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Review of Milestone Book: Electromagnetic Unification of Four Forces Zi-Jian Cai*

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Review Article

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ABSTRACT

Recently, it was published the book "Electromagnetic Unification of Four Forces" (ISBN978-3-659-76798-2). In the book, it was compiled the progressions in physics organized by the author with satellite networks and accomplished altogether with the anonymous people in television worldwide from 2005 to 2009. During the process, it was achieved many important progressions in physics, such as the mass as spatially localized electromagnetic structure notably by the author and European people in television; the electromagnetic multi-hairy structure notably by the Sate-Commune Group India Member and athletes in video record of 2000 Olympic Opening Ceremony; the electromagnetic orienting force notably by the Sate-Commune Group Zhejiang Member; the thermodynamic strong force from electromagnetic multi-hairy hybrid notably by the author and US Congress Senator; the hybrid split emerging weak processes and electromagnetic oscillatory neutrino structure; the gravitational force as electromagnetic curving and shifting red from electromagnetic orienting force; and so on; electromagnetic unifying the four forces. Herein, it is in further suggested that the electromagnetic mass structure can explain the quantum theory of Planck because all photons emitted from electron possess identical electrical hairy strength as electron with frequency to differentiate energy only, and can also explain the quantum tunneling effect with deviation in returning to the original point for electromagnetic electron wave. Besides, it is believed by the world people in television that the particles in collider are simple in conformation as bigger in hybrid area and higher in hybrid frequency, while it is speculative that the theoretical massless gluon resembles half of neutrino.

INTRODUCTION

Recently, the author published the book "Electromagnetic Unification of Four Forces" (ISBN978-3-659-76798-2)^[1]. As the premise, the energy was present as the frequency of electromagnetic wave or frequency of light in atomic physics, therefore all forces with energy should be unified with the electromagnetic force. In the book, it was compiled the progressions in physics organized by the author with satellite networks and accomplished altogether with the anonymous people in worldwide television from 2005 to 2009. Since October 2005, it could be seen from the many television news, live telecast of arts/sports and so on that the people made use of the television as media to join the process of unifying the four forces in physics. During such process there was achieved many very important physics progressions, such as the non-relativity of ideal time and space, electromagnetic mass structure, electromagnetic multi-hairy structure, electromagnetic orienting force, oscillatory neutrino structure, and so on. There was explained and unified the strong force, weak force and gravitational force in physics with the electromagnetic force, realizing the unification of four forces in physics. There was comprehensively amended, replenished and completed a large quantity of theories and knowledge of present physics. The television and satellites were the new public media announcing and propagating these achievements, widely influencing the people of the whole world, and vividly manifesting the unprecedented originality of the achievements.

To be attractive to readers in interest and convenient to people for eulogy, there was introduced poetic and music sense in style while writing this book of physics, just as the cinema with affluence of music, which also represented a kind of progression in composition of science.

For this milestone book in physics, it is obviously worthy to review its contents briefly as Open Access journal paper for the convenience of academic propagation and citation, and to recommend the teachers and students relevant to physics to read this book. In this review article, it is attempted to undertake and finish this task.

THE CONTENT LIST OF THE BOOK

The followings are the content list of the book "Electromagnetic Unification of Four Forces" ^[1]. In the book the organizer Zi-Jian Cai classified the achieved progressions on physics this time into the independent scientific communications to the colloquia of public academic symposium, listing the contributors to individual achievements. In many communications the contributors of achievements consisted of the anonymous people in television of various countries. They were appointed as the contributors or one of the contributors in the form of being witnessed and reported, also listed in the communications.

Chapter 1: Disproving the Relativity of Ideal Time and Space

Contributors: Zi-Jian Cai, Sports-People in 2000 Olympic Opening Ceremony (Witnessed and Reported by Zi-Jian Cai from DVD in 2008), Sports-People in 2004 Olympic Opening Ceremony (Witnessed and Reported by Zi-Jian Cai from DVD in 2008), Sate-Commune Group Beijing Member, Actor Jiang, Kun in Television (Witnessed and Reported by Zi-Jian Cai) and Hong Kong People in Television (Witnessed and Reported by Zi-Jian Cai).

