

“Force Field” and “Force”

Guosheng Yang Physics Department, Shenzhen University, Shenzhen City, Guangdong Province, China

Keywords

Force Field, Gravitational Field, Positive Gravity, Negative Gravity, Electromagnetic Field, Genic Preponderance Field, Genic Insufficiency Field

In accordance with PNT dynamics, as material transference & transmutation among matter systems, force is but dynamic domino effect of instinctive PNT reciprocal equilibrium towards optimum PNT operation due to presence of PNT operational disturbance, and the uniform mathematic expression of force is $F=m \cdot K'(t) \cdot Y(t)$. The root cause of occurrence of force is matter system loses its PNT operational balance or operational PNT initial state so as to cause spontaneous reaction of instinctive PNT equilibrating. The everlasting dynamic orientation of force is the most feasible PNT balance due to PNT equilibrium instinct; idiographic characteristics of force depend on variation of characteristic PNT operational factors which directly impact the matter system to lose its PNT operational balance and how the matter system recover its PNT balance by the light of nature. Gravity, electromagnetic force, strong interaction, weak interaction which were historically gained as deserving rewards for our historical formidable but devious stochastic exploration journey are but four typical instances for matter system to lose PNT operational balance and consequently to recover PNT balance by the light of nature due to presence of PNT equilibrium instinct. In this section, we are ready to introduce and illuminate the individual details of inducements and influence methods of gravity, electromagnetic force, strong interaction, weak interaction, which radically cause time dynamic domino effect due to instinctive PNT equilibrium.

Foreword

During the historical course human coming to know comprehensive existent authenticity of nature from none to some, from some to more proportionally followed historical reciprocal cognition correction & qualitative optimization from superficiality to profundity, from parochiality to generality, human coming to know mechanical phenomena in the nature generally experienced a parallel progressional process from superficiality to profundity, from macrocosms to microcosms.

Throughout the very process, human gradually perceived and successively comprehended gravity, electromagnetic interaction, strong interaction and weak interaction in historically accessible rational lay. No matter inchoative perception or perfect comprehension of gravity, electromagnetic interaction, strong interaction and weak interaction, they all indicated the proper positive science progress of the very historical stage. And synchronously, when human came to know the physical application of gravity, electromagnetic interaction, strong interaction and weak interaction more and more extensively in the nature, human realized that the universal existence & motion in the nature are generally dominated by the four type of mechanical phenomena of gravity, electromagnetic interaction, strong interaction and weak interaction, the temporal authorities apparently had substantial evidences to declare that the four type of mechanical phenomena were just the so-called “four basic interactions” in the nature going without saying.

This was undoubtedly typical instance of historical science progress invisibly directed by historical progression.

The historical partition and definition of the so-called four basic interactions were of course remarkable cognition cumulative increase during the course of human coming to know comprehensive existent authenticity of nature from none to some, from some to more, but the historical partition and definition of the so-called four basic interactions obviously contradicts the cosmic original demiurgic fundamental of law of identity, and at the same time, it was obviously affected by the very historical progression and deeply charactered historical behavior of human coming to know the nature.

After all, on the basis of the proper historical groundwork, as the limitation of reproducible thought resource, there are only practical possibility for us to perceive and study this kind of mechanic phenomena and that kind of mechanical phenomena like making fun of this apple or that apple on tip of our fingers, as a result, we were of course more feasible and sensitive to

perceive more of their separate perceivable “thumbprint”, but still short of practical possibility to throw light on the unitive origin of the same nature of them under the general background of cosmic evolution. Because in that age, no matter how limited our backup producible thought resource was, no matter how insensitive our perception ability was to face the very object, and no matter how simple our practical cognition harvest was due to the very issue, we had no reasons to mishandle our practical perception feasibility and accessible approach under the very historical background. As a result, we just separately partitioned and defined them YY interaction, ZZ interaction ... offhand in accordance with accessible thumbprints of the very mechanical phenomena historically perceived by us. At any rate, we should be sane to our fixed lot knowing our distance and should not overlook even maltreat our practical approach upon historical feasibility & availability under temporal background; After all, there are only possibilities for men in different ages to draw their historical conclusions with backup of the living background resource of the proper age; succedent generation can only review on their own historical stage but no way to materialize their wisdom in prior.

