

**SMALL SPACE, BIG UNIVERSE*****Lie Chun Pong**

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Abstract

In this research paper, we aim to explore a new concept of small-space formation. We explore this by examining a proton collision experiment over time and then projecting the relationship that could transform a small space into the vast possibilities of a big universe. This exploration has the potential to revolutionize our understanding of the universe, particularly in the i dimension. We will use the Copenhagen Interpretation to illustrate the topology hypothesis, as a powerful tool to explain the origins of small space beyond its initial dimension. Our goal is to uncover the connection between small space and the big universe, opening up the possibility of a multi-universe beyond the initial creation that could reshape our perception of the cosmos.

Keywords: Copenhagen Interpretation, Topology hypothesis, Small Space, Big universe

INTRODUCTION

There have been various interpretations of quantum mechanics proposed, such as the Copenhagen interpretation [1] & many-worlds interpretation [2]. The linguistic Copenhagen interpretation offers a detailed and comprehensive conceptual framework within the realm of quantum mechanics, utilizing advanced terminologies and precise physics vocabulary to elucidate the underlying principles. In this research paper we provide a new innovative version of the concept in utilizing the Copenhagen interpretation that is derived from Neumann's formulation of quantum mechanics on Hilbert spaces. The Quantum Language (QL) theory, which stems from the linguistic Copenhagen interpretation, covers a broad spectrum of concepts, encompassing not only the quantum mechanics of physics but also classical statistics. (Shiho-Shuppan, 2023). This will serve as the practical realization of the dualistic idealism espoused in small space into big universe possibility. We will concentrate on proving the initial point. Quantum Linguistics (QL) as a foundation on two atom with the basic assumptions of measurement and causality, by stand with Copenhagen interpretation. We will commence by establishing the von Neumann-Lüders projection postulate. To consult the remaining unchanged wave of uncertain particles left at that moment of time. Whether this constitutes a physical solution, the concept of a hypothesis enables discussion of using the Copenhagen interpretation to address our new attempt (interpretation) caused by our assumption. Our modified projection postulate will clearly describe how measuring a discrete-spectrum observable affects a quantum system in a conceptual pure state, within nonrelativistic quantum mechanics. As you may know, it is commonly understood the "von Neumann's projection postulate" & "the Lüders rule." The Lüder's rule describes how a quantum system changes when a selective measurement is made. When we observable A , with eigenvalues a_i and associated eigenprojections P_i (where $i = 1, 2, \dots$), is measured on the system in state T , then the state transforms to $8Tk:=PkT Pk/tr [T Pk]$, under the condition that the result a_k will become a transformant. This kind of projection plus transformant of the series is important in our initial assumption of what happens in the initial that has created before and after.

That is, without using complex math, QL can form a much more friendly and simple way to express our simple way of the galaxy, including our universe.

This means that in our research paper, we will utilize the projecture as a postulate assumption to provide an in-depth insight into the universe formation, particularly in the wave of the quantum, and to express the possibility of what could happen by utilising the QL. Many scientists employ mathematics to describe the complex universe. However, from a quantum linguistic viewpoint, the core principles of this likelihood approach can be so different.

The QL interpretation method can still retain its expected power, as it is closely linked to measurement and causality axioms, and does not require significantly more mathematics to deliver the same level of interpretation (Shiho-Shuppan, 2023). In the Copenhagen interpretation, there are no certainties in quantum physics; it only focuses on the probability of what might happen. This means that there are many possibilities that could occur, some of which may not have been established yet in theoretical statistics. However, if we consider Quantum Linguistics (QL) for classical systems as the same interpretation as the theoretical statistics, we can gain a deeper understanding of statistics by using the concept. This may lead us to a more interesting phenomenon that can help explain the complex world of the universe. As modern statistics rapidly advances towards practical applications, it's crucial to have a comprehensive understanding of statistics as a whole understanding in the framework. This understanding is not only crucial for the advancement of science but also for our ability to interpret and make sense of the complex world around us.

The argument that von Neumann's formulation of quantum mechanics may be confined to the realm of physics but should rather be regarded as a foundational theory of science. Although in this paper we postulate that two-particle collisions can work as an illustration of the particle crash that confounds a new universe that may not appear in this world, we call it a C transform, which may happen to induce the unhappening event to happen by the high-speed crash moment.

As denoted by our research paper, it seems to have to great significance in the proton collision event, may cause the create a small world to a big universe, in the wave of particle movement that may be already happening but has not been captured by the system, when the particle decay that is the beta decay, the new world may have formation, in different layers, since due by then, the world of the micro side will expand but the big world of the other side that in the other dimensions may collapse, due to the crash by both side.

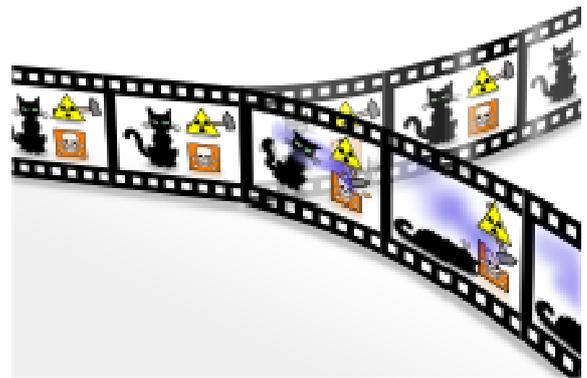
As the big side collapses at once, then the small space may grow to a much larger side, which may lead to our so-called C transform, as our research paper assumes, we define as the C Transform. This transformation of big to small and small to big one can be expressed by the excellent I, with exponential function, that is, the superb L.i.e. transformation. The Big one will be decade than from the perspective of wave-particle, the momentum of the small one will be as significant as the big one, utilizing the "CI" (Copenhagen Interpretation), accompanying its possible integration that leads us to reconsider collectively as a unified entity that is we so call the "LCI" (L Copenhagen Interpretation).