Chapter 2: Disproving the Relativity of Time and Space of Noise

Contributors: Russian Dmitry Medvedev in Television (in Period as President Candidate) (Witnessed and Reported by Zi-Jian Cai) and Zi-Jian Cai.

Chapter 3: Explaining the Phenomenon of Light Speed in Irrelevancy to Movement in Vacuum

Contributors: Yangzhou People in Television (Witnessed and Reported by Zi-Jian Cai).

Chapter 4: Explaining the Phenomenon of Light Speed in Irrelevancy to Frequency in Vacuum

Contributors: Zi-Jian Cai, European People in Television(Witnessed and Reported by Zi-Jian Cai), Sate-Commune Group Beijing Member(Female), Sate-Commune Group US Member, Sate-Commune Group German Member, Nanjing People in Television(Witnessed and Reported by Zi-Jian Cai) and Sate-Commune Group Beijing Member(Male).

Chapter 5: Explaining the Special Relativity with an Electromagnetic Method

Contributors: Sate-Commune Group US Members, British People in Television (Witnessed and Reported by Zi-Jian Cai) and Brazilian People in Television (Witnessed and Reported by Zi-Jian Cai).

Chapter 6: Explaining the Mass with the Spatially Localized Electromagnetic Structure

Contributors: Zi-Jian Cai, Sate-Commune Group Beijing Member, European People in Television (Witnessed and Reported by Zi-Jian Cai) and Southern American People in Television (Witnessed and Reported by Zi-Jian Cai).

Chapter 7: The Electromagnetic Orienting Force

Contributors: Sate-Commune Group Zhejiang Members and Sate-Commune Group Shanghai Member.

Chapter 8: The Electromagnetic Multi-Hairy Structure and the Photon

Contributors: Sate-Commune Group India Member, Zi-Jian Cai, Sports-People in 2000 Olympic Opening Ceremony (Witnessed and Reported by Zi-Jian Cai from DVD in 2008), Sports-People in 2004 Olympic Opening Ceremony (Witnessed and Reported by Zi-Jian Cai from DVD in 2008), Sate-Commune Group Zhejiang Members, Sate-Commune Group Beijing Member and Chinese People in Television (Witnessed and Reported by Zi-Jian Cai).

Chapter 9: The Electromagnetic Multi-Hairy Structure and the Particle of Charge

Contributors: Sate-Commune Group India Member, Zi-Jian Cai, Sports-People in 2004 Olympic Opening Ceremony(Witnessed and Reported by Zi-Jian Cai from DVD in 2008), Shanghai People in Television (Witnessed and Reported by Zi-Jian Cai), European People in Television (Witnessed and Reported by Zi-Jian Cai) and Southern American People in Television (Witnessed and Reported by Zi-Jian Cai) and Southern American People in Television (Witnessed and Reported by Zi-Jian Cai), European by Zi-Jian Cai).

Chapter 10: The Preliminary Investigation of Quark Structure

Contributors: Zi-Jian Cai and Sate-Commune Group India Member.

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Chapter 11: Explaining the Strong Interaction with the Electromagnetic Multi-Hairy Hybrid

Contributors: UN Staffs in Television (Witnessed and Reported by Zi-Jian Cai), Sate-Commune Group India Members, Sate-Commune Group US Members, US Congress Senator in Television (Witnessed and Reported by Zi-Jian Cai), Zi-Jian Cai, Sate-Commune Group Zhejiang Members, Korean People in Television (Witnessed and Reported by Zi-Jian Cai) and European People in Television (Witnessed and Reported by Zi-Jian Cai).