Whether the historical partition and definition of the so-called “four basal interactions” really reflects the authenticity of nature or in what an extent it reflects the authenticity of nature is still very necessary for subsequent progressional cognition to review. Casting back of history, a gifted conclusion of Aristotle that heavier objects are always fall faster to the ground than the lighter ones was believed and adored by succedent generations for several hundred years; in early 19 century, many optimistical people had ever believed that Newton had found the universal laws of cosmos, the development of sciences in the future was but to make the related experiments more detailed and convictive; in terminal of 19 century and beginning of 20 century, human gradually found electron, proton and neutron, in that years, proud people were so confident that they had found the elementary particles of cosmos already; No matter whether the historical partition and definition of the so-called four basal interactions in cosmos were in this queue, at least, we can fully conclude the historical derivation situation of the historical partition and definition of the so-called four basal interactions in cosmos was just the same as that of any instances list above, ——triumphant songs on temporal historical stage! ——enthusiastic whoopee of historical progress as well as substantial annotation of historical ignorance.

Whereas, on the other hand, as remarkable progress of modern particle physics discerned into microcosm conformation of matter, perception cumulation about microcosm conformation of matter in cosmos had thrown more and more light onto configuration profile of homogenous cosmos, practical introduction & logic extension hypostatization of Homogenous cosmos originated from unique genesis postulate had consumedly refurbished our nous eyeshot of matter essentiality and the consequent existence & motion of matter in cosmos. Reviewed the mechanic phenomena in the nature along the logic extension derived from idea of homogenous cosmos originated from unique genesis, force is but dynamic domino effect of instinctive PNT reciprocal equilibrium towards optimum PNT operation due to presence of PNT operational disturbance, so-called “four basic interactions” are but four typical instances PNT losing its operational balance or constant.

Riding the fence of such nous eyeshot, we get down to contrast the original coherence of cosmic evolution of demiurgic sequential homologic multiplication and historical stochastic exploration of human towards existent authenticity of nature, oh, my God, so marvelous the contrast disparity between the both is, it's stark legpull the God played on us!

——In terms of the demiurgic evolution of nature: **universal existence & motion are but a well-regulated dynamic homogeneity system originally arranged in thorough coherence of cosmic demiurgic evolution of sequential homologic multiplication due to instinctive PNT reciprocal equilibrium towards optimum PNT operation..**

——In terms of modus operandi of human cognition exploration: **Temporal science harvests of human are but a basket of omnifarious science travelogues as deserving rewards of a formidable but devious stochastic exploration journey.**

In order to show off his humorous gift, is the God always ready to play joke on us!?

“Gravitational Field” and “Gravity”

Gravitational Field

Homogenous Cosmos Originated from Unique Genesis confirms that gravitational field is just the archetype of matter field itself, which originally dominates and coordinates the existence & motion of matter in space time.

In accordance with conventional gravity distribution characteristics in Newtonian mechanics, we primarily affirm the function correlation between any point with distance R to the center of mass of matter and the corresponding matter field strength α of the very point as below:

$$\alpha = \varepsilon * m / R^2 \text{ (III-i-1)} \quad (\otimes)$$

(In the equation above, ε denotes some certain constant, m denotes the mass of the positive matter/luminous matter of matter system)

The equation above indicates the matter field strength α of any point in matter field is proportional to the positive mass m of matter system, and is inversely proportional to the square of the distance R from the very point to the mass center of matter system.

The matter field, which at the same time is gravitational field is synchronously generated and formed just with innate generation & original mass enrichment of matter in the space field. Thus, it is easy for us to comprehend that during the course of the development of space field, there must be a critical space field strength value indicating the initial possibility of naissance of matter in space field. For some certain expedience, we just denote the initial critical field strength as α_0 . With the gradual enrichment of mass of matter, matter field expand proportionally, and the field strength became stronger and stronger accordingly. Consequently, it's very easy for us to comprehend that any matter field has a critical low strength limitation α_0 —the weakest matter field strength value, it indicates, in weakening tendence, matter field does not extend any longer. Correspondingly, there must be a matter field radius R , which indicates the distance from the barycenter to the critical strength interface, this distance is just the maximum value of the matter field radius, we just denote it as R_{Max} . In accordance with the general strength distribution formula of matter field $\alpha = \varepsilon * m / R^2$, we can arrive at the mathematical correlation between α_0 and R_{max} as below:

$$\alpha_0 = \varepsilon * m / R_{\text{max}}^2 \leftrightarrow R_{\text{max}}^2 = \varepsilon * m / \alpha_0 \quad \text{(III-i-2)}$$

According to equation above, we know that any matter field radius square R_{max}^2 is proportional to its positive matter/luminous matter mass m . Matter systems with different mass scale proportionally have different matter field maximum radius, the bigger the mass is, the larger the matter field maximum radius will proportionally be. And at the same time, it implies that in matter field strength weakening tendence, once the matter field strength approach strength value α_0 the matter field doesn't extend any longer.

