

**Research Article**
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## A Major New Discovery in Physics Experiments has created a New Theoretical System for Physics in the 21<sup>st</sup> Century: Declaration of the Century to Prevent Humanity from Advancing towards Self-Destruction

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### ABSTRACT

This article draws on the series of papers titled "New Theoretical System of Physics in the 21st Century," published between 2020 and 2022. A significant new discovery of generating the same charge through friction of the same substance, author puts forward a significant proposal for reforming physical theory, challenges Hendrik Anton Lorentz's interpretation of positive and negative charges at the atomic level, inheriting and developing E. Edlund understanding of positive and negative charges at the particle level. Based on the new understanding of the positive and negative charges of particles, the "New Theoretical System of Physics in the 21st Century" was established. New theory: Revealed the reasons for the generation of "particles"; Revealed the reasons for the generation of "atoms"; Reveal the essence of "universal gravitation" between matter, revealing the essence of the "universal repulsion force" between "matter"; Revealing the motion laws between all stars and planets in the universe; Revealing the reasons for the formation of the Milky Way; A series of major scientific problems that plague the development of human science is solved. Further propose utilizing the principle of "attraction" and "repulsion" forces between planets; between planets to develop a discharge spacecraft for rapid cruising between planets; Once successfully developed, when humans have the ability to obtain resources from other planets, can avoid nuclear wars caused by the competition for "Earth's resources" and prevent humanity from heading towards the fate of self-destruction; Promote humanity to move from "Earth civilization" to a new era of permanent peace in the "universe civilization"!

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**Received:** March 16, 2025; **Accepted:** March 20, 2025; **Published:** May 22, 2025

**Keywords:** Physics, Theory, Reform, Particles, Levels, Establishment, Positive and Negative Charges, Epistemology, New Theoretical System, Prevention, Human Self-Destruction, Declaration

### Introduction

This article is based on the "New Theoretical System of Physics in the 21<sup>st</sup> Century" series of papers published from 2020 to 2022, and explores how to avoid the path of human destruction [1-3]. With the continuous development of nuclear weapons, this crisis is becoming increasingly severe! How to avoid crises, the author proposes a new idea for reforming physics theory!

As early as 1992, the author discovered for the first time through friction experiments that all substances that are prone to frictional electrification will generate electrification when subjected to friction experiments between the same substance, and only produce the same charge, this is a universally existing objective law. A significant new discovery of generating the same charge through friction of the same substance; Refuting the viewpoint that Lorentz generates positive and negative charges at the atomic level through the "gain" and "loss" of electrons, because the theory

of Lorentz generating positive and negative charges through the gain and loss of electrons at the atomic level inevitably produces opposite charges, which contradicts the experimental fact that friction of the same substance produces "the same" charges! Therefore, based on experimental facts, the author denies Lorentz's understanding of positive and negative charges at the atomic level; Re established the scientificity of E. Edlund's understanding of positive and negative charges at the particle level; The author has published a series of research papers on this issue, showcasing the "New Theoretical System of 21st Century Physics" established by the author based on E. Edlund new understanding of positive and negative charges at the particle level [1-3].

New theoretical system: revealed the reasons for the generation of "particles"; Revealed the reasons for the generation of "atoms"; Reveal the essence of "universal gravitation" between matter, revealing the essence of the "universal repulsion force" between "matter"; Revealing the motion laws between all stars and planets in the universe; Revealing the reasons for the formation of the Milky Way; A series of major scientific problems that plague the development of human science is solved. Further propose utilizing the principle of "attraction" and "repulsion" forces between

planets; between planets to develop a discharge spacecraft for rapid cruising between planets; Once successfully developed, when humans have the ability to obtain resources from other planets, can avoid nuclear wars caused by the competition for "Earth's resources" and prevent humanity from heading towards the fate of self-destruction; Promote humanity to move from "Earth civilization" to a new era of permanent peace in the "universe civilization"!

The discussion is as follows: ①Introduction; ②Denies the understanding of positive and negative charges at the atomic level; ③Understanding positive and negative charges at the particle level can reveal the essence of "universal gravitation" and "Universal repulsion" of matter!; ④Commentary on the history of physical science; ⑤Declaration: If human physical science research does not correct its mistakes, humanity will face the fate of self destruction; ⑥Conclusion.

### **Denies the understanding of Positive and Negative Charges at the Atomic Level**

In the 19th century, Newton proposed the law of universal gravitation between matter, laying the foundation for the development of modern astronomy, the law of universal gravitation is a great and correct theory. However, the essence of universal gravitation has always been a problem for the physics community. The reason why the essence of universal gravitation has not been revealed for a long time is closely related to the major erroneous decision of awarding the Nobel Prize to Hendrik Antoon Lorentz in 1902 in recognition of his contributions to electron theory.

After years of research, the author has identified the following issues: Lorentz proposed that atoms carry positive and negative charges due to electron gain and loss [1-8]. This viewpoint limits the generation of charges to the atomic level and ignores the deeper particle level. According to this theory, electrons naturally carry negative charges and protons carry positive charges, without further explanation for why electrons and protons carry these charges separately. This understanding of positive and negative charges at the atomic level hinders human exploration of the origin of particle "positive and negative charges" and hinders the revelation of the essence of deep matter gravity. Therefore, Hendrik Anton Lorentz's theory has limitations in explaining the nature of charges and fails to provide insights into the causes of charge generation at the particle level. The following analyzed Hendrik Anton Lorentz's erroneous viewpoint that frictional electrification is the theoretical view that atoms generate positive and negative charges due to the gain and loss of electrons.