Chapter 12: Explaining the Gravitational Field of General Relativity with the Electromagnetic Wave in Curve and Red Shift

Contributors: Sate-Commune Group Shanghai Member, US People in Television (Witnessed and Reported by Zi-Jian Cai), Nanjing People in Television (Witnessed and Reported by Zi-Jian Cai), Sate-Commune Group US Members, Southern American People in Television (Witnessed and Reported by Zi-Jian Cai), Sate-commune Group Zhejiang Members and Beijing People in Television (Witnessed and Reported by Zi-Jian Cai).

Chapter 13: The Paradox on Explosion of Black Hole

Contributors: Zi-Jian Cai, Sports-People in 2000 Olympic Opening Ceremony (Witnessed and Reported by Zi-Jian Cai from DVD in 2008), Sate-Commune Group Zhejiang Member and Sate-Commune Group Beijing Member.

Chapter 14: Explaining the Weak Interaction with the Electromagnetic Interaction

Contributors: Sate-Commune Group Taiwan Member, Sate-Commune Group Beijing Members, European People in Television(Witnessed and Reported by Zi-Jian Cai), Shenzhen People in Television(Witnessed and Reported by Zi-Jian Cai), Sate-Commune Group Guangdong Member, Sate-Commune Group Zhejiang Members, Zi-Jian Cai, Sate-Commune Group India Member, Chinese People in Television(Witnessed and Reported by Zi-Jian Cai) and Nanjing People in Television(Witnessed and Reported by Zi-Jian Cai).

Chapter 15: Two Possibilities for the Relationship between the Quark and π Meson

Contributors: Beijing People in Television (Witnessed and Reported by Zi-Jian Cai), US People in Television (Witnessed and Reported by Zi-Jian Cai), Zi-Jian Cai, European People in Television(Witnessed and Reported by Zi-Jian Cai), Shanghai People in Television (Witnessed and Reported by Zi-Jian Cai), Shanghai People in Television (Witnessed and Reported by Zi-Jian Cai), Sate-Commune Group Zhejiang Members, Sate-Commune Group Beijing Member, Sate-Commune Group India Member, Artists and Audience of "The Same Song" Performance in August 2009(Witnessed and Reported by Zi-Jian Cai).

Chapter 16: Two Methods Unifying the Electrical Field and Magnetic Field as well as Two Essences Probing the Unification of Electromagnetics

Contributors: Zi-Jian Cai, Sate-Commune Group Zhejiang Member, European People in Television(Witnessed and Reported by Zi-Jian Cai), Russian Dmitry Medvedev in Television (in Period as President Candidate)(Witnessed and Reported by Zi-Jian Cai), Sate-Commune Group US Member, US People in Television(Witnessed and Reported by Zi-Jian Cai), Chinese People in Television(Witnessed and Reported by Zi-Jian Cai), Artists and Audience of "The Same Song" Performance in October 2008(Witnessed and Reported by Zi-Jian Cai).

Chapter 17: Solving the Crisis of Ocean Nuclear Explosion

Contributors: Zi-Jian Cai, US Bank Staffs in Television (Witnessed and Reported by Zi-Jian Cai) and Sate-Commune Group Zhejiang Member.

Chapter 18: Solving the Crisis of Accelerator in Generating Black Hole

Contributor: Zi-Jian Cai.

Chapter 19: The Nuclear Magnetic Pushing Force to Realize Long-Distant Astronavigation

Contributor: Zi-Jian Cai.

THE NON-RELATIVITY OF IDEAL TIME AND SPACE

In the book, it was demonstrated the non-relativity of ideal time and space in the first chapter ^[2]. As supposal, the ideal reference system O was stationary, the ideal reference system A moved at constant velocity v, and the ideal reference system B moved at constant velocity – v. The reference system A and B were symmetrical in mirror. From the reference system O to see A, the relative velocity was v. If the axial unit of time itself possessed relativity, its relative time changed t. From the reference system O to see B, the relative velocity was - v. If the axial unit of time itself possessed relativity, its relative time also changed t. In this regard, to observe from the reference system O, the two axial units of time of reference system A and B were equal and the same. Again from the reference system B to see A, the relative velocity of reference system A was 2v. If the axial unit of time itself possessed relativity, the change in relative time was close to 2t. This was different from the situation observed from the reference system O in which these two axial units of time were equal with each other. These two states were concurrent but contradictory.

