

## Fundamental interaction results from autonomous motion of an elementary particle. (25)

- Mass and charge are ideal models of non-existent fictions -

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### Abstract

1. In modern physics, it is recognized that all elementary particles (or a quark) are composed of hard solids, and the elementary particles of these solids have separate masses and charges. However, all elementary particles are not made up of hard solids, but repeat the "autonomous vibration" of contraction and expansion in perpetuity. In addition, the elementary particles of autonomous vibration simultaneously have a function of producing field energy (nuclear field, electric field, gravity field) and an additional function of reacting to that field energy. All movements of these elementary particles are made by the process of autonomous displacement. Therefore, the charge, the quark, and the mass, which are perceived from the viewpoint of modern physics, can be regarded as nonexistent. In other words, the charge, the quark, and the mass are only ideal models of fictitious things, and do not have a functional role in the necessity of existence.

2. The field energy has a pure spatial function, and the field energy of that spatial function allows for the conditions under which the elementary particles of autonomous vibration can autonomously move. In addition, the preparation and the process for the autonomous motion of the elementary particles of autonomous vibration are determined inside the elementary particle. Therefore,

mediators such as gluons, gauges, bosons, mesons, and gravity are unnecessary in the process of basic interaction. Of course, there is no need for space-time curve model (4 dimensions) and multidimensional logic (11 dimensions). In other words, in the process of the basic interaction, the elementary particles are not displaced (moved) by external interference or influences.

3. If the movement of the elementary particles is done autonomously, it is not possible for the attractive power and repulsive power to intervene. In other words, the attraction and repulsion perceived from the point of view of quantum mechanics and the theory of relativity are merely the idealistic act of non-existent fiction. Therefore, quantum mechanics and the theory of relativity of modern physics, which are applied to the concept of attraction and repulsion should be revised.

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## Sequence

- I. Introduction
- II. Body
- III. Conclusion
- IV. References of the Cyber site

※ **For your reference** – This paper denies some arguments of Relative theory and quantum mechanics, and suggests a new alternative. It is hoped the Relative theory and quantum mechanics of the abolition target will be excluded from the judgment standard.

## I . Introduction

In modern physics, it has been recognized that an elementary particle (or a quark) is composed of a rigid solid, and the elementary particle solid has a mass and a charge. Therefore, the mass and the charge should be considered for the elementary particle as for a solid. In other words, various entities concurrently coexist in the elementary particle as solids. Furthermore, the mass and the charge are different (that is, different components). Thus, the inertial force and the electric force resulting from the mass and the charge respectively do not have mutual functional relations.

When accepting (approving) the particle model of the modern physics, the elementary particles as a solid must generate multiple types of field energies simultaneously. Further, the elementary particle as a solid must control various kinds of carrier particles (gauges, bosons, mesons, etc.). Moreover, when external kinetic energy is applied to the elementary particle as a solid, the elementary particle as a solid only passively reacts to the externally applied kinetic energy. That is, the elementary particle as a solid moves heteronomously.

When the elementary particle as a solid only passively reacts to the external kinetic energy, that is, the particle moves heteronomously, as mentioned above, the external kinetic energy is not conserved inside the elementary particle. When using the theory of the elementary particle as a solid, the working principle of the "fundamental interaction" is very complicated and difficult to understand using common sense. Therefore, in order to reasonably interpret the working principle of the "fundamental interaction", the theory of the elementary particle as a solid should be discarded. Rather, a particle model with a new paradigm should be introduced. The particle model considering the new paradigm should satisfy the fact that when the external kinetic energy is applied to the elementary particle, the external kinetic energy is conserved inside the elementary particle.

## II. Body

It is appreciated that from the detailed analysis of a process of manifesting the various effects of the elementary particle that the elementary particle is not composed of a rigid solid, but, the particle permanently "**autonomously vibrates**", that is, the particle autonomously shrinks and expands. This implies that the elementary particle has an intrinsic active energy (vibrational energy) currently and permanently acting therein. Due to this autonomous active energy, the model of the particle is permanently maintained. The autonomous vibrational active energy and general kinetic energy have the same kind of mechanical functions. Thus, the autonomous vibration active energy and general kinetic energy may be combined into a single vector.<sup>[6], [7]</sup>

<<http://batangs9.com/E-6.pdf>>. <<http://batangs9.com/E-7.pdf>>

The autonomous vibrational active energy currently and permanently acting in the elementary particle generates infinite electric, nuclear, and inertial forces and a gravity factor. The autonomous vibrational active energy has been misunderstood as an action of a super-string in modern physics. Further, the field energy including the electric force, the nuclear force, and the gravity produced from the autonomous vibrational active energy also is currently active.