Firstly, we know that the diameter of an atom is 0.1 nanometers. Both manual and instrumental techniques are unable to strip even smaller electrons from atoms with a diameter of only one ten-millionth of a millimeter (0.1 nanometers). This theory, which is detached from reality and lacks experimental basis, is a completely erroneous fallacy. 1 millimeter is divided into 10 million parts, one of which is the diameter of the atom (0.1 nanometer). It is impossible for human technology to strip electrons from such a small "size" of one ten-millionth of a millimeter and keep the atomic nucleus still, this is not something that ordinary friction can achieve. The theory that frictional electrification is caused by "atoms one ten-millionth of a millimeter in size" (0.1 nanometers) gaining and losing electrons under micro force friction is an insult to human intelligence. The epistemology of generating positive and negative charges through electron gain and loss on atoms as

small as a nanometer is a completely erroneous fallacy. The fact of frictional charging is that the structure of the material surface will be destroyed by friction, which will lead to the shedding of tens of thousands of atoms, rather than just the shedding of electrons outside the atomic nucleus, Therefore, the theory of understanding positive and negative charges based on the "gain of electrons" and "loss of electrons" between atoms is an erroneous theory without experimental support.

Secondly, in previous experiments, we only focused on the phenomenon of opposite charges generated by friction between different substances and did not notice the phenomenon of same-sex charges generated by friction between the same substance. Experimental facts indicate that all substances that are prone to frictional electrification will produce the same electric charge when conducting frictional electrification experiments between the same substances [7].

Below supports the author's claim through specific experimental evidence, providing replicable evidence and experimental methods: **Experimental Method 1:** Which is referred to the experimental method broadcasted by Beijing Television Station, the specific method is as follows, "Two" pieces of silk (or plastic cloth; or any material that are prone to friction and electrification) is cut with a length of 10cm and a width of 10cm from a piece of silk [8]. Insulated silk thread is used to link "two pieces" of silk, hanging on a wooden pole. Two pieces of dry "meal paper" are held with both hands as a barrier. The purpose is to prevent the problem of transferring experimental charges out of the hands and conduct friction electrification experiments on "two pieces" of silk. Experimental facts have shown that when two pieces of silk with a length of 10cm and a width of 10cm are used to rub the same substance, the same negative charge generated can reach -4500 volts (higher voltage "same negative charge" can also be observed). This experiment can be repeated countless times. The results always produce the same charge [8]. All materials that are prone to friction and electrification can be used for this experiment.

**Experimental Method 2:** Two people each take a silk strip cut from the same piece of new silk, measuring 1 meter in length and 10 centimeters in width. They hold both ends of the silk and rub the middle part of the two silk strips with force, until heat is generated. The experimental phenomenon of producing same-sex charges in the friction part of the silk strips will be observed. We should try to maintain the consistency of the new silk strips in the experiment and avoid contamination. "Experimental Method 2" is to eliminate the doubts about the impact of hand involvement in the experiment in "Experimental Method 1". Note that during Experiment 2, there should be a time interval between each 'once' experiment; Wait until the friction charged silk returns to uncharged before conducting the next experiment. This experiment can be repeated countless times. The results always produce the same charge. It is noted that Experiment 2 should accurately measure the position where friction has occurred.

**Experimental Method 3:** Everyone can do a simple experiment like this; a person takes a new A4 paper that has been divided into two parts and rubs it against each other with both hands; We will find that the friction surface produces the same negative charge in the experiment.

The above experiment used an electrostatic tester to obtain the experimental results. It is the objective law that the friction of

the same substance produces the same charge, which universally exists. That negates the popular theory of electron gain and loss, friction, and electrification proposed by Hendrik Anton Lorentz for over a hundred years. Wrong theories can mislead the development direction of physical science research, causing human physical science research to deviate from the track of natural science truth and go astray. This is the root of many bizarre fallacies that later emerged, and also the reason why we cannot reveal the essence of material universal gravitation [2].

The above supports the author's claim through specific experimental evidence, providing replicable evidence and experimental methods. It has been proven that friction of the same material can also generate charges, producing only the same charges. The significant discovery of this experimental phenomenon is of great significance because it provides us with an excellent window to explore the 'natural science truth track'. The "Friction experiments and papers on the same substance producing the same charge" published at the 9th Conference on Electrostatics of the Chinese Physical Society should be referred to [7-8]. This new experimental discovery negates the notion that frictional electrification is caused by the acquisition and loss of electrons between atoms. The article "New Theory" discusses the reasons for why friction produces opposite charges between different substances and the same charges between the same substances [1]. Due to space limitations, they will not be repeated here.