The only explanation was that the difference in value for these axial units of time t=0. With the same method, it could further be deduced that, among the ideal reference systems moving at constant velocity, the value of difference for the axial units of space x=0. These situations might occur in reality as holding the meeting together with hand phones or adding a mirror into the reference system. It was necessary to solve these contradictions and paradoxes with the conclusion that there was no relativity in time and space ^[2].

In consistency, recently, it was demonstrated in updated experiment that the speed of neutrino was at least equal to that of light ^[3]. In consideration of that the neutrino possessed the mass, the result was unfavorable to the rationality of special relativity, while in further supported the non-relativity of ideal time and space.

THE ELECTROMAGNETIC MASS, MULTI-HAIRY STRUCTURE AND ORIENTING FORCE

In the book, there were introduced some novel electromagnetic structural forms and an important type of force, which were the keys to achieve the significant progressions. First, the author and European people in television proposed that the mass of particle should possess the spatially localized electromagnetic structure according to the fact that the γ photon of high energy could transform in reciprocation with the gravitational mass adequately and completely ^[4]. The mass electrical field and magnetic field of particle moved continuously and transformed reciprocally, but spatially this electromagnetic mass structure did not resemble that of photon which dissipated away. Instead it returned to the vicinity around its original point of departure through its electromagnetic movement and transformation ^[4]. After Zi-Jian Cai led the sate-commune group to make this proposition in early October 2005, the activities in discussion and exchange of physics elicited the attention, participation and comment of people in the whole world with television as the common media. It was this moment of time that there started the processes of electromagnetic unification of four forces. Besides the adequate and complete reciprocal transformation of γ photon of high energy with the gravitational mass, the increase in mass during quark condensation ^[5,6] strongly supported the mass as spatially localized electromagnetic structure, with mass increment to be easily explained with electromagnetic conformational change ^[4].

Second, the Sate-Commune Group India Member and athletes in video record of 2000 Olympic Opening Ceremony both proposed that the multi-pointy electromagnetic hybrid could make many electromagnetic interactions superimpose together, just alike to the DNA of genetic biology in characteristics, while similarly possessing the multi-hairy hybrid structure of complementary pairing and directional binding ^[6]. In a photon when a changing electrical vector E generated a changing magnetic vector B, immediately from such new and changing magnetic vector B there generated the next changing electrical vector E. At this time, the original electrical vector E had changed a little. Such process repeated continuously until the earliest changing electrical vector E vanished. In this way, there would generate the electromagnetic multi-hairy structure for the photon ^[7]. In similarity, there would also generate the multi-hairy electrical fields for both positron and electron ^[8]. It was easy to see that the positron and electron could hybrid like two gears. The difference in nuclear reactivity of π meson and μ particle strongly supported the multi-hairy hybrid structure sensitive to particle frequency ^[9].

Third, the Sate-Commune Group Zhejiang Member proposed the electromagnetic orienting force ^[10]. When several electromagnetic particles with positive and negative charges were close together, among their electrical fields there would occur the static electrical interactions with the same charge repelling and opposite charge attracting. The same charge repelling made the electrical fields increase in distance, decrease in interactive strength and decrease in interactive time. The opposite charge attracting made the electrical fields decrease in distance, increase in interactive strength and increase in interactive time. Such asymmetrical interactions made them generate a kind of net attractive force among the electromagnetic particles, called as the electromagnetic orienting force ^[10].

