

MIRROR GRAVITATION FIELD THEORY***LIE Chun Pong**

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Abstract

Our current understanding of outer space recognizes gravity as the main force shaping the structure and movement of celestial bodies. Planets tend to be spherical and orbit stars because of gravity. In our solar system, the Sun is the central star, with all planets, including Earth, orbiting it. Although this traditional view of gravity is very effective and allows precise calculations of planetary motions, masses, and distances, it does not fully clarify what causes and maintains these motions. Questions remain about the fundamental drivers of planetary motion and the stability of stars in space. To address these gaps, this paper proposes a new idea: the Mirror Gravitational Field Theory. This concept aims to enhance the standard gravitational model and provide fresh insights into the mechanisms behind gravitational forces.

Keywords: Mirror Gravitation Field Theory, Mirror gravitational field, Dual-phase gravity, Parity symmetry, Symmetry breaking, Gravitational duality, Mirror field, Unified field theory, Gravitational interaction, Attractive and repulsive forces, Mirror Gravitational-magnetic coupling.

INTRODUCTION

Historically, many believed the Earth was flat and that the Sun and Moon revolved around it, positioning Earth as the universe's center. This geocentric perspective lasted for centuries until Galileo Galilei gathered observational evidence showing the Earth is spherical and orbits the Sun. He also highlighted that the Earth rotates on its axis. These findings were groundbreaking and questioned long-standing beliefs of that era.

Such findings prompted additional questions, such as why objects and people do not fall off the Earth despite its spherical shape and motion. This question was later answered by Isaac Newton, who developed the law of universal gravitation. Newton provided a mathematical explanation for the motion of celestial bodies and the force that keeps objects anchored to Earth. His work laid the foundation for classical physics and was considered a major scientific breakthrough.

Over a hundred years later, Albert Einstein expanded on this idea with his theory of general relativity [1][2]. He suggested that large objects like the Sun distort the fabric of spacetime, causing planets to follow curved trajectories instead of being solely influenced by a force. This idea was confirmed by experimental evidence, such as the observation that light bends when passing close to massive bodies.

Although these notable progressions have been made, gravity is still an incomplete theory. General relativity effectively describes gravitational phenomena but does not entirely align with quantum mechanics. Essential questions, such as the nature of gravitons, the function of dark matter, and the fundamental mechanisms behind gravitational interactions, still lack definitive answers. Einstein's theory of relativity offers a solid framework for understanding gravitational phenomena, yet the true nature of gravity itself is still not completely understood. A key ongoing challenge is harmonizing general relativity with quantum mechanics.

This research paper seeks to unify these two fundamental theories by presenting a conceptual framework that links relativistic and quantum views. It aims to answer long-standing questions in physics and help solve one of the most significant scientific challenges of the last century, epitomized by Einstein's famous question: "Does God play dice?"

DISCUSSION

While the theories mentioned earlier offer partial insights, they fail to fully explain the nature of gravitation. Specifically, they lack a detailed account of the underlying mechanisms and do not provide a comprehensive framework for understanding gravitational phenomena. Consequently, this research aims to develop a more integrated perspective that can better explain gravity in its entirety. Additionally, the study considers the potential for unifying gravity with the other three fundamental forces, advancing the broader goal of a unified theory.

Suggestion:

In this sense, we propose a unified framework that integrates the other three theories through our innovative Unifying Mirror (Gravitational) Field Theory. This framework conceptualizes the Mirror Field as a distinct "phase," where duality emerges under microscopic gravitational conditions. Such conditions may give rise to a lifting effect that counteracts the gravitational field, thereby contributing to the structural stability of planets and stars within the gravitational network. We hypothesize (Appendix 1) the existence of a form of symmetry-based duality that coexists at a fundamental level, contributing to the cohesion of planetary systems. Within this framework, the Mirror Field functions as a guiding mechanism that influences both the orbital motion and rotational dynamics of planets. This assumption may offer a potential bridge between unresolved problems in gravitation and quantum mechanics. Specifically, each planet may be associated with two symmetrical Mirror Fields, each existing in a corresponding "phase." These magnetic phases generate forces that collectively form a gravitational-magnetic pathway. This