### **Understanding Positive and Negative Charges at the Particle Level can reveal the Essence of "Universal Gravitation" and "Universal Repulsion" of Matter**

**Understanding Positive and Negative Charges at the Particle Level**  
The new viewpoint is as follows: In history, physicist E. Edlund of the Swedish Academy of Sciences proposed an understanding of the reasons for the generation of positive and negative charges at the particle level [9]. He believed that there was an excess of "Ether" in the entity with a positive charge, a lack of "Ether" in the entity with a negative charge, and a saturation of "Ether" in the entity with neutral and uncharged matter. His viewpoint can reveal the reasons why particles carry positive and negative charges. His understanding of the positive and negative charges of particles is based on the idea that positive and negative charges can change with each other. This is consistent with experimental facts, such as a positively charged object. When you touch it with an object that carries a large amount of electricity and a negative charge, it can change the positively charged object to a negative charge, and vice versa. This is the phenomenon that static electricity can be induced into same-sex charges that we all know. This phenomenon indicates that positive and negative charges are variable. But this theoretical idea was rejected by Nobel Prize winner Hendrik Anton Lorentz in 1902. As a result, it was unable to enter the research system of physics for a long time. The theory was gradually forgotten by people.

### **The New Theoretical System of Physics in the 21st Century Inherits and develops E. Edlund's Theoretical Ideas [1-3].**

The essence of the "ether" is thermal energy [1]. When there is a lack of "thermal energy" in the "entity" of a "substance", it carries a negative charge (such as electrons). When there is too much supersaturated "thermal energy" in the "entity" of a "substance", it will carry a positive charge (such as a proton). When the "thermal energy" of the "entity" in the "substance" saturates, it becomes neutral and uncharged (such as neutrons). In short, the reason why matter (including molecules, atoms, and

particles) generates positive and negative charges is due to the charge characteristics exhibited by the unbalanced combination of "entities" and "thermal energy" in matter. The reason for the frictional electrification phenomenon is that the surface of the material is damaged by friction between substances, causing an imbalance in the combination of "entity" and "thermal energy" on the surface of a substance, resulting in the appearance of positive and negative charges on the surface of the substance. That is, when there is a lack of thermal energy on the surface of the substance, the surface of the substance becomes negatively charged. When there is an excess of thermal energy on the surface of a substance, it exhibits a positive charge. Frictional electrification is not a phenomenon of frictional electrification caused by the gain or loss of electrons between atoms, but rather a phenomenon of positive and negative charges manifested due to the imbalance of the combination of "entity" and "thermal energy" [1]. Based on the above understanding of the reasons for the generation of positive and negative charges on particles (electrons, neutrons, protons), it can be inferred that the positive and negative charges of particles are variable. This can establish a new atomic model called the "Particle Charge Dynamic Atomic Model" [1]. This new atomic model reveals the reasons for the generation of atoms Based on this' new atomic model ', it further reveals the essence of the "universal gravitation" and "universal repulsion" of matter [1].

### **The New Theoretical System of Physics in the 21st Century reveals the essence of the "Universal Gravitation" and "Universal Repulsion" of Matter [1-3].**

The material world is composed of "entities" and "thermal energy" [1]. When "entities" and "thermal energy" exist independently, they cannot be called "matter", they are only components of matter, entity and thermal energy have natural properties that combine with each other, only when "entity" and "thermal energy" are combined can atoms be produced, matter with atomic structural force can be produced, "atom" is the smallest unit of "matter" in the material world [1]. The new understanding of the "particle charge dynamic atomic model" reveals the reasons for the generation of atoms [1]. The ability of "entities" to absorb thermal energy from the outside in "atoms" is the fundamental reason for the occurrence of universal gravitation between matter [1].

**At the Microscopic Level:** The "entities" in atoms have the ability to absorb external thermal energy, especially electrons lacking thermal energy, because all atoms contain thermal energy, thus forming the far (near) distance attraction characteristics between atoms, while the protons in atoms emit strong electromagnetic thermal energy (See: New Understanding of Atomic Models), causing atoms to form an emitting electric field, the emission electric field between atoms forms a repulsive force; Resulting in close distance repulsion and long-distance attraction between atoms, thus forming the natural law that atoms are at a balanced distance of attraction and repulsion [1]. This is the reason for the attraction and tension phenomena between atoms. When atoms follow the natural law of "attraction and repulsion equilibrium distance law" between atoms, the small size of atoms, which have a diameter of only 0.1 nanometers, makes it difficult to observe the phenomenon of short-range repulsion between them at the atomic level. Between atoms which is mainly manifested in the far-range absorption characteristics of relative micro bodies. Thus, the relative agglutination effect of micro bodies "atomic" appears, thus forming the cohesion effect of macroscopic "Star Ball" of atomic aggregates; This is the reason why macroscopic "star balls", as atomic aggregates; The reason why it condenses

into independent "Star Ball" in space without spreading or disintegrating. For a detailed explanation of this viewpoint using the Earth as an example, see [1] Section 3.4 Revealing the Reasons for the Formation of Earth's Gravity.

**At the Macro Level:** The "entities" in the "Star ball" absorb heat energy from outer space, forming a centripetal condensation heat effect, which creates a centripetal condensation gravitational effect on all matter that the "Star ball" constitutes, because all substances contain thermal energy [1]. The thermal energy released by the "Star ball" follows the voltage characteristics and emits strong electromagnetic radiation thermal energy (emitted by protons in atoms); The total amount of absorption and release of thermal energy by the "Star Ball" is equal and in equilibrium; That is to say, when entities in a "Star ball" absorb a large amount of thermal energy to form a strong gravitational force, it relies on the protons in the "Star ball" atoms to release electromagnetic heat energy, thereby forming a balance of incoming and outgoing heat energy on the "Star ball"; The entire planet is in a state of thermal energy saturation equilibrium; The "Star" as a whole does not carry positive or negative charges and exhibits charge neutrality; It only exhibits the characteristics of absorption collection weak thermal energy and releasing strong electromagnetic radiation thermal energy externally; The "Star ball" releases strong electromagnetic radiation heat energy, forming the emission electric field of the "Star ball" [1].