Gravity

The original formation, figuration, regular distribution and their normative relative motion of celestial bodies and galaxies are all the connatural consequence of performance of gravity. Now, we come to analyze gravity.

Gravity is in fact not a special sort of force different from any others, considered from the connatural hypostasis, it is too but the unbalanced PNT equilibrium domino effect caused by instinctive PNT covariant equilibrating between $d(M \rightarrow m)$ and $d(M \leftarrow m)$, but the physical inducement and method which causes the PNT unbalance of matter system is a little distinctive. Man drag trailer, engine start load is just some of the biological energy storage or engine fuel substance disaggregated, (Just the PNT performance situation of $d(M \rightarrow m) < d(M \leftarrow m)$, which exhausts some positive mass of object and releases energy.), and transfer some of the disaggregated mass to the trailer or the load of the engine, so that the PNT action of matter system of the trailer or engine load lose their stationary state, as a result, their motion states arise acceleration consequentially. While gravity is but a sort of force caused by the superposition disturbance between matter fields, whose effect is the same as releasing cosmic mass to opposite matter system in fundamental.

Apparently, the occurrence of gravity has a fundamental precondition; —there must be superposition disturbance between matter fields of matter systems. In accordance with analysis of the gravitational field above, we know that any matter field has proportional maximum radius R_{max} . Let's suppose there are two matter systems in spacetime, their matter field maximum radius are $R_{1\text{max}}$ and $R_{2\text{max}}$, and the distance between the two matter systems is "S". If S, $R_{1\text{max}}$ and $R_{2\text{max}}$ satisfy $S \geq R_{1\text{max}} + R_{2\text{max}}$, then it is obviously impossible for the both matter systems arises matter field superposition disturbance, as a result, there is none gravitational action between the two matter systems; only when S and $R_{1\text{max}}$, $R_{2\text{max}}$ satisfy $S < R_{1\text{max}} + R_{2\text{max}}$, there is possibility for the two matter systems to arises matter field superposition disturbance, there is possibility to arises gravitational action between them. But matter field superposition disturbance does not only imply pure "attraction gravity" as Newtonian mechanics mentioned; in some certain cases, as the special matter field superposition disturbance is disobedient due to presence of Instinctive PNT equilibrium as to maintain connatural perfection conformation of matter field of matter system, the interaction between the matter systems with mutual matter field superposition disturbance even exhibit "repulsion gravity" on the contrary due to PNT equilibrium instinct.

We've introduced in above section that any matter system has its instinct to keep PNT equilibrium. The ultimate consequence of PNT equilibrium instinct is to keep the covariant $d(M \leftarrow m)$ and $d(M \rightarrow m)$ of PNT action equivalent, (*just to keep $d(M \rightarrow m) = d(M \leftarrow m)$*) but this is only the ultimate consequence, in fact, the realization to maintain PNT equilibrium involves the instinctive state maintenance of all related state parameters of PNT intrinsic operational circulation, variation of any state

parameter of PNT intrinsic operational circulation will directly impact PNT performance against PNT stationary state. Consequently, the presence of PNT equilibrium instinct of matter system will spontaneously bring up the proper PNT reaction so as to maintain all the state parameters in their inherent status.

Matter system generally consists of matter and matter field, and intrinsic physical characters of matter and matter field are of course effective factors to impact PNT performance between matter and matter field. In terms of matter field, matter field has its inherent esthetical sculpt which is one of the effective factors to impact PNT performance, once the esthetical sculpt of matter field is disturbed, it will of course indirectly impact the PNT performance and there will of course be instinctive reaction of matter system to maintain PNT equilibrium thereby. It of course implies the PNT equilibrium instinct includes the instinct to maintain the inherent esthetical sculpt of matter field in normative status, if the matter system does not have the instinct to maintain the innate esthetical sculpt of matter field, then, such factuality has virtually negated the presence of PNT equilibrium instinct of matter system on PNT operational mechanism.

In detail word, matter field is but a special space field with innate field esthetical sculpt, whose space field strength distribution is regularly subject to formulation $\alpha = \epsilon * m / R^2$ with a centre of the mass concentration point of the object and lower limit strength of α_0 . in terms of any valid impact to PNT performance caused by external superposition disturbance, on one hand, matter systems will immediately and spontaneously equilibrate $d(M \rightarrow m)$ and $d(M \leftarrow m)$ of PNT action as to maintain $d(M \rightarrow m) = d(M \leftarrow m)$; and on the other hand, matter systems will escape or assimilate the on-going devastating superposition disturbance by the light of nature. This obviously involves the optimum dynamic motion orientation for ideal self-acclimation due to expedient PNT equilibrium.