pathway not only stabilizes the planet's position but also directs its motion along a defined trajectory. Thus, each mirror gravitational field consists of a distinct "phase," which more precisely can be understood as the fundamental component that gives rise to gravitational effects. The superposition of these phases generates a coherent field, which propagates as magnetic-like waves that stabilize and sustain the planet. In turn, this dynamic process reinforces and gives rise to the Mirror Gravitational Field itself. One may ask how such a system enables motion along a defined path. The preceding discussion explain show the "phase" field contributes to lifting and stabilizing the planet through a magnetic-like effect. Building on this, we propose that the mirror "phase" field exhibits both attractive and repulsive components. The interaction between these forces generates a dynamic push-pull mechanism, which drives and regulates the planet's motion (movement) along its trajectory.

From this perspective, our innovative conceptual hypothesis, "Mirror Gravitational Field," assumption may represent a possible candidate for contributing to the unification of the four fundamental forces, potentially helping to bridge the gap between general relativity and quantum mechanics (Appendix 2,3). Our mirror gravitational field theory proposes a hypothetical dual-phase parity system in which two "phases" exist in mutual equilibrium which is the Mirror Gravitational magnetic coupling, each sustaining the other. When this symmetry is disrupted, an asymmetrical breakdown occurs, giving rise to dynamic effects that may cause planetary movement along their trajectories (Appendix 3,4). Within this framework, the mirror gravitational field provides a conceptual basis for understanding the underlying mechanism of gravitation. Specifically, the interaction between asymmetric mirror "phases" may generate a coupled magnetic kinematic effect. This effect could exert gravitational-like influences while operating through a unified gravitational magnetic mechanism (Appendix 4). In our model, we further propose that a symmetry-breaking process occurs within the mirror gravitational field. This asymmetry gives rise to a mirror "phase" field that generates both attractive and repulsive forces. The interaction between these opposing forces produces an attractive repulsive effect, which may manifest as a magnetic-like force. This emergent force could contribute to motion along a defined trajectory, influencing planetary movement along its orbital path. Which, a more accurate description, therefore, centers on the asymmetric breakdown of the mirror "phase" field, driven by transitions between attractive and repulsive forces. This dynamic interplay may account for the observed directional motion. Furthermore, this revised mirror gravitational field framework may offer an explanation for NASA's observations of an uplift force acting on planetary bodies (Appendix 5). This means that during the Mirror "Phase," the spatial position corresponds to its opposite configuration. When a symmetry break occurs, both the position and phase evolve and adjust accordingly. As a result, we can interpret the Mirror "Phase" as a state in which position becomes definite. This supports our mirror field hypothesis, which may address the quantum mechanical dilemma that "when location is uncertain, the path of motion is determined; when motion is uncertain, position is defined." In our mirror field model, both the positional state (via "Phase") and the circular trajectory (as observed in the Earth's motion) can be precisely specified. Therefore, at each corresponding Mirror "Phase," both position and motion achieve "a state" of certainty.

This implicit meaning suggests that we may have solved the puzzle of the quantum mechanical problem (Appendix 6,7,8).

CONCLUSION

Our Mirror Gravitation Field Theory (MGFT) concludes by proposing a novel conceptual framework that extends beyond conventional gravitational models, introducing a dual-phase, symmetry-based mechanism to explain both the stability and motion of celestial bodies. By integrating elements of parity symmetry, symmetry breaking, and mirror field dynamics, this (MGFT) theory offers a potential pathway toward reconciling key inconsistencies between general relativity and quantum mechanics. The central contribution of this research study fabrications in its formulation of the mirror gravitational field as a coupled system of attractive and repulsive phases, whose dynamic interactions generate a gravitational-magnetic effect. This push-pull mechanism provides a new perspective on orbital motion, suggesting that planetary trajectories are not solely governed by spacetime curvature or classical gravitational attraction, but also by underlying "phase-based" interactions that regulate motion and stability. Furthermore, the proposed symmetry-breaking process introduces a mechanism through which transitions into equilibrium motion, offering a plausible explanation for directional dynamics observed in planetary systems.