**In Summary:** Due to the fact that macroscopic "Star Ball" are aggregates of microscopic "atoms", so the principle of "Star Ball" and "atom" absorbing and releasing "thermal energy" is the same, both absorb thermal energy (collect weak thermal energy) through the "entities" in the atoms to form attraction, and release electromagnetic radiation "strong thermal energy" through the "protons" in the atoms to form electromagnetic repulsion. Specifically, the essence of "universal repulsion" is formed due to the existence of "emission electric field" between "Star ball" (atoms) in the universe (the formula of the "universal repulsion" law:  $F=Q U/R$ , see [3]), and the essence of "universal gravitation" is formed due to the "heat absorption ability" of "entities" between "Star ball" (atoms). All Between atoms, Between "Star Ball" in the universe follow the law of equilibrium distance between gravity and repulsion. All "Star ball" in the universe obey the law of close repulsion and the law of long-distance attraction; The relationship between Star Ball is governed by the natural law of the equilibrium distance between gravitational and repulsive forces; And their running route is the path that reflects the motion trajectory of between adjacent "Star Ball" "following the law of equilibrium spacing between attraction and repulsion" in real time; details see [1-3].

### Overview of New Perspectives in the "New Theoretical System of Physics in the 21st Century" [1-3] Series

New Basic Epistemology of The Material World, please refer to Part 2 of [1]: The new epistemology of "the material world is composed of entities and thermal energy"; New understanding of "matter", "thermal energy", and "entity"; New understanding of the reasons for the formation of positive and negative charges; A New Understanding of the "Particle Charge Dynamic Atomic Model", which reveals the reasons for the generation of atoms.

For a new understanding of gravitational and repulsive fields, please refer to [1] Part 3: New understanding of universal gravitation and repulsion; New understanding of the law of equilibrium distance

between attraction and repulsion; Revealing the reasons for the formation of gravitational and repulsive relationships between "Star Ball"; Reveal the reasons for the formation of Earth's gravity; Reveal the reasons for Earth's rotation; Reveal the reasons for the formation of comet elliptical orbits; Reveal the reasons for changes in comet structure; Revealing the reasons for the formation of black hole gravity.

New epistemology of magnetic field, please refer to Part 4 of [1]: A new understanding of the existence of two types of magnetic fields in the material world; The formation of the Earth's "emission magnetic field" and the strength characteristics of the emission voltage value; Revealing the reasons for the formation of the "North South Pole NS Magnetic Field" on Earth; Revealing the reasons for the formation of the "Van Allen Radiation Belt" on Earth; Revealed the reason for the small circular motion of the Earth's "North South Pole magnetic Pole Point" throughout the year; Revealing the reasons for the formation of magnetic fields at the N and S poles in magnetic materials; Revealing the reasons for the formation of ferromagnetism in magnetic materials; Revealed the fundamental reason for the emergence of the "compass" phenomenon.

New epistemology of electric fields, please refer to Part 5 of [1]: A new understanding that the essence of 'ether' is thermal energy; A new understanding of the "resistance" of "electromagnetic radiation" in space; New understanding of conductors and nonconductors; A new understanding of electricity and electromagnetic radiation; A new understanding of the reasons for the continuous generation of current in conductors when cutting magnetic field lines.

The new theory reveals the reasons for the generation of all charged and uncharged "particles" (including over 100 types of particles), please refer to [2]. Propose a new understanding that "material light state" is the fifth physical state [2]; The new theory holds that particles do not have a minimum unit, and entity particles can infinitely decompose under the strong 'thermal energy' action. As the entity particles are infinitely decomposed and become smaller, the physical state of matter will undergo phase transition effects (solid state; liquid state; Gaseous state; Plasma state ), They can ultimately decompose into the fifth physical state of matter with non-particle properties - "the state of material light" [2]. The "The state of material light" refers to the 'material light state' formed by the disintegration of condensed matter particles into non particles properties when thermal energy acts on a 'entity'; The "material light state" is the fifth physical state in which " non particle entity flow state " and "electromagnetic radiation heat energy" Synchronize Running Propagation [2]; "entity flow state" is a non particle property that does not exist in the form of particle quanta; which is why "photons" do not have volume boundaries; This is also the reason why particles in the material world do not have a minimum unit. The particle phenomenon discovered in cosmic rays is formed by the "superposition effect when the entity flow stops moving" of cosmic rays as a matter light state "non particle entity flow" shining on the measuring cosmic ray instrument. In the material world, particles do not have a smallest unit, and the smallest unit of "matter" is "atoms" ; That is to say, the smallest unit of matter with "atomic structural force" formed by the combination of "charged particles (including electrons, neutrons, protons)" is the atom [1-2]. The author believes that the current "quantum mechanics" is actually the study of the fifth physical state "matter light state"; The "material light state",

as a non particle entity flow that operates synchronously with electromagnetic radiation, has the same propagation principle of light speed time as the "pure electromagnetic radiation" of mobile phone electromagnetic signals during propagation [2]. There is no exaggerated "quantum entanglement" effect of "synchronicity and simultaneity" from one end of the universe to the other in the propagation of "material light states"; This extreme theory of 'quantum entanglement' is a fallacy that arises due to a lack of understanding and recognition of the essence of the fifth physical state, the 'state of matter light'. For a new understanding of the fifth physical state of matter "material light state", please refer to Section 6.1 in [2]; A new understanding of the fifth physical state of "material light state".