To any two matter systems with matter field radius R_{1max} , R_{2max} and with relativistic distance S . If S and R_{1max} , R_{2max} satisfy $0 < S < R_{1max} + R_{2max}$, then, the both matter systems befallen matter field superposition disturbance. Matter field superposition disturbance obviously devastates the innate esthetical sculpt of matter fields of the both matter systems, as the presence of PNT equilibrium instinct, confronting the devastating superposition disturbance, on one hand, matter system will spontaneously equilibrates covariant negative transmutation rate $d(M \leftarrow m)$ and positive transmutation rate $d(M \rightarrow m)$ orienting to new PNT equilibrium of $d(M \rightarrow m) = d(M \leftarrow m)$; and on the other hand, matter system will spontaneously escape and assimilate the on-going devastating superposition disturbance. Thus, it involves the dynamic orientation alternative of both matter systems.

If the both matter field maximum radiuses satisfy $R_{1max} > R_{2max}$.

Once $R_{1max} < S < R_{1max} + R_{2max}$, as the superposition disturbance of matter fields is not sufficient yet, besides the internal PNT equilibrating between $d(M \rightarrow m)$ and $d(M \leftarrow m)$ of matter system, relatively, it is more expedient for the both matter systems to adopt resisting the continuous nearness of the both matter systems as to escape and assimilate the further devastating disturbance. As a result, the gravitational reciprocity between the both matter systems exhibits repulsion of “negative gravity”, but not attraction as our traditional notion of “gravity”.

Once $0 < S < R_{1max}$, it indicates that the both matter systems are rather near, and the matter field superposition has been rather sufficient, in order to prevent its matter field from devastating superposition disturbance, resisting the opposite's further superposition is not expedient way for matter system to acclimatize itself. As a result, the both matter systems “snatch” the superposition material field mass to the field district not overlapped enough yet according to the innate esthetical sculpt of matter field, so as to assimilate and digest the field superposition of matter fields to maintain and re-create their innate esthetical sculpt. As the rape of the superposition of the matter field, the both matter systems come closer and closer, the gravitational reciprocity between the two matter systems exhibits real attraction as our traditional notion of “gravity” consequently, we call it “positive gravity”.

Of course, the clearance and assimilation of superposition pimple of matter field does not only cause the matter systems to close each other and ultimately make them merge together, the mutual gravitational reciprocity between matter systems may also cause the motion state change accordingly. And in fact, the motion state change is just one of the instinct self-acclimation of matter system by equilibrating positive transmutation rate and negative transmutation rate as to tend to new PNT equilibrium due to the presence of certain matter field superposition pimple. As a result, in some cases, matter systems can accept the presence of matter field superposition pimple by some certain normative relative motion, but not only to merge together. For instance, in orb system, planets run around the star upon mutual gravitational reciprocity, they both coexist separately in certain relativistic rounding motion state.

Now, we come to analyze the “gravity” mathematically according to PNT dynamics.

Let's suppose, there are two planets of planet A and planet B, the distance between the two planets is S , and their matter field radiuses are separately R_{1max} , R_{2max} . $0 < S < R_{1max} + R_{2max}$. Now, let's choose the planet A as our study object. For expedience, we just denote the function correlation of the mass ΔM that matter field B overlapped to matter field A varying with the distance S

and time t as $\Delta M(S, t)$; and we just denote the function correlation of the mass change Δm varying with distance S and time t as $\Delta m(S, t)$. Once the both planets arises gravitational field superposition disturbance, the matter inertial conservation equations of planet A will consequently change into:

$$\left\{ \begin{array}{l} M + (\Delta M(S, t) - \Delta m(S, t)) + m + \Delta m(S, t) = R + \Delta M(S, t) \\ [M + (\Delta M(S, t) - \Delta m(S, t))]/(m + \Delta m(S, t)) = K(t) \\ V(t) * (m + \Delta m(S, t)) = d(M \leftarrow m)(t) * Y(t) \\ L^3(t) * \alpha(t) = A * (m + \Delta m(S, t)) \\ Y(t) = B * \alpha(t) \end{array} \right. \iff \left\{ \begin{array}{l} M + (\Delta M(S, t) - \Delta m(S, t)) = K(t)(R + \Delta M(S, t))/(1 + K(t)) \\ m + \Delta m(S, t) = (R + \Delta M(S, t))/(1 + K(t)) \\ V(t) = d(M \leftarrow m)(t) * Y(t)/(m + \Delta m(S, t)) \\ L^3(t) = A * (m + \Delta m(S, t)) / \alpha(t) \\ Y(t) = B * \alpha(t) \end{array} \right.$$

