

Research Article

PROTON COLLISIONS, MULTIVERSES & MICRO UNIVERSES

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Received 12th September 2025; Accepted 13rd October 2025; Published online 25th November 2025

ABSTRACT

In this research paper, we aim to explore a new concept of micro-universe formation by considering a high-speed proton collision event that happens in the capture moment protraction and the relationship behind the Macro world of the universe. The extra wave of the dimension opens new space universes. This new concept of micro-universe formation by considering a high-speed proton collision event will reveal our knowledge of understanding of how the multi-universes work in the new create dimension by the colluder of proton particle crash. We will utilize the Kaluza–Klein theory and topology hypothesis as a tool to illustrate the new concept assumptions in explaining the origins of the micro-universe beyond its beginning dimension. To explore the origin of micro-capture moments of time and space to further explore the possibility of a multi-universe that goes beyond the initial creation.(Small Space, big universe).

Keywords: Micro Universes, Macro Universe, Small Space, Big Universe.

INTRODUCTION

The Kaluza-Klein theory (KK theory) is a classical unified field theory within the realm of physics that aims to integrate gravitation and electromagnetism. It introduces the notion of a fifth dimension, extending beyond the conventional four dimensions of space and time. Widely recognized as a significant precursor to string theory, KK theory holds substantial theoretical importance in the field of physics [1].

According to Hopkins, he suggests that the universe originated from the Big Bang. This one-time event provided an opportunity for the universe to grow. According to Hopkins' theory, the universe was created through compression, where all materials, matter, and space were folded into a very tiny condition. In this extreme compression, there was a critical moment when it blew off and exploded, leading to the creation of the universe. He emphasizes the once-and-for-all big band moment is the initial creation of the universe [2], but indeed, some scientists already challenge his thought; in this research paper, we hope to utilize Hopkin's theory as a reverse concept to analyze the possibility that the proton collider which may create a micro big band event, that creates a new wave of the micro-universe.

Our intention is to provide a brand new whole Idea concept, which will shape the possible opportunity for our universe to explore the new dimension of the microwave of particle universe. In actual speaking, the proton collier utilizes the same concept of the big-band approach in order to create a likewise micro-big-band environment that allows the particle to transform into a different particle. But surprisingly, this research paper predicted that, the proton collider activities may have created a micro-wave of the micro-universe, while after the micro big-band, in the capture of the moment. This capture of wave-particle moment may be the same as the once-and-for-all moment, which is produce in the big-band period [3].

Albert Einstein considered the universe as a whole, a concept he referred to as space-time, where time and space are inseparable.

According to Einstein's field theory of the universe, time and space are interconnected, and this forms the basis for the creation and expansion of the universe. While his ideas can help explain how the universe bended, but they (Einstein and Hopkins) rarely discuss the idea of the micro universe and the existence of different multi-verses.

Einstein's theory focuses on space and time connection in the 3 Demintion+1Time space-time concept, but the whole idea of assumption is based on time need space to connect, and space needtime to expand. So, what if the ideal assumption behind this is the micro-particles that may contribute a large part of particles involvement. The collision of the proton perhaps will provide a good illustration of how the matter of particles works. That may growth to the extension of the small place evolves into the big universe in the extra dimension; it may happen to the extent during the collision process, and it will create a wave of movement in the once and for all capture moment. Over time, this wave will transform into different particles; during the Beta Decade process, Higg's particles correspond to a novel class of subatomic particles identified through high-energy proton-proton collision experiments at the collider. These particles exhibit unique quantum properties, potentially indicating new physics beyond the Standard Model, and their detection involves advanced particle tracking and data analysis techniques.

In the standard proton-proton (pp) collision scenario, only a few partons typically undergo a significant scattering, while the remainder of each proton experiences only minor disturbance. As the collision energy increases, there is a rapid growth in the densities of gluons and sea quarks probed inside each proton. In the collision process, it may create a new form of particle. Scientists discovered various particles following the collision of two protons. The most prevalent ones are pions and kaons (light hadrons). Other particles include electrons, muons, and photons.