In modern physics, it has been misinterpreted that the charge, the quark, and the mass of the elementary particle generate the electric field, the nuclear field, and the gravitational field. However, as the present author has argued, when the autonomous active energy of the elementary particle produces infinite electrical, nuclear, inertial forces, and a gravity factor, the elementary particle needs not have the charge, the quark, or mass. That is, the concept as perceived from the point of view of modern physics, that the elementary particle has the charge, the quark, or mass is not real. Therefore, all interpretations in connection with the concept of the charge, the quark, and mass should be modified. As an example, I do not use words of charge, quark, or mass in my theory of absolute (Particle model of autonomously vibrates).<sup>[1]</sup>

<<http://batangs9.com/E-1.pdf>>

The electric force, the nuclear force, and the gravity factor produced by the autonomous vibrational active energy of the elementary particle are propagated through a space in all directions. Further, upon receiving the electrical and the nuclear forces and the gravity factor, the region in the space is structurally modified by the external stresses (electrical, nuclear, and gravitational forces). The state of the structurally modified space corresponds to the field energy. Due to this connection, the field energy of the electric and the nuclear forces and gravity reflects the characteristics of the space. The characteristics of the space are influenced (stress) by the electric force, the nuclear force, and gravity.

**A** - The elementary particle with the autonomous vibration energy produces an infinite field energy of electric force. The field energy of the electric force is embodied as waves. In this connection, the waves of electric field include continuous forward and backward waves, like in a form of a sound wave (in the longitudinal wave model). The forward and backward waves of the electric field are configured asymmetrically. The asymmetry between the forward and backward waves results in fundamental interactions (electric force). Further, when the field energy of the electric force and the vibrational energy of the elementary particle are connected in a large area, the elementary particle with the autonomous vibration further autonomously moves.<sup>[8], [9]</sup>

<<http://batangs9.com/E-8.pdf>>, <<http://batangs9.com/E-9.pdf>>

**B** - Protons with autonomous vibration generate infinite field energy of the nuclear force. The field energy of the nuclear force is embodied as a wave. In this connection, the wave of the field of the nuclear force includes a backward wave in a very low vacuum. Further, the backward wave acts as a suction concerning the neutron. The suction is expressed as the nuclear force of the fundamental interaction. However, the neutron with autonomous vibration does

not produce the nuclear force field, but is only used as a carrier particle for the nuclear force. Therefore, the protons and neutrons are repeatedly arranged alternately inside the nucleus. <sup>[9], [10]</sup> <<http://batangs9.com/E-9.pdf>>, <<http://batangs9.com/E-10.pdf>>

C - The vibrational energy of the elementary particle continuously produces a reaction mechanically towards a space. This reaction is expressed as an inertial force. This inertial force reflects the magnitude of the vibration energy. Further, even when external kinetic energy is applied to the elementary particle with the autonomous vibration, the inertial force is proportional to the magnitude of the vibration energy. <sup>[11]</sup> <<http://batangs9.com/E-11.pdf>>

When the elementary particle with the autonomous vibration moves at a constant velocity, the distribution of the vibration energy within the elementary particle becomes biased. The autonomous vibration with the biased energy distribution lasts forever. As the autonomous vibration with the biased energy distribution of the elementary particle persists permanently, the external kinetic energy is conserved within the particle. That is, the kinetic energy is conserved via the biased energy distribution resulting from the autonomous vibration. By conserving the kinetic energy, the inertial motion at a constant velocity progresses permanently. Therefore, the force (momentum) of the inertial motion is proportional to the inertial force and the velocity of the motion. <sup>[13]</sup>

<<http://batangs9.com/E-13.pdf>>

D - The elementary particle with the autonomous vibration produces an infinite gravity factor. The gravity factor has a volume and a spatial element, like the neutrino. Further, the spatial element of the gravity factor permeates the elementary particle in a non-resistive manner. Therefore, when the spatial element of the gravity factor transits the elementary particle with the

autonomous vibration, the spatial background of the elementary particle is displaced by the volume of the gravity factor with no resistance. In this connection, the inertial force of the elementary particle acts in a biased manner (downwardly) towards the volume of the gravity factor. The biased action of the inertial force is expressed as a gravity-based free fall. This free fall corresponds to the autonomous inertial motion of the elementary particle.<sup>[14], [15]</sup>