Then, according to the PNT dynamics, we can arrive at the acceleration of planet A due to the gravitational reciprocity between planet A and planet B as below:

$$a(t) = Y(t) * K'(t) = B * \alpha(t) * \{ (M + \Delta M(S, t) - \Delta m(S, t)) / (m + \Delta m(S, t)) \} \tag{III-i-3}$$

Further, according to the conventional force definition equation $F = m * a$, we can arrive at the gravity equation as below:

$$F(t) = (m + \Delta m(S, t)) * Y(t) * K'(t) = (m + \Delta m(S, t)) * B * \alpha(t) * \{ (M + \Delta M(S, t) - \Delta m(S, t)) / (m + \Delta m(S, t)) \} \tag{III-i-4}$$

Of course, the “gravity” here is not sure just the gravity as traditional gravity theory mentioned by Newton. If $R_{1max} > R_{2max}$, when S satisfies $R_{1max} < S < R_{1max} + R_{2max}$, the so-called gravitational reciprocity is purely “negative gravity”. In accordance with the negative gravity relativistic distribution range $R_{1max} < S < R_{1max} + R_{2max}$ and the mathematical correlation between the mass m and the corresponding matter field maximum radius R_{max} that R_{max}^2 is proportional to m , it is easy for us to know, to any two reciprocity planets, if the more the mass tend to equivalence, the thicker and wider their relative negative gravitational fields would be; the more working energy would be exhausted for the planets to rush through their relative negative gravity field district. This is just the so-called “equivalence accessible to negative gravity” of optimization equilibrium principle of gravitational reciprocity of PNT dynamics. The “equivalence accessible to negative gravity” reciprocity fundamental avails the steady and harmonious coexistence of the celestial bodies with general equivalent mass or galaxies in general equivalent scale, avail to ensure them not to swallow up each other when they coexist with expedient distance.

PNT dynamics affirms that the red shift human perceived recently is but mechanic effect of negative gravity. As the relatively equilibrium distribution of mass in cosmos, the galaxy farer away from us, there are proportionally more relative negative gravitational field districts between us and the proper galaxy, and of course there are more anti-gravities doing their work, as a result, the faster we found the galaxy flying away from us. And indeed, no matter where we stand in cosmos, we can always find the same phenomena —the farer galaxies are always flying faster away from us. According to such factuality, some certain persons built up his theory of “The Big Bang”, while now, as PNT dynamics redefined “gravitational reciprocity”, it seems necessary to bring “The Big Bang” to forum to canvass with Homogenous Cosmos Originated from Unique Genesis.

Theoretically, when $S = R_{1max}$, the gravitational reciprocity between planet A and planet B exhibits neither positive gravity nor negative gravity.

Only when $0 < S < R_{1max}$, the gravitational reciprocity between the two planets exhibits as substantial “gravity”. In accordance with the relative gravitational reciprocity distribution range of $0 < S < R_{1max}$ and the mathematical correlation between m and R_{max} that R_{max}^2 is proportional to m , it is easy for us to know that relatively, the greater disparity of mass of any two gravitational reciprocity objects is, the thicker the relative gravitational global ring is, and the thinner their relative anti-gravitational global ring is, ($R_{1max} < S < R_{1max} + R_{2max}$) the more accessibly they can absorb each other. For instance, between discretional photon and star, their relative gravitational global ring mainly exhibit as gravitational global ring, their relative anti-gravitational global ring almost can be neglected. This is just the so-called “scale disparity accessible to positive gravity” of optimum equilibrium principle of gravitational reciprocity of PNT dynamics.

The formation, distribution and relative motion state of celestial bodies and galaxies are just the performance consequence of the both optimum equilibrium principles of gravitational reciprocity. Affected by the both optimum equilibrium principles of gravitational reciprocity, the size scale and distribution of celestial bodies and galaxies are neither too decentralized nor too centralized, but are exactly worthy of the connatural factuality itself. If there is only positive gravity in cosmos, the cosmos will ultimately tend to ballyhack for extremity centralization of positive mass; if there is only negative gravity in the cosmos, the cosmos can only be decentralized besides molecule and molecular linkages for accessible electromagnetic interactions among objects in spacetime.