In other words, during the collision process, it may derive a new kind of capture moment, which this research paper believes is the micro-universe. During the many times of proton collision experiences, this paper believes that it might have created many universes, that is surprisingly during the collision process capture moment. With this research paper's assumption, we may predict that it has possible

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links to match up with the Multi Universes as well as the Macro Universe. The collision of the proton will create a lot of new particles. Every experience actually develops a new form of the different particles due to the different speeds of collision. This research paper focuses on the micro-wave-particle process in the capture of the moment, the once-and-for-all capture of wave movement. May be a hindrance to exploring the Big Bang theory, as likely as the micro-mini-blackhole.

Some scientists already believed it might create a micro black hole during the proton crash moment. In the experiment, this research paper believed that during the collision, it might form a likewise a micro-wave of the universe, more than the micro black hole due to the energy margin of consumption/explosion in the superposition. But the collision of the proton can provide a hint of the environment, likewise the blackhole inside. This micro big band process may provide scientists with hints about the big band moment and may help them discover the mechanism for creating a multi-universe. By investigating the micro-wave of energy that is as same as the big band moment behind.

If we utilize the Kaluza-Klein (KK) theory, to explain the above consistency. It can be explain by a classical unified field theory that unites gravitation and electromagnetism. This theory introduces the idea of a fifth dimension beyond the common 4D space-time and is considered an important precursor to string theory. The KK theory aims to explain and connect different field theories through a process known as Kaluza-Klein processing. It is significant for elucidating the existence of an additional dimension in our 3+1 space-time framework.

In reality speaking, many scientists may hope the collision of the protons can create a string that can explain the connection in between macro and micro physics. But actually, this micro string is hardly perceptible, so based on the collision experience, we believe the experience of proton collision has already successfully created many of the micro universe in the specific capture moment (which may exist for a very short period of time). Most importantly, the possibility of creating a capture wave of the micro-universe, of likewise "The Big Band moment" is more likely to discover the strings; that means, in the actual experiment, this research paper predict that, the collision may have already creates many multi-micro-wave-universe, in the micro-particle-wave of proton collimate. But they might just ignore the importance of the process of capturing the wave moment.

In the field of KK-theory concept, it generalizes K-homology and K-theory, functioning as an additive bivarient functor on separable C^* -algebras. Introduced by Gennadi Kasparov (1980). KK-theory has found success in operator algebraic formalism, contributing to index theory, the classification of nuclear C^* -algebras, non-commutative topology, and the development of the Baum-Connes conjecture. It has also led to the development of similar bifunctor constructions like E-theory and the bivarient periodic cyclic theory, many of which have more category-theoretic flavors, apply to a different class of algebras, or incorporate group actions.

So, by the following explanation can resembles the one given by Kasparov and is commonly used in applications. In the context of separable C^* -algebras A and B , where B is also assumed to be σ -unital, the set of cycles consists of triples (H, ρ, F) . Here, H represents countably generated grouped Hilbert module over B , ρ is a $*$ -representation of A on H involving even bounded operators that commute with B , and F is the bounded operator on H of degree 1 that also commutes with B . These triples must satisfy the condition that for any a in A , the operators are all B -compact. A cycle is considered

degenerate if all three expressions are 0 for every a . Additionally, two cycles are considered homologous, or homotopic, if there is a cycle between A and the C^* -algebra IB (consisting of continuous functions from $[0,1]$ to B) and there is an even unitary operator that connects the 0-end of the homotopy with the first cycle, as well as a unitary operator that links the 1-end of the homotopy with second cycle. KK-group $KK(A, B)$ in between A and B is defined as the set of cycles modulo homotopy. It forms an abelian group under the direct sum operation of bimodules as addition, with the class of degenerate modules serving as its neutral element.