<<http://batangs9.com/E-14.pdf>>, <<http://batangs9.com/E-15.pdf>>

When the elementary particle with the autonomous vibration is affected by the field energy (nuclear field, electric field, gravitational field), the distribution of the vibration energy inside the elementary particle is biased. When the distribution of the vibration energy is biased, the autonomous vibration with the bias-deformed state lasts forever. Further, as the elementary particle continuously autonomously vibrates with the distribution of the vibration energy being biased, the working distance of the vibration energy is enlarged in the forward direction, while the working distance of the vibration energy is shortened in the backward direction. The enlarging and shortening are repeated. In this way, a center point of the elementary particle is displaced biasedly. This biased displacement of the center point is achieved autonomously. The autonomous displacement of the center point is expressed as the kinetic effect of the fundamental interaction.

When the distribution of the vibrational energy inside the elementary particle is biased, this leads to the generation of kinetic energy. Further, the continuation of the autonomous vibration of the elementary particle with the distribution of the vibrational energy being biased implies the conservation of kinetic energy. In this connection, when the generation and the conservation of the kinetic energy overlap, the motion of the elementary particle has an acceleration proportional to the square ( $t^2$ ) of time.<sup>[14]</sup>

<<http://batangs9.com/E-14.pdf>>

The elementary particle with the autonomous vibration produces multiple field energies (nuclear field, electric field, gravitational field) simultaneously. The particle responds to the field energy with the autonomous motion of the particle. In other words, the elementary particle with autonomous vibration has simultaneous functions of producing the field energy and reacting to the field energy. Therefore, the role of carrier particles such as gluons, gauges bosons, mesons, and gravity are not necessary for the fundamental interaction. Of course, a space-time curve model (4 dimensions) and a multidimensional logic (11 dimensions) are not necessary either.<sup>[2], [15]</sup> <<http://batangs9.com/E-2.pdf>>, <<http://batangs9.com/E-15.pdf>>

The field energy has a pure spatial function. The field energy of that spatial function allows for the conditions for the elementary particle with the autonomous vibration to autonomously move. Further, a preliminary condition for the elementary particle with the autonomous vibration to autonomously move is completed within the elementary particle. In this regard, the field energy for the spatial function induces the autonomous motion of the elementary particle. That is, the structural property of the field energy is translated into the motion of the fundamental interaction.

The kinetic effect of the fundamental interaction is not determined by the relative relationship between the elementary particle(A) and elementary particle(B), as the theory of relativity claims. In one example, the elementary particle(A) produces the field energy, to which another elementary particle(B) reacts with autonomous motion of the particle. In the manifestation of the fundamental interaction, the attracting force and repulsion force do not work unlike the view from quantum mechanics. In other words, the concept of the attraction and repulsion as perceived from the viewpoint of quantum mechanics is non-real. Therefore, in the process of expressing the effect of movement of the basic interaction, it is not desirable to use words of the attraction and repulsion.<sup>[1]</sup> <<http://batangs9.com/E-1.pdf>>

### III. Conclusion

In the process of the manifestation of the kinetic effect of the fundamental interaction, the elementary particle does not move passively or moves heteronomously as the logic of modern physics claims. In other words, the kinetic effect of the fundamental interaction is made active by the autonomous displacement or vibration of the elementary particle. Therefore, the role of the charge, quarks, and the mass, which are recognized in terms of modern physics, are unnecessary. In this regard, a presence of the charge, quarks, and mass in connection with the elementary particle are merely a fictional and are an ideological model. All elementary particles have no charge, quarks or mass.

When, in the process of the manifestation of the fundamental interaction, the vibration of the elementary particles is made autonomously, it does not involve attraction force or a repulsion force. In other words, the presence of attraction and repulsion as perceived in terms of quantum mechanics and the theory of relativity is a fictional and ideological model that does not exist. Therefore, the quantum mechanics and theory of relativity of modern physics employing the concepts of attraction and repulsion should be revised.

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**\* Difference becomes specialty, Ideal becomes reality,  
at the center of world in the name of center**

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