If $S > R_{1max} + R_{2max}$, as it is impossible to arises gravitational field superposition disturbance between matter systems, there is none gravitation reciprocity between matter systems. For instance, there is no gravitational reciprocity between an isolated electron in solar system and another isolated electron in any other galaxy.

All in all, the so-called “gravity” is but the PNT unbalance dominant effect derived from accessible superposition disturbance of matter fields between matter systems; and the gravitational orientation is but the consequence of expedient approach of instinctive PNT equilibrium of matter systems.

About “Black Hole”

Further, we currently found the existence of “Black hole” in the cosmos, which is able to absorb and lick up all matter trending to it, even the photons passing by. Whereas, Homogenous Cosmos Originated from Unique Genesis is confused by such parlance, because the distinctive characters of Black hole are obviously not compliant with the integrative characters of cosmic unique-genesis homogeneity system. Considered by Homogenous Cosmos Originated from Unique Genesis, cosmos is but an absolute homogeneity system originated from unique genesis, the entire cosmic contents are absolutely homogenous and compatible, comprehensive cosmic existence & motion are but limited in homogenous material configuration transmutation and transition within range of unique-genesis homogeneity system, and cosmic mass is conserved during the course of homogenous material configuration transmuting and transiting. In another word, in cosmos, there are only coherent transmutation and transition among homogenous material configurations based on coherent cosmic origin and homogenous evolution, it’s impossible for cosmos to adulterate any material relationship or reciprocity of extinct “licking up” in cosmos. As a result, considered by Homogenous Cosmos Originated from Unique Genesis, such supernatural and horrific object as “Black hole” is non-cosmic-existence, even if we suppose it is just cosmic-existence, in accordance with PNT dynamic principle, it’s still impossible for it to exist in cosmos. Even though, we just suppose its existence in cosmos, in fact, any cosmic objects can never find its existence at all, because there is nothing for it to resort to produce any physical reciprocity or interaction with any cosmic objects according to PNT dynamic principle.

Of course, even on the stand of Homogenous Cosmos Originated from Unique Genesis, the apparent phenomena that “Black hole” exhibits is still comprehensible. Considered by Homogenous Cosmos Originated from Unique Genesis, the so-called “extinct dissipation” of matter in Black hole is but the performance of inversely oriented transmutation and transition process against cosmic progressive evolution —the anti-convergent degradation of matter in incommensurate weak space field.

Homogenous Cosmos Originated from Unique Genesis affirms the so-called “Black hole” is but the presence of the special space field whose field strength is less than α_0 , and just because its field strength is less than α_0 , it is impossible to support the existence of any positive matter/luminous matter, as a result, once positive matter/luminous matter approach or slide into the field district, the inverse process of generation of positive matter/luminous matter will be performed here thereby,—as the matter field are continuously exhausted in such weak space field, PNT performance of matter system of course loses its balance and react to arises $d(M \leftarrow m) > d(M \rightarrow m)$ by the light of nature, positive matter/luminous matter degenerated in the “Black hole” and seemed disappeared with “nothing” left just as throwing crystalloid into proper non-saturated solution and the crystalloid immediately dissolved and “disappeared”.

In so far as the extraordinary and horrific “adsorptive power” of “Black hole”, Homogenous Cosmos Originated from Unique Genesis does not think it is some mysterious “adsorptive power”, but our fictive rainbow. In a definite word, as special space field whose field strength is less than α_0 , it is impossible for it to exhibit such supernatural and horrific adsorptive power. The pestilent reason is that:

If the “adsorbed” objects are photons or objects similar as photons, one hand, as their mass is rather tiny, the gravity that all the circumjacent celestial bodies works on them is almost neglectable, and on the other hand, all these material particles exist in spacetime with rather remarkable momentum, (just as $d(M \leftarrow m)/m = V/Y$ indicated, m is very tiny, while Y is almost constant, the magnitude of V is consequently rather big, the energy $\Delta E = 1/2 mV^2$ of matter system is relatively substantial). Once they are oriented to the Black hole, nothing can draw them back, but to die off themselves in Black hole (Dissolved themselves into the weak field.).

If the “adsorbed” objects are macroscopical subjects around the Black hole, relative to the gravitational fields of these objects, all the space field district around the Black hole are generally negative gravitational field. As a result, once objects slide into such district of “negative gravitational field” around Black hole, they will consequentially tend to the Black hole under the repulsion of the negative gravity derived from the celestial bodies a little farer around the Black hole, and eventually dissolve into Black hole.