KK-theory has various equivalent definitions. One notable definition, by Joachim Cuntz, eliminates bimodules and the 'Fredholm' operator F from the picture, focusing entirely on homomorphism ρ . More precisely, it can be defined as set of homotopy classes of $*$ -homomorphisms from sorting algebra qA of quasi-homomorphisms to C^* -algebra of squeezed operators of an infinite-dimensional separable Hilbert space tensored with B . Here, qA is defined by way of a kernel of the road map from C^* -algebraic free product $A*A$ of A with itself to A , expressed by distinctive in both factors.

When utilizing C^* -algebra C of complex numbers as the first row of KK (written as $KK(C, B)$), the resulting additive group is naturally isomorphic to K_0 -group $K_0(B)$ of second quarrel B . From the Cuntz point of view, a K_0 -class of B is essentially homotopy class of $*$ -homomorphisms from the complex numbers to stabilization of B . Similarly, when we use the algebra $C_0(\mathbb{R})$ of the continuous functions on the natural line that decay at infinity as the first argument, the group obtained, $KK(C_0(\mathbb{R}), B)$, is naturally isomorphic to $K_1(B)$.

The Kasparov product, an essential property of KK-theory, is a type of composition product that is bilinear with respect to essence group structures. Specifically, each element of $KK(A, B)$ provides a homomorphism from $K^*(A)$ to $K^*(B)$ and another homomorphism from $K^*(B)$ to $K^*(A)$. In the Cuntz picture, the product can be defined more quickly due to the existence of natural maps from Transformation Q , where QA to A , and from B to $K(H)$ tensor B , which induce KK-equivalences.

In other words, if we extend the above concept, which draws into our innovative approach concept L imaginative transformation (L.i.e Transformation), we will come to the possibility of micro-verse, as has happened in the proton collision process, which may create by wave function.

The composition product creates a new category, where the objects are separable C^* -algebras, and the elements of the corresponding KK-groups represent the morphisms between these algebras. Additionally, any $*$ -homomorphism from A to B produces an element of $KK(A, B)$, establishing a functor from the original category of separable C^* -algebras into this new category. The approximately inner auto orphisms of the algebras correspond to identity morphisms in this new category. The functor mentioned is universal among certain types of functors in the category of separable C^* -algebras. Any theory that satisfies certain properties also exhibits Bott periodicity. The Kasparov product can be extended to include the K-theoretic cup transform, as well as the product of extensions.

In applying the concept of KK theory, we can utilise it as a transform domain of A to B , then C : this transformation of extra micro wave dimension can explain our research paper's the assumption of creating micro-universe. That means the experience of collision may not just create an A and B event, but surprisingly and accidentally, they may ignore that; they have already explored the micro multi-wave

of universes during the capture moment process. That is causing a transformation of the shift to New C (wave zone).

So, we modify the KK theory and produce, adding an extra space of micro-dimension called the New C micro-wave zone in the Kasparov upshot, which is a significant property known as the composition consequence. When it is bilinear with respect to the additive group structures, Each element of $KK(A, B)$ yields a New C (wave zone) homomorphism of $Ki^*(A)_i$ to $Ki^*(B)_i$ -transform (shift to) New C and vice versa. In the Cuntz-Sanrio, the creation can be more easily defined, as there are natural road maps from QA to A and from B to New C micro-wave zone transformant to $K(H) \otimes \text{New C}$, which results in our new model consistency based on the rule of KK-equivalences extension. Transform C. (New C micro-wave zone).

This New C micro-wave zone is likewise the micro-universes, which may have already been created by the collision of the proton experience during crush. So, this research paper well believed that the beta decay processing may be one of the clues to exploring microwave-universes, as well as the multi-micro-universe. This Create a theoretical concept of extra topology space of dimension.

CONCLUSION

This research paper hopes to explore the formation of micro-universes resulting from high-speed collision events and the relationship between the macro universe, the additional dimensions opening up, may link up in extraspace. We modify the Kaluza-Klein theory and topology approach to create a new extension of the Ci wave space model, denoted as the Lie-KK model in the micro-wave-universe, in order to project our assumptions and explain the concept behind the origins of the micro-universe. (Small Space, big universe).

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