ELECTROMAGNETIC UNIFICATION OF FOUR FORCES

In the book, it was utilized the electromagnetic force to unify the strong force, weak force and gravitational force, unifying the four forces ^[1]. In premise, the energy was present in the form of frequency of electromagnetic wave or frequency of light in atomic physics, thereby all forces with energy should be unified with the electromagnetic force.

First, with regard to the strong force, it was suggested in the book that there formed the stable electromagnetic multi-hairy hybrid between the adjacent positive and negative quarks, and it was further divided the released energy brought about by the electromagnetic hybrid into two parts ^[9]. One was the released energy of the electromagnetic multi-hairy hybrid itself. Another was the thermodynamic moving, vibrating and rotating energy of quark particles and their internal electromagnetic structures, which was released by the orderliness and stability of electromagnetic multi-hairy hybrid ^[9]. Both of the two energies are parts of the energy of strong interaction. The difference of π meson and μ particle in their nuclear reactivity supported that the strong interaction was generated from the electromagnetic multi-hairy hybrid ^[9].

Second, with regard to the weak process, it was suggested in the book that, as the electromagnetic multi-hairy hybrid of positive and negative quark was subject to the multiple destructions and effects such as the internal tension within atomic nucleus and so on, the hybrid was torn apart and there accordingly occurred the recombination and modification in structure of atomic nucleus. The electromagnetic multi-hairy hybrid torn-apart to single side formed weak pairing and binding with the external

electrical field of opposite charge, getting stabilized temporarily ^[11]. In the subsequent process of weak interactive decay, the external electrical field pairing and binding with the single side of hybrid turned to bind with another external electrical field of opposite charge in external environment, dropping away from its binding with the original single side of hybrid, and becoming the neutrino of oscillatory electrical structure of opposite charge ^[11].

With this mechanism of weak process, it was speculated in the book that, if modifying the present quark theory and proposing that the positive and negative π meson themselves consisted of only one single quark, it was possible to construct the structural model for the positive and negative quark with the weak interactive decays of π meson, that was the positive and negative quark were just the respective positron and electron with one flat hybrid plane ^[12]. Quark condensation with increment in mass or frequency was also easily explained as formation of the flat hybrid plane ^[12].

Third, with regard to the gravitational force, it was suggested in the book that the electromagnetic mass waving entity of gravitational donor interacted in electromagnetic orientation with the electromagnetic waves mediating the gravity, making them turn in curve. While such orienting interaction fading away with the electromagnetic waves partially returning to the original status, the electromagnetic waves consumed energy and shifted red ^[13]. The electromagnetic waves curving and shifting red manifested in sum as the phenomena of gravitational field ^[13]. The photon and electromagnetic wave curving and shifting red in gravitational field directly supported this explanation ^[13]. Besides, the increment of mass during condensation of quarks ^[5,6] could only be explained with the electromagnetic conformational change of gravitational entity, with higher mass frequency affected more in coordination in gravitational attraction, supporting this mechanism of gravitational force.

PROGRESSIONS AND SPECULATIONS AFTER THE BOOK

The book was finished in writing in 2010, with its contents fixed since then. After that time, there have also been achieved new progressions and been raised new speculations relevant to the topics in the book. Herein, it is also collected some important issues of them.

First, with special relativity disproved, it is naturally necessary to consider the classical quantum theory. Classical quantum theory has mostly been successful in description of the behavior of electron around the atomic nucleus. Notably, the quantum theory is capable of accurate calculation for relatively simple atoms as physical explanation of the periodic table ^[14]. Besides, the quantum tunneling effect manifests a particle tunnels through a barrier that it classically could not surmount ^[15], so as to refer to quantum theory necessarily.