If the Black hole itself has adsorptive power, according to the cosmic conventional dynamic theorem, the smaller and the nearer objects to the Back Hole are of course easier to be adsorbed by the Black hole; if the Back Hole has none adsorptive power itself, all macroscopical objects sliding into Black hole is but because of repulsion of negative gravity derived from the celestial bodies a little further around Black hole, then according to “equivalent scale accessible to negative gravity” theorem

of PNT optimum equilibrium of gravitational reciprocity, we can predict that in the space fields with equivalent distance to the Black hole center, the bigger ones are even easier to be “licked up” by the Black hole, and the small ones are even safer than the big ones. In other word, at the position with equivalent distance to the Black Hole centre, the bigger ones even have more probabilities to be “licked up” than the small ones. And if the “Black hole” itself has mysterious adsorptive power to attract objects around it; the objects should be englutted wholly once like man swallowing down a small bird egg without mastication; if the “Black hole” itself is but special space field whose space field strength is less than critical strength of α_0 , then, the dissipation process of objects in Black hole will exhibit the inverse physical process of cosmic progressive evolution symmetrically like mirror image ——dissolving into the weaker space field along inverse procedures of cosmic progressive evolution. If future observation results can prove what I predict here, Black hole phenomena can also be regarded as one demonstrative instance of existence of material space field. And of course, it implies the failure of conventional vacuum notion as Einstein mentioned in his Relativity too.

All in all, considered by Homogenous Cosmos Originated from Unique Genesis, “Black hole” in fact is not some mysterious and horrific “object”, but some certain space field whose field strength is less than α_0 , its mystery and horror is but because it speculates the congenital active inherence and helpless situation of photons and the wickedness of negative gravity to macroscopical objects around the “Black hole”.

Galaxies scatter too much will cause “matter field gap” ——“Black hole” arise thereby.

Electromagnetic Field and Electromagnetic Interaction

Electromagnetic Field

As a component of the cosmic unique-genesis homogeneity system, matter field of course have its connatural compositive genic configuration. According to the space field hypothesis, matter field is above all a sort of hylic field consisting of certain sorts of genic units in certain configuration ratio; all the compositive genic units are correlated by mutual phantasmagorical transmutation and transition. And on the other hand, matter field is just consort field of proportionate positive matter/luminous matter, whose field strength distribution is subject to mathematical correlation $\alpha = \epsilon * m / R^2$; and whose field centre is just the mass centre of positive matter/luminous matter, and low confine field strength of matter field is $\alpha_0 = \epsilon * m / R_{\max}^2$, R_{\max} is just the radius of matter field.

Genic configuration of matter field is one of the effective factors to impact PNT operation of matter system, once the compositive genic configuration of matter field varies, the PNT operation of matter system will vary accordingly, and there will be instinctive reaction of PNT equilibrating by the light of nature, dynamic domino effect of instinctive PNT reciprocal equilibrium towards optimum PNT operation due to presence of PNT operational disturbance of matter system occurs thereby.

As some certain special non-saturated (or non-normative) genic accumulation configuration of matter, and as the inherent presence of PNT performance between matter and matter field, matter must transfer some of the non-normative genic configuration to matter field by mutual PNT infiltration, ——either release more of its preponderant genic units to its matter field or capture more complementary genic units from its matter field as to remedy its non-saturated genic configuration towards inherent saturation of genic configuration as possibly as it can do. Thus, mutual PNT infiltration makes both matter and matter field to share the genic preponderance or genic insufficiency equally, so that the matter field also has the non-normative genic preponderance or genic insufficiency. Electromagnetic fields are just the distinctive matter fields with genic preponderance or genic insufficiency. And as the difference of distinctive genic preponderance or genic insufficiency of matter field, electromagnetic fields are accordingly classified into positive electrical field, negative electrical field and magnetic field.

As the inducted matter field with some certain genic preponderance or genic insufficiency, electromagnetic field generally has the same field profile as matter field, and the field strength distribution is almost the same as matter field. It has field confine too, any static electromagnetic field derived from any point charge can never transcend its proper matter field district limit with confine low field strength limit α_0 . And of course, electromagnetic field is not sure to overlap with matter field exactly, the maximum radius of point charge electromagnetic field radius may be equal to the proper maximum radius of matter field at the utmost, and may be less than the proper matter field maximum radius. It is impossible for electromagnetic field to exceed the proper matter field.