In this context, our "mirror gravitational field" not only complements existing theories but also opens new avenues for interpreting phenomena such as dark matter effects, gravitational anomalies, and potential uplift forces observed in astrophysical studies.

Additionally, our Mirror Gravitation Field Theory introduces a new conceptual framework that goes beyond traditional gravity models, featuring a mirror-phase, symmetry-based gravitational field mechanism to explain the stability and movement of celestial objects. By incorporating aspects like parity symmetry, symmetry breaking, with our mirror field dynamics, our innovative theory may help reconcile unresolved issues between general relativity and quantum mechanics. The core contribution rely in describing the mirror gravitational field as a system with both attractive and repulsive phases, whose interactions produce a gravitational-magnetic effect. The attractive-repulsive mechanism offers a new perspective on orbital equilibrium motion, proposing that planetary paths are influenced not only by spacetime curvature or classical gravity but also by phase-based interactions that govern movement and stability. Moreover, the symmetry-breaking process introduces a way for systems to swing from equilibrium to motion, providing a plausible explanation for the directional behaviors seen in planetary systems. In this framework, the mirror gravitational field not only supports existing theories but also opens new possibilities for understanding phenomena such as dark matter effects and gravitational anomalies. Although the Mirror Gravitation Field Theory remains hypothetical and requires mathematical development and empirical testing, it lays the conceptual groundwork for future research. Developing this theory further could help toward a unified understanding of fundamental forces, deepening our knowledge of the universe's structure and the true nature of gravity. Hope our research can contribute to the world and mankind.

REFERENCES

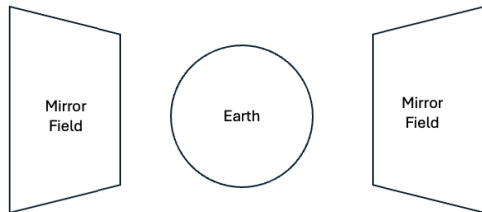
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APPENDIX

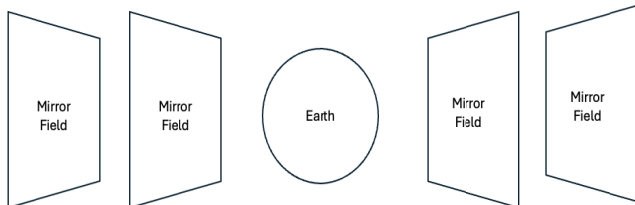
Appendix 1: Let MGFT “Phase” and “Position” Assumption
 MGFT posits two mutually coupled gravitational sectors: the ordinary field $g_{\mu\nu}$ and the mirror field $\tilde{g}_{\mu\nu}$, interacting primarily through mirror phase gravity while respecting parity symmetry $P: \phi \rightarrow \tilde{\phi}$.

Our MGFT may resolves Heisenberg uncertainty by defining position in mirror phase (\tilde{x}^μ) and momentum in ordinary phase (p_μ), such that $[\tilde{x}^\mu, p_\nu] = i\hbar\delta_\nu^\mu$.

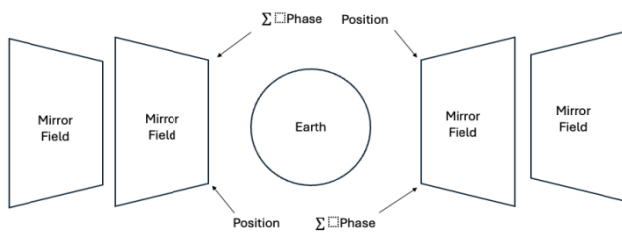
Appendix 2: Dual Mirror “Phase” Field



Appendix 3: Summation of the Mirror “Phase” Field



Appendix 4: Mechanism of “Phase” and “Position”



Appendix 5: Calibration Pic from “Mirror” Field



Appendix 6: Calibration Pic from “Mirror” and Summation “Phase” Field



Appendix 7: CalibrationPic Automatic Stabilizer in the “Mirror” Gravitational Field



Appendix 8: TCalibration Pic trajectory orbit from the “Dual Mirror” Field

