combination of states, each resembling different classical states, to having a unique classical description. Standard microscopic quantum mechanics suggests multiple possible outcomes of experiments, while only one is observed. This thought experiment underscores this apparent paradox. Although our intuition insists that the cat cannot be in more than one state simultaneously, the quantum mechanical description of the thought experiment necessitates such a condition.

Various interpretations of quantum mechanics have been suggested since Schrödinger's time, providing different answers to the questions posed by Schrödinger's cat about the duration of superpositions and the timing or occurrence of their collapse. But the most famous one is Copenhagen's interpretation and Bohr's interpretation.

The Copenhagen interpretation is a commonly held view of quantum mechanics. According to this interpretation, a structure exists in a superposition of states until it's observed, at which point it "collapses" into one of the possible states. This interpretation raises questions about the nature of observation and measurement, as it does not provide a clear explanation for the state of the system before it is observed. A well-known thought experiment illustrating this concept is the scenario involving Schrödinger's cat, where the cat is described as both alive and dead until the box containing it is opened and the cat's state is observed.

Niels Bohr, a key figure associated with the Copenhagen interpretation, proposed an explanation independent of a subjective observer-induced collapse of wave function or measurement. Instead, he suggested that an "irreversible" or effectively irreversible process leads to the decay of quantum coherence, resulting in classical behavior during "observation" or "measurement". According to this interpretation, Schrödinger's cat would be either dead or alive before obsearved.

Lie transform Muti-universes interpretation

This research paper utilized the quantum-mechanical aspects of Dirac's concept of space-time and modified it into the transformation L.i.e approach, which is L imaginary exponential transformation. In mirror space and time, everything is either connected or disconnected, but in the realm of reality spacetime, when we obey the law of energy conservation, actually, the real spacetime has been partially shifted into the mirror of spacetime due to the light energy shifted.

The "Schrödinger's cat" paradox is a thought-provoking concept within the framework of the many interpretation. According to this viewpoint, every event is a branching point, suggesting that the cat exists in a superposition of being both alive & dead, regardless of whether the box is opened. The coexistence of the "alive" and "dead" states of the cat in different branches of the universe sparks about the nature of reality and interbranch interactions.

In this case, we modify it as a magnetic wave of moment shifted by light. The light is a wave-like cone that is captured in the energy side, which makes the mirror stage, in the short run, get the energy continuities that in the series Siri scenario. This capture meaning is not the meaning of that once-and-for-all moment. It is the moment that is captured by a period of time. In the short run. That means, in the short run, this theory may not obey the law of conservatism, but in the long run, this intercross/intercrops change will be redeemed as a shift effect.

In conclusion, we formulated the muti-universes interpretation of quantum mechanics, which does not single out but observation as a special process. In the muti-reveres universe interpretation, both alive and virtual states, the superposition entanglement persist after the wave is opened, but are decoherent from each other. In other words, when the wave of the particles is opened, the observer and the possibly virtual part will split into a spacetime between the real and the virtual one. But since the virtual and the real states are decoherent, they have no communication or interaction but just a wave of particle transformant. Lie transformation.

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