In quantum mechanics, experiments explore quantum superposition, linking it to random subatomic events. Physicist Schrödinger [3] designed experiment in 1935 to highlight issues with the Copenhagen interpretation of quantum mechanics. It raises the question of when quantum superposition ends and reality chooses a definite state. Originally a critique of the Copenhagen interpretation, it has since become a fundamental concept in quantum mechanics and features prominently in debates about the theory's interpretations. The experiment is not meant to be performed on an actual cat but is intended to illustrate atomic behavior. Although experiments at the atomic level have demonstrated superpositions, performing such experiments with larger objects faces technical challenges, with different interpretations of quantum mechanics providing various explanations for this process.

The Copenhagen interpretation of quantum mechanics claims that a system ceases to be in a superposition of states and collapses into one definite state upon observation.

In 1932, John von Neumann described a scenario where a radioactive source is detected. He argued that quantum predictions stay the same regardless of where the superposition collapses along the causal chain. This chain could, however, be broken if a conscious object intervenes. Von Neumann claimed that a conscious observer is essential for the wave function to collapse into one of its terms [4][5]. Using the concepts of topology and quantum mechanics within Wigner's scenario, this paper proposes a link communicator particle that perceives both domain spots. In the learning process, this particle becomes part of the wave function from a third-party perspective. According to Niels Bohr [6], a process causes quantum coherence to decay, resulting in classical behavior during reflection.

Light wave of Film Universe (Small Space, Big Universe Approach) projection postulate



(Cc: Calibrate Pic from Wiki)

The Many-Worlds Interpretation, proposed by Hugh Everett in 1957, suggests that every event creates a branching point [6]. In this interpretation, the paradox is both in different, equally real branches of the universe or the virtual one that represents. These branches are decoherent and cannot interact with each other. When the object becomes entangled, it creates "observer states," reflecting the possible states of being. Each state is interconnected with the state so that the reflection of the state corresponds with the actual state. Quantum decoherence ensures that the various outcomes do not interact with each other and prevents simultaneous observation of multiple states.

This research paper argues that while theoretical discussions of quantum mechanics often critique the scenario, this research paper believes that the collision experiment itself is not intended to be carried out on an actual position. Rather, it serves as an easily understandable illustration of atomic behavior in superposition. While this research paper believed, the collision 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 we so call a "siri" subject state are considerable. A variation of the proton collision experiment is known as the quantum collision machine. The collision examines the scenario from the perspective of microparticles and suggests that this approach may help distinguish between the Copenhagen and many-worlds interpretations.

In the relational interpretation of quantum mechanics, there is no fundamental distinction between object, apparatus, and experimenter. Different objects can provide varying descriptions of the same events depending on the available information. The state of the apparatus is only defined when both objects have the same view, causing the system to appear to "collapse" into a definite state.

Our view is that, in our new "Transactional Interpretation", the apparatus emits an advanced wave backward in time, combining with the forward wave emitted by the source to form a standing wave. According to this view, the collapse of the wavefunction is "atemporal" and occurs throughout the entire transaction. This interpretation resolves the quantum paradox regarding the state.

In this research paper, our basic assumption is when one Objective collapses, then the other new objective will grow; in the extra dimension.

This research paper proposes that superpositions are spontaneously destroyed when they reach a certain physical threshold, such as time, mass, or temperature. This means that when one side of an objective collapses there may be the objective on the other side may grow in the siri, causing our small space, big world assumption. In the experiment of proton collision, there may happen a sudden event that, causes the creation of a micro~wave~world of the universe; although it may happen in the dimension that we can't see, but this extra dimension may be created by the collapses of other dimensions of space, which lead to our postulation fluffing the energy conservation law, in the long run, that is constant to zero. This would have settled into a definite state. Our theories modify some of the standard quantum mechanics; we fulfill the assumption of standard quantum mechanics, and based on that, this research paper modifies it, which allows superpositions to be expanded by the wave of magnetic form evolution. This could potentially create mesoscopic superposition multi universe states in experiments, such as using energy states as a precise of quantum gravity-related energy decoherence, into our model assumption. Additionally, we suggested a new interpretation of the Light wave of the Film Universe (Small Space, Big Universe Approach) projection postulate. This light wave projection of our universe may interpret and apply to the many-worlds theorem because the light wave can reflect and divide into many "siri" worlds. We call this phenomenon mechanism the "many siri worlds."

In conclusion, our research paper aims to explore the concept of small-space formation. We utilized a proton collision experiment over time and projected the potential relationship that could transform a small space into the vast possibilities of a larger universe.

This exploration has the potential to revolutionize our understanding of the universe, especially in the dimension of 'i'. We use the Copenhagen Interpretation to illustrate the idea of a hypothesis to explain the origins of a small space beyond its initial dimension. In order to uncover the origins of small space and its connection to the creation of the big-universe, this research paper opening up the possibility of a multi-universe beyond the initial creation. Our research paper could reshape our perception of the cosmos. Hope this paper can benefit the world and humanity.

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