Revealed the reasons for the generation of "particles", please refer to Section 4.1 of [2]. Revealing the reasons for the formation of the Milky Way, please refer to Section 8 of [2]. For a new understanding of the formula  $F=Q U/R$  for the law of universal repulsion, please refer to [3].

Due to space limitations, the specific content mentioned above can be found in references [1-3].

### Commentary on the History of Physical Science

The phenomenon of an apple landing inspired Newton to establish the law of universal gravitation, but Newton did not reveal the essence of universal gravitation. The reason why the essence of universal gravitation cannot be revealed is that Hendrik Anton Lorentz's remains at the atomic level, denying E. Edlund's profound understanding of positive and negative charges at the particle level, causing errors in the direction of fundamental research in physics, obstructing the revelation of the essence of "universal gravitation" between matter by humans. In this context, Albert Einstein proposed the explanation that gravity is the bending of matter in spacetime, Albert Einstein's sophistry was discovered by influential physics experts at the time, who believed that he had found a life-saving straw to explain the essence of gravity. However, this theory cannot explain why stars in the universe are not attracted together by gravity. Physicists understand that it cannot be explained solely by Christiaan Huygens' theory of centrifugal mechanics. Because in the universe, when stars are not rotating around each other and there is no centrifugal force, they still do not gather together. Therefore, the Big Bang theory was proposed. Due to the fact that there is currently only a theory of universal gravitation in physics, it cannot explain why stars do not gather together. The Big Bang theory is a 'hedge' explanation. This is the current popular basic understanding of the material world in physics. It can be seen that current physical theories have not recognized the existence of "universal repulsion" between matter. In this regard, the "New Theory" explains the laws of motion between all stars and planets in the universe from the perspective of the "unity of opposites" of "Universal gravitation" and "universal repulsion" between matter [1-3]; The formula of universal repulsion law was proposed:  $F=Q U/R$ , details can be found in [3]. Rejecting the fallacy of Albert Einstein's general theory of relativity using spacetime curvature to explain the nature of gravity and the errors of the Big Bang theory could be referred to [2] for details.

### Declaration: If Human Physical Science Research does not correct its mistakes, Humanity will face the fate of Self-Destruction

Humans have now mastered the number of nuclear weapons capable of destroying themselves. If humanity does not move from the era of Earth civilization to a peaceful era of space

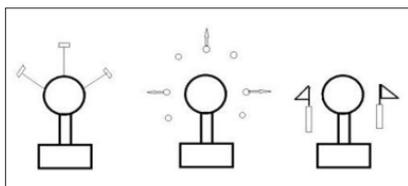
civilization as soon as possible, once a large-scale nuclear war breaks out, humanity will face the fate of self-destruction and Earth civilization will come to an end.

The New Theoretical System of Physics in the 21st Century is a declaration to prevent humanity from heading towards self-destruction. If human physical science research does not correct its mistakes, humanity will face the fate of self-destruction. The specific content of the declaration is as follows: Completely negate Hendrik Anton Lorentz's theory of generating positive and negative charges at the atomic level through electron gain and loss! Establish E. Edlund's theory of understanding positive and negative charges at the particle level [1-3]. Only in this way can human physical science research return to the track of natural science truth. The author has conducted in-depth research on the "E.Edlund" ideology for many years, through a new understanding of the reasons for the generation of positive and negative charges at the particle level, a new understanding of the "particle charge dynamic atomic model" has emerged, which reveals the reasons for the generation of atoms [1-9]. Reveals the essence of the "Universal attraction repulsive force" between matter. By revealing the principle of "Universal Attraction Repulsive Force" between "Star Ball", it is suggested to use this principle to develop discharge driven spacecraft, realize fast cruising between "Star Ball". And through in-depth research on the "discharge spacecraft", we aim to achieve interstellar travel, which could propel Earth civilization into a new era of "cosmic civilization" and permanent peace for humanity [3,10-15]. This article puts forward this important declaration aimed at preventing humanity from heading towards destruction.

In 1902, Nobel laureate Hendrik Anton Lorentz "denied" the understanding of positive and negative charges from the particle level by the great physicist E. Edlund of the Swedish Academy of Sciences. Although E. Edlund's ideas were able to explain all the electrostatic effects discovered at the time, he was unable to refute Lorentz's recognition of the generation of positive and negative charges through "electron gain and loss" at the "atomic level" due to his failure to discover experimental phenomena where the same substance generates the same charge through friction. His theory was completely rejected by the award-winning Hendrik Anton Lorentz, leading to his understanding of the nature of positive and negative charges from a particle perspective being removed from the human physics research system and little known. This is a tragedy in the field of physics research.

