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Research Article

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MODIFY THE GRAVITATIONAL EFFECT AS AN ANALOGY INNOVATIVE CONCEPT TO ILLUSTRATE THE FORCE SUPPORTING THE UNIVERSE

***Lie Chun Pong**

Hong Kong University of Science and Technology.

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ABSTRACT

Many research studies focus on the utilities of the outer space of the universe. They always look up at the vast far sky, but initially speaking, they can only focus on five percent of the universe's space. There is still plenty of space that we often ignore, especially the system of the universe, the galaxies of the formation, and the force that supports our universe system. This research paper utilizes the Casimir effect as an analogy to explain the force that supports the universe.

Keywords: Gravitational effect, Universe's space, Universe system, Casimir effect.

INTRODUCTION

Our research paper suggested that the universe is somewhat like a card field universe, supported by many cards field by Casimir effect. Which is, if you imagine the universe as a closed circuit, it would be much easier if it came out of this bottle of empty space. And if you consider the space net as a kind of cards, then this folding of matter will cause a magnetic effect that binds around the universe, similar to the surrounding of Lightwave and gravitational waves in motion. When a black hole pulls planets into its potential, the emission from the other side of the black hole may create an inertia potential energy as part of the card magnet net. When the cards of the space net capture all the emission energy, that magnetic spillover will spread across the universe, shaping our space net. Some scientists even suggest that our universe is a curved shape.

If the accumulation of the card space net occurs at different levels of layers (dimensions) beneath the full bottle insider-outsider universe, then the position of the empty bottle will be shifted by this kind of card-flipping effect that raises the universe on top of the card space net. According to NASA [1], they have found evidence supporting the theory of the universe's initial cold period, which occurred during the early stages of the Big Bang. This dark area is filled with dust and gas, where light cannot even pass through that secret space.

INNOVATIVE SUGGESTION

Card Field Gravitational Space Assumption

This assumption may imply that energy and matter are trapped within those empty, limited layers of space, causing a flipping of inertia potential energy card effects in the space net. Actually, according to the NASA Dark Matter and Dark Energy findings [2], it supports my research paper assumption. In this research paper, we assume that the flipping of cards is a kind of space net that supports the whole universe, including the stars and planets.

The Casimir effect is a phenomenon proposed by Dutch physicist Hendrik Casimir in 1948 [3]. It is based on the concept that a "vacuum is not empty" in quantum field theory. Even if there is no matter in the vacuum, quantum fluctuations still occur. The effect suggests that two neutral (uncharged) metal plates in a vacuum will experience attraction due to these quantum fluctuations. This phenomenon does not exist in classical theory.

This effect is based on the concept from quantum-field theory; it emphasizes that the vacuum is not empty. Even without matter, quantum fluctuations still occur. Casimir suggested that two uncharged metal plates in a vacuum would experience an attractive force, a phenomenon not explained by classical theory. This effect becomes significant at very small distances, such as submicron scales, between objects. At a gap of 10 nanometers, the Casimir effect can produce a pressure of 1 atmosphere (101.3 kilopascals). Similar zero-point energy effects are seen in van der Waals forces between pairs of neutral atoms. These forces occur when a metallic conductor or dielectric material alters the expected value of the electromagnetic field energy after the vacuum has been secondarily quantized. This change depends on the shape and position of the conductor and dielectric, causing the Casimir effect to act like a force influenced by these properties.

The observed effects naturally follow from quantum field theory, which states that all fundamental fields, such as electromagnetic fields, must be quantized everywhere in space. Essentially, the physical field can be envisioned as vibrating balls filling space, connected by springs. The strength of the field is like how far the ball is displaced from its resting position. These vibrations can travel and are described by the wave equation for that particular field. In the second quantization process of quantum field theory, the combined system of the ball and spring must be quantized, meaning the field strength at each point in space is quantized. In canonical terms, the field at each point acts as a resonator, and quantization means there is a quantum resonator at every point. The excitation of the field corresponds to elementary particles in particle physics. Yet, these descriptions show that even a vacuum has a remarkably complex structure. All calculations in quantum field theory rely on modeling this vacuum.