In my opinion, it is necessary to in further analyze the photon electron interaction manifesting quantum phenomena. It is obvious that any photon emitted by the electron would have the same electrical hairy strength as the electron. With the repeated occurrence of photon electron absorption and emission during cosmos evolution, all photons would acquire the same electrical hairy strength as that of electron. In this way, with identical electrical hairy strength, the energy of all photons would be only relevant to their frequencies, which is exactly the phenomenon of Planck, the basis of quantum theory. As there is only one kind of photon, without differentiation in photons emitted by electron or by nuclear quark, it supports the speculation that the positive and negative quark was just the respective positron and electron with one flat hybrid plane ^[12].

The quantum tunneling effect deserves to be specially addressed ^[15]. For an electron to tunnel through a high barrier that it classically could not surmount, it is necessary to resort to the quantum wave property of electron. In the spatially localized electromagnetic mass structure, its electrical field and magnetic field move continuously and transform reciprocally, but spatially they return to the vicinity around their original point of departure ^[4]. If there is deviation in returning back to the original point for electromagnetic electron wave due to external effects, the electron would be able to manifest the quantum tunneling effect ^[15]. This is also the strong evidence in support of the spatially localized electromagnetic structure of mass.

Second, it is necessary to in further speculate on the structure of gluon which is important in QCD to bind hadrons together. As energy manifests as frequency in photon wave, the gluon must also possess an electromagnetic structure. The theoretical gluon is 0 in mass, and 1 in spin. With these characters, it is most likely that the theoretical gluon may resemble half neutrino. Whereas, the observed gluons in three-jet event was very high in energy to hadronize into normal particles ^[16], so that I would argue that the observed gluons would also have contaminated or coexisted together with the electromagnetic hybrid regions in the third jet, same in behavior for both in the collider.

Third, it has been warned by the world people in television that the high energy stable particles generated in colliders would resemble those within the black hole. Bigger in hybrid area and higher in hybrid frequency manifest the characters of these electromagnetic structures simply. The Brazilian people in television argued that any dented structure of particle, without external force to maintain, would naturally turn into flat plane with higher frequency.

Fourth, as the gravitational force was suggested to be mediated through the electromagnetic waves in the book ^[13], it is not surprising that the gravitational wave could be assayed, as has recently been done from observation on the merge of two black holes ^[17].

DISCUSSIONS

In this article, it is reviewed the important contents of the milestone book "Electromagnetic Unification of Four Forces" (ISBN978-3-659-76798-2), introducing the non-relativity of ideal time and space, the spatially localized electromagnetic mass structure, the electromagnetic multi-hairy structure and the electromagnetic orienting force, and demonstrating how to unify the four forces with electromagnetic force. The strong force resulted from the stable electromagnetic multi-hairy hybrid between the adjacent positive and negative quarks, releasing the electromagnetic multi-hairy hybrid energy itself, and releasing the thermodynamic moving, vibrating and rotating energy of quark particles by the orderliness and stability of electromagnetic multi-hairy hybrid, both of which contributed to the strong force. The weak process resulted from the electromagnetic hybrid torn apart to form weak pairing and binding with the external electrical field of opposite charge, getting stabilized temporarily. Then, the external electrical field pairing and binding with the single side of hybrid turned to bind with another external electrical field of opposite charge in external environment, dropping away from its binding with the original single side of hybrid, and becoming the neutrino of oscillatory electrical structure. The gravitational force resulted from the electromagnetic mass waving entity interacting in electromagnetic orientation with the electromagnetic waves mediating the gravity, making them turn in curve and shift to red.

In this review, it is in further collected some important progressions and speculations after the book, in order to acquire the ability to comprehensively explain all experimental phenomena of physics available up to now. This is important in that it implicates the comprehensive proof to the electromagnetic unification of four forces in this book.

When encompassing quantum theory with electromagnetic electron wave, it resorts to a reasonable constraint, that is the photon emitted by electron should have the identical electrical hairy strength as that of electron. Accordingly, all photons from electron should have the same electrical hairy strength, so that the energy of photons is only relevant to the frequencies of photons, manifesting the phenomenon of Planck as the basis of quantum theory. In similarity, all photons from quark should have the identical electrical hairy strength as that of quark. Because there is only one kind of photon instead of two types of photons as electron photon and quark photon, it unexpectedly supports the proposal that the positive and negative quark is just the respective positron and electron with one flat hybrid plane ^[12]. The proposal was raised as speculation in the book, while it is proved herein.