With the in-depth study of E. Edlund's ideas, the "New Theoretical System of Physics in the 21st Century" was born, which revealed the essence of the universal gravitation of matter, returning physical science research to the track of natural science truth [1-3]. When humans used the principle of gravitation and repulsion forces between planets to develop a discharge spacecraft that could quickly cruise between planets. Once humans have this' discharge propulsion power 'spacecraft [3]. When achieving rapid cruising flight between planets, Humans have the ability to obtain resources from other planets, there will be no more infighting among humans on Earth, thus avoiding nuclear wars caused by competition for Earth's resources. At that time, humanity will enter a truly peaceful new era of cosmic civilization, and the relationships between nations today will transform into the relationships between provinces in the "Earth Kingdom" of the universe, with governors interchangeable. To achieve this vision, it requires the joint efforts of physics researchers. The primary task

is to rectify the chaos, if human physical science research does not rectify the chaos, see [2] for details, humanity will not be able to move towards a new era of "cosmic civilization" and peace. Once a large-scale nuclear war breaks out, humanity will face the fate of self-destruction, and Earth civilization will come to an end.



**Figure 1:** Schematic Diagram of the Experiment of “Van de Graaff Generator”.

For the study of discharge flying saucers, let us analyze the problem of the vacuum effect appearing outside the high-voltage “discharge body”. When using the “Van de Graaff generator” for experiments, heavier objects are repelled. For example, metal bottle caps connected by thin wires will be repelled (the purpose of the experiment is to observe the phenomenon of heavier objects being repelled). The paper scraps thrown at the “Van de Graaff generator” will be “repelled” when not in contact with the “discharge ball” (the experimental purpose is to observe the phenomenon of the discharge control field continuously expanding). The candle flame is “repelled” (the experimental purpose is to observe the phenomenon of vacuum in the discharge control field). As shown in Figure 1, see experiment [11].

Experimental results indicate that the discharge voltage and the amount of discharge are directly proportional to the repulsive force. In other words, as the discharge voltage and amount increase, heavier objects are repelled more effectively. It was also observed that the discharge control field is continually expanding. Due to vacuum hypoxia, any carbon fire will extinguish (not referring to the flame of a candle), but this phenomenon was not observed due to limited experimental conditions. However, the author believes that when a single anode high-voltage discharge occurs on the

outer shell of an independent discharge ball (referring to a flying saucer) in the air, a vacuum effect will appear outside the discharge ball shell when the discharge repulsion is greater than atmospheric pressure. Because fundamentally, atmospheric pressure is formed by the Earth's gravity, and the electromagnetic force that repels atmospheric pressure means the emergence of electromagnetic forces that can counteract the Earth's gravity. Therefore, when the discharge repulsion is greater than atmospheric pressure and produces a vacuum effect, the electromagnetic force emitted by the discharge sphere and the electromagnetic force emitted by the Earth exhibit a completely “electromagnetic confrontation” repulsive state, indicating that the discharge spacecraft can overcome the Earth’s gravity. At this point, by continuing to "expand the range of the vacuum body" to overcome its weight, the discharge spacecraft can escape Earth's gravity and fly into space.

Next, based on Archimedes’ law, we will analyze the relationship between the size of the vacuum zone and buoyancy. The purpose of taking an approximate density of 1.29 kilograms per square meter of air near the ground is to give us an understanding of the relationship between vacuum and buoyancy. It is not a specific analysis of buoyancy parameters at different heights and air densities in the atmosphere (Note: since the vacuum is generated by electromagnetic force, flying saucers ascend due to electromagnetic “adversarial” forces, it is actually independent of air and air density) [3]. We borrow the buoyancy formula for calculation. We predict and understand it after the successful research of the future “electric discharge flying saucer”. The flight speed of the “electric discharge flying saucer” will be determined. Due to the large values in the kilogram force and Newton’s expression in the following tables, tonnage force is used for explanation. In addition, the vacuum here refers to the total volume occupied by the body of the “discharge flying saucer” and the vacuum area formed outside the shell of the flying object. The diameter of the high-voltage discharge ball is 3 meters and the quality is 1 ton. Calculate in the "way" of a sphere. The relationship between the radius of the vacuum generated and its buoyancy intensity is shown in Table 1.

**Table 1: The Relationship between the Vacuum Spacing generated by a 3-Meter Diameter and 1-Ton quality “Discharge Flying Saucer” and its Buoyancy Intensity**

Flying saucer quality/radius	Outer vacuum distance of flying saucer	Vacuum body radius	Vacuum volume (cubic meters)	Floating force of vacuum body (ton force)	Pure buoyancy (buoyancy minus 1 ton of flying saucer)
1 ton/1.5 meters	4.5 meters	6 meters	904.3 cubic meter	1.167 ton-force	0.167 ton-force
1 ton/1.5 meters	8.5 meters	10 meters	4186.67 cubic meter	5.4 ton-force	4.4 ton-force
1 ton/1.5 meters	13.5 meters	15 meters	14130 cubic meter	18.2 ton-force	17.2 ton-force

As can be seen from Table 1, it can be seen that a “discharge flying saucer” with a diameter of 3 meters and a mass of 1 ton only generates a vacuum distance of 4.5 meters outside its shell. The buoyancy of this 3-meter diameter and 1-ton quality “flying saucer” is as high as 1.167 ton force. When subtracting 1 ton of its own gravity, its pure upward buoyancy still has a force of 0.167 tons. In this way, this “discharge flying saucer” can not only be suspended in the air but also have a certain “upward” acceleration. Attention the insulation support "legs" of the "discharge flying saucer" should have a certain height to prevent the discharge energy from escaping to the ground in the form of electric current. It can be seen that the dynamic effect generated by the buoyancy of this vacuum body is shocking. If a vacuum spacing of 13.5 meters is created, the rising pure buoyancy can reach 17.2 tons of force.