In physics, the vacuum possesses properties of a particle such as spin, polarization of light, and energy. When these properties are averaged, they cancel each other out, resulting in a value of zero,

***Corresponding Author: Lie Chun Pong,**
Hong Kong University of Science and Technology.

which is how the "emptiness" of a vacuum is maintained. However, an exception to this is vacuum energy, also known as the vacuum expectation value of energy. This research paper examines how energy cards can create a space net effect, where the magnetic nets formed by these cards accumulate on the wall magnet side, essentially creating a magnetic field that provides a supportive force for the universe.

Our paper assumes that, in the quantization process of a simple harmonic oscillator reveals the existence of a non-zero minimum energy value known as zero-point energy. In my research paper, we will modify the approach into, a wave-like card wall function as:

Espwave=1/2hw* gravitation wave of summation acceleration

Which than these energy forms, will change to become the Force of lift up support:

F = 1/2hw*Genergywave*A

F = 1/2hw*Gew*V^2

As the modified approach approaches, this kind of gravitational wave will change to a form of shifting power force as a lift-up. Likewise, zipping cards Field.

Our research focused on the second acceleration of the electromagnetic field. When there are large objects present, such as metal or dielectric materials, that create boundary conditions similar to those of the classical electromagnetic field, these conditions will impact the formation of vacuum energy. My research paper posits that the acceleration effect provides substantial support for the notion that the electromagnetic wave card magnet field, when subjected to space card summation, exhibits acceleration that manifests as a force, thereby contributing to the upward lift support of our universe.

Consider, for instance, the expected vacuum state of the electromagnetic field in a metallic cavity. Examples of such metallic cavities include radar cavities or microwave waveguides. In this context, by our innovative approach to determine the zero-point energy of the field is to sum up the energies of the standing waves in the cavity. Each possible standing wave will corresponds to an energy value. For example, the energy value of the nth standing wave is the vacuum expected value of the electromagnetic wave field-wall side at En~wave chamber.

Due to the demonstrated Casimir effect, the first quantum will seemingly appear in the other bottle in an instant. This transformation, voila, supports our assumption that the existence of infinite or finite universes may hinge on the principle of inertia. This principle dictates that an object at rest possesses potential energy and will remain stationary unless influenced by an external force, causing a shift or movement during the process.

This type of shift is equally likely, just like wave magnetic radiation, which is the emission of electromagnetic waves from all matter at a temperature to absolute zero. Thermal radiation represents the conversion of thermal energy into electromagnetic energy. Thermal energy is the kinetic energy of the random activities of atoms and molecules in matter.

The sum represents the total energy of all possible standing waves, with the factor "a" accounting for zero-point energy. When adjusted through a reflective approach, the sum diverges. At the critical point, the accumulated potential energy transforms into a force due to net wave pressure, causing a spill-over effect. However, this can be expressed as a finite value. This paper presents it as an infinity of finite values. The zero-point energy is affected by the shape of the cavity, influencing each energy level. Therefore, both the energy level and the vacuum expectation value should be expressed as functions of the shape. Additionally, the force at each point on the chamber wall in the gravitational field is an inverse reflection of the space-time net, equally likely to the change in vacuum energy when the wall shape is perturbed. These shape perturbations can be described as functions of the position point. At this point of modification, as a result of an infinite set of finite values.

CONCLUSION

This research paper employed the Casimir effect as an analogy to elucidate the concept of a card-like gravitational wave flipping field force, which theorizes a fundamental mechanism that sustains the stability and expansion of the universe. The Casimir effect, arising from quantum vacuum fluctuations between closely spaced conductive plates, serves as a macroscopic manifestation of zero-point energy, providing a conceptual framework to understand how dynamic field interactions could support cosmic structure and gravitational phenomena on a fundamental level.

REFERENCES

[1] NASA's James Webb Space Telescope and Chandra data (2024) have been used to visualize and map dark matter, improving our understanding of how it distributes and behaves throughout the cosmos.

[2] NASA findings (2024) affirm that dark energy, the force accelerating the expansion of the universe, has been active for most of cosmic history, at least nine billion years, consistent with Einstein's cosmological constant in many respects. However, recent observations from the Dark Energy Spectroscopic Instrument (DESI) suggest dark energy might be evolving over time, challenging the view of a constant cosmological force.

[3] Hendrik Casimir, (1948). "On the Attraction Between Two Perfect Conductors," North Holland Publishing Co.

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