Gluon is key in mediating the strong interaction in QCD. In the book, it was proposed the electromagnetic structure of neutrino as oscillatory electrical structure of opposite charge ^[11]. It is certainly necessary to figure out the structure of gluon. With 0 in mass and 1 in spin theoretically, it is reasonable that the theoretical gluon might resemble half neutrino. Whereas, the observed gluons in three-jet event high in energy ^[16] might contaminate or coexist together with the electromagnetic hybrid regions in the third jet.

It is important to point out that, in observations and experiments, the strong interaction and weak interaction are just opposite in process as involving in nuclear fusion and fission respectively. It would have been easier to unify the strong interaction and weak interaction earlier than to unify them individually with the electromagnetic interaction as the situation of present theoretical unification of forces in physics. If considering the strong interaction and weak interaction as opposite in their processes, it is reasonable that the theoretical gluon resembles half neutrino in structure.

However, the hybrid region is also key to both strong interaction and weak interaction. In strong interaction, the hybrid region forms, while in weak interaction, the hybrid region splits. It is certainly expected to observe the hybrid region in both interactions in accelerator or collider. From the speculation in the book ^[12], π^0 would be a good candidate to observe the hybrid region.

Comparison of particles in accelerator or collider with those presumably within black hole makes it easier to figure out the structures of various particles generated in accelerator or collider. They are just bigger in hybrid area and higher in hybrid frequency, simple in conformation. Without external force to maintain, any dented structure of particle would naturally turn into flat plane with higher frequency.

In all, with all discussions herein, it is attempted to acquire the comprehensive ability plausible to explain all experimental phenomena of physics available up to now, while also plausible to prove the electromagnetic unification of four forces in this book.

CONCLUSIONS

In this article, it is reviewed the important contents of the milestone book "Electromagnetic Unification of Four Forces" (ISBN978-3-659-76798-2), including the non-relativity of ideal time and space, the spatially localized electromagnetic mass structure, the electromagnetic multi-hairy structure and the electromagnetic orienting force. It is also reviewed the electromagnetic unification of four forces in the book. The strong force formed from energy release of the electromagnetic multi-hairy hybrid energy itself, and energy release of the thermodynamic moving, vibrating and rotating energy of quark particles by the orderliness and stability of electromagnetic multi-hairy hybrid. The weak process manifested the electromagnetic hybrid torn apart to form weak pairing and binding with the external electrical field of opposite charge. Then, the pairing and binding external electrical field turned to bind with another external electrical field of opposite charge in external environment, dropping away from its binding with the original single side of hybrid, and becoming the neutrino of oscillatory electrical structure. The gravitational

force was the electromagnetic mass waving entity interacting in electromagnetic orientation with the electromagnetic waves, making them turn in curve and shift to red.

In order to acquire the comprehensive ability plausible to explain all phenomena in physics up to now, it is in further collected some important progressions and speculations after the book. It is suggested that the electromagnetic mass structure can explain the quantum theory of Planck because all photons emitted from electron have identical electrical hairy strength as electron with frequency to differentiate energy only. Because there is only one kind of photon instead of two types of photons as electron photon and quark photon, it is unexpectedly supported the speculation in the book that the positive and negative quark are just the respective positron and electron with one flat hybrid plane. In this review, it is also explained the quantum tunneling effect with deviation in returning to the original point for electromagnetic electron wave. Finally, while it is speculative that the theoretical massless gluon resembles half of neutrino, it is pointed out that the high energy particles generated in colliders or accelerators would resemble those within the black hole, simple in conformation as bigger in hybrid area and higher in hybrid frequency.

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