According to Newton’s second law, we subtract the gravitational acceleration from the buoyancy acceleration to obtain the pure buoyancy acceleration value generated by a certain vacuum distance. We obtain the calculated values according to the following formula, as shown in Table 2.

$$a = \frac{F - mg}{m}$$

**Table 2: The Relationship between the Vacuum Distance Generated by a 3-Meter Diameter Flying Saucer Quality 1 Ton and The Pure Buoyancy Acceleration it produces**

Flying saucer quality/radius	Flying saucer external Vacuum distance	Vacuum body radius	Buoyancy of vacuum body	Floating acceleration of "vacuum body"	The speed at which a flying saucer noses in 10 seconds
1 ton/1.5 meters	4.5 meters	6 meters	1.167 ton-force	1.64 meters/s <sup>2</sup>	16.4 meters per second
1 ton/1.5 meters	8.5 meters	10 meters	5.4 ton-force	43.12 meters/s <sup>2</sup>	431.2 meters per second
1 ton/1.5 meters	13.5 meters	15 meters	18.2 ton-force	168.56 meters/s <sup>2</sup>	1.69 kilometers per second

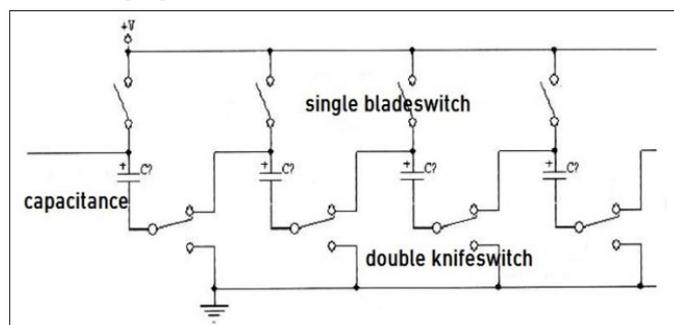
From Table 2, it can be seen that a "discharge flying saucer" with a diameter of 3 meters and a mass of 1 ton only generates a vacuum distance of 4.5 meters outside its shell. Its pure buoyancy acceleration is 1.64 meters/s<sup>2</sup>. When "running" for 10 seconds, the speed will reach 16.4 meters/second. When a vacuum distance of 13.5 meters is created outside the sphere, its pure buoyancy acceleration is as high as 168.56 meters/s<sup>2</sup>. When it reaches 10 seconds, its speed reaches as high as 1.69 kilometers per second. More data can be found in [10]. This is the use of buoyancy to calculate the ascent speed of the "flying saucer". From the above calculation results, it can be seen the key is to increase the discharge power of the flying saucer to expand the vacuum distance.

The above is the use of buoyancy to determine the flight speed of a "discharge flying saucer", on the surface, the lift of a flying saucer appears to be buoyancy, but in reality, this is a lift phenomenon generated by the "electromagnetic confrontation" between the Earth's emission of electromagnetic energy and the flying saucer's emission of electromagnetic energy [3]. This is an electromagnetic repulsion phenomenon based on the principle of universal repulsion between planets, independent of air buoyancy [3]. A detailed explanation of a series of experiments supporting the above viewpoint can be found in [3,11].

All matter on Earth emits electromagnetic energy with a characteristic of 2500V, and the atmosphere is no exception [1]. When the electromagnetic force emitted by the discharge flying saucer is greater than the electromagnetic force emitted by the Earth, a vacuum effect will occur outside the outer shell of the flying saucer due to electromagnetic repulsion. This is due to the vacuum "accompanying" phenomenon caused by electromagnetic repulsion on planets with atmospheres. On the moon without air, there will be no accompanying vacuum phenomenon, only the lift effect generated by the electromagnetic repulsion of flying saucer discharge and lunar discharge. The lift phenomenon caused by the discharge of flying saucers is independent of air buoyancy (Experimental evidence could be referred to [3] for details). But by using the buoyancy formula to calculate the vacuum accompanying phenomena, we can roughly understand the flight speed of the "discharge flying saucer" on Earth.

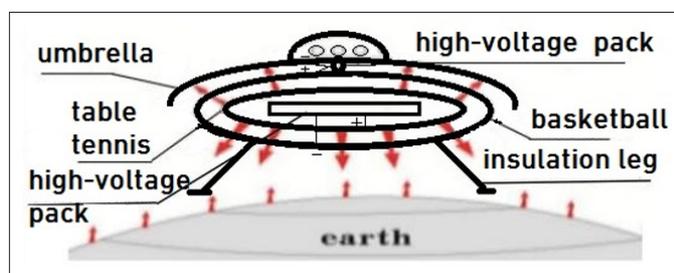
According to the discharge measurement data, when the discharge voltage is 29000 volts and the discharge is 1 milliamper, the generated lift is only 0.5g force [3]. Although it was found that the discharge body and the earth discharge produce repulsive lift, the small discharge power did not achieve shocking experimental results. Therefore, increasing the discharge power is the key technology for developing discharge flying saucers. After years of research [10-15], the author currently has a development plan to improve the ultra-high voltage and high-power discharge of

discharge spacecraft, which includes multi-million-volt high-voltage relays and high-power discharge technology. The high-power discharge design switches from "parallel charging" of capacitors to "series discharging", as shown in the circuit diagram in Figure 2. This high-power discharge design will contribute to the research and practical application of discharge spacecraft, as detailed in [13].



**Figure 2: Schematic Diagram of Capacitor Parallel Charging to series Discharging Circuit**

The specific implementation plan of the circuit diagram has not been disclosed. The author hopes to find a "partner" for the development of the "discharge propulsion power" spacecraft project so that this research achievement can benefit humanity. In the design of discharge spacecraft, various safety risk factors are fully considered. Advanced safety technologies and measures are adopted to ensure the safe and reliable operation of the spacecraft. The manufacturing plan is detailed in [12-14].



**Figure 3: Schematic Diagram of the Manufacturing Principle of a Single Anode Discharge Flying Saucer**

The manufacturing principle of the "Discharge Flying Saucer" is detailed in [13,15]. From Figure 3, we can get a brief explanation: A flying saucer is composed of three layers of metal structure. To explain it better, a metaphor is used. The center is a table tennis ball, the middle layer is a basketball, and the outermost layer is an umbrella. The architecture of the discharge flying saucer is formed by connecting a "three-layer metal structure" from top to bottom through insulated tubes at the center "handle" position of the

umbrella; Install a cockpit at the top of the pipe and a flying saucer exit door at the bottom; The detailed design of the internal structure for manufacturing flying saucers can be found in reference [13]. The principle of "flying saucer" discharge: A high-voltage pack is installed in the table tennis ball, with the positive pole connected to the table tennis ball and the negative pole connected to the basketball [15]. Another high-voltage pack is placed between the umbrella and the basketball, with the positive pole connected to the basketball and the negative pole connected to the umbrella. When the central table tennis ball discharges high voltage because the high-voltage pack under the umbrella keeps the basketball at a discharge voltage greater than that of the "Earth", ping pong balls can be discharged to the ground through the metal layer of the basketball. More accurately, it is a leakage discharge that does not return to the high-voltage negative electrode. The umbrella acts as the negative pole of a high-voltage power source, which causes the table tennis ball to mainly discharge high voltage through the basketball beneath the umbrella and into the ground (this is known as leakage discharge), cause the discharge of electricity from the Earth upwards and the discharge of flying saucers downwards form electromagnetic repulsion forces, causing flying saucers to exhibit lift phenomena. "lateral flight" can achieve the "lateral flight" function of a flying saucer by directing the tip of the central table tennis ball to discharge, and the same goes for turning. Based on the above principles, the author created a discharge flying saucer that can achieve the functions of "up and down flight" and "lateral flight" (Using batteries to power the discharge "high-voltage pack"), as shown in the flight experiment video [11]. The specific detailed manufacturing method of the discharge flying saucer can be found in [13]. Due to space limitations, more content can be found in [12-15].

As is well known, the acting force is equal to the reactive force. In the solar system, the principle of repulsive force between the electrical energy emitted by the "discharge spacecraft" and the electrical energy emitted by the sun (Or each planet) is used to achieve discharge flight; This is similar to the principle of comets (such as Halley's Comet) being repelled by the sun, section 3.6 of See [1] reveals the reasons for the formation of comet elliptical orbits. That is to say, in space, a "discharge spacecraft" is equivalent to an artificial planet obtaining reverse propulsion power by directionally launching electrical energy, thereby obtaining the kinetic energy for directional high-speed flight [3]. "discharge spacecraft" continuously absorbs solar energy in space and converts it into electrical energy, thereby obtaining continuous directed discharge energy; Through the process of continuous acceleration, it is possible to achieve the bright prospect of "light speed flight speed" that human long for. "Flying saucer" this is a discharge spacecraft that does not need to carry fuel and can achieve directional high-speed cruising flight between "Star Ball" by absorbing and releasing solar energy. Flying saucers can fly at high speeds, immediately change direction, hover at any altitude on Earth, and make no sound during flight; The principle is detailed in [3].

### Conclusion

This article is a crucial declaration of reform in physical theory: A significant new discovery of generating the same charge through friction of the same substance! Denying Hendrik Anton Lorentz understanding of positive and negative charges at the atomic level, inheriting and developing E. Edlund understanding of positive and negative charges at the particle level. This reform of physics theory establishes a new epistemology of positive

and negative charges at the particle level; Can reveal the reasons for the generation of "particles"; Revealing the reasons for the generation of "atoms"; Reveal the essence of universal gravitation between matter, revealing the essence of the "universal repulsion force" between "matter"; Revealing the motion laws between all stars and planets in the universe; Revealing the reasons for the formation of the Milky Way; A series of major scientific problems that plague the development of human science is solved [1-3]. On the path of pursuing the truth of natural science, after years of research by the author, it is recommended to develop a discharge spacecraft that utilizes the principles of planetary attraction and repulsion to achieve rapid cruising between planets [1-20]. Once successfully developed, when humans have the ability to obtain resources from other planets, it can avoid nuclear war caused by the competition for "Earth's resources" and prevent humanity from heading towards the fate of self-destruction; Promote humanity to move from "Earth civilization" to a new era of permanent peace in the "universe civilization"! The author proposes a development plan to improve the ultra-high voltage and high-power discharge of discharge spacecraft and hopes to find partners to make this research result benefit humanity.

**Conclusion:** The initiatives outlined in this paper aim to collaboratively tackle common threats to humanity through scientific exploration, technological innovation, resource diversification, peaceful usage, and international cooperation and governance. Our goal is to create a more peaceful, prosperous, and sustainable future. Let us work together to journey toward the vast future that lies in the sea of stars.

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