To any electromagnetic field of point charge, the strength distribution of electromagnetic field is similar as the strength distribution of matter field. If we denote the charge quantity of point charge as Q, treat the point charge the center point of

the electromagnet field, and denote the electromagnetic field strength of any point in the electromagnetic field with distance R to the field center as β , then β, Q, R satisfy mathematical correlation as below;

$$\beta = \omega * Q / R^2 \tag{III-i-5} (\otimes)$$

(In the equation ω denotes the proportional coefficient)

Electromagnetic Force

The world is always ready to orient perfection by the light of nature.

The electromagnetic force is but the unbalanced PNT equilibrium/counterbalance domino effect caused by superposition disturbance between electromagnetic fields. As the genic configuration of matter field is effective factor to impact PNT performance and as presence of PNT equilibrium instinct, matter system must have instinct to maintain the normative genic configuration of mater field.

If the genic preponderance or genic insufficiency of the interacted electromagnetic fields are just the same, the superposition disturbance of genic preponderance or genic insufficiency of the interacted electromagnetic fields will consequently deviate more of the normative genic configuration of mater fields, the instinct to maintain the normative genic configuration of mater field will spontaneously reject the same genic preponderance or genic insufficiency of the interacted electromagnetic fields to go on to superpose more and is always ready to make the same genic preponderance or genic insufficiency of the interacted electromagnetic fields not to superpose as possibly as it can, as a result, the interaction between the mutually disturbed electromagnetic fields with the same genic preponderance or genic insufficiency exhibits repulsion.

If the genic preponderance or genic insufficiency of the interacted electromagnetic fields are complementary and reciprocal due to normative genic configuration of matter field, the superposition disturbance of complementary genic preponderance or genic insufficiency of the interacted electromagnetic fields will consequently do good to consummate the normative genic configuration of mater field, the instinct to maintain the normative genic configuration of mater field will spontaneously scare up the complementary genic preponderance or genic insufficiency of the interacted electromagnetic fields to go on to superpose as possibly as they can, as a result, the interaction between the mutually disturbed electromagnetic fields with the complementary genic preponderance or genic insufficiency exhibits attraction.

Now we come to formulate the electromagnetic force according to PNT dynamics.

Let's suppose there are point charges A and B, we separately denote their mass as m_1, m_2 , and separately denote their matter field mass as M_1, M_2 , the both point charges exist in the opposite electromagnetic field, we can know that there must be electromotive force between them. For expedience, we choose A as our study objective, and assume that during the course of the electromagnetic action, we denote the charge B overlaps its electromagnetic field mass ΔM into the electromagnet field of charge A, and denote the function correlation of ΔM varying with distance S and time t as $\Delta M(S, t)$, at the same time, we denote the change of the mass of positive matter/luminous matter of charge A as Δm , and denote the function correlation of Δm varying with distance S between the both charges and time t as $\Delta m(S, t)$, then during the course of the mutual electromagnet action between the two charges, the unbalanced matter inertial conservation equations of charge A consequently changes into:

$$\left\{ \begin{array}{l} M + (\Delta M(S, t) - \Delta m(S, t)) + m + \Delta m(S, t) = R + \Delta M(S, t) \\ [M + (\Delta M(S, t) - \Delta m(S, t))]/(m + \Delta m(S, t)) = K(t) \\ V(t) * (m + \Delta m(S, t)) = d(M \leftarrow m)(t) * Y(t) \\ L^3(t) * \alpha(t) = A * (m + \Delta m(S, t)) \\ Y(t) = B * \alpha(t) \end{array} \right\} \iff \left\{ \begin{array}{l} M + (\Delta M(S, t) - \Delta m(S, t)) = K(t)(R + \Delta M(S, t))/(1 + K(t)) \\ m + \Delta m(S, t) = (R + \Delta M(S, t))/(1 + K(t)) \\ V(t) = d(M \leftarrow m)(t) * Y(t)/(m + \Delta m(S, t)) \\ L^3(t) = A * (m + \Delta m(S, t))/\alpha(t) \\ Y(t) = B * \alpha(t) \end{array} \right.$$

Then we can deduce, under action of the electromagnetic force, the acceleration of the point charge A is as below:

$$a(t) = Y(t) * K'(t) = B * \alpha(t) * \{M + (\Delta M(S, t) - \Delta m(S, t)) / (m + \Delta m(S, t))\}' \tag{III-i-6}$$

Further, according to conventional force definition equation $F = m * a$, we can arrive at the electromagnetic force point charge A stands as below:

$$F(t) = (m + \Delta m(S, t)) * Y(t) * K'(t) = (m + \Delta m(S, t)) * B * \alpha(t) * \{M + (\Delta M(S, t) - \Delta m(S, t)) / (m + \Delta m(S, t))\}' \tag{III-i-7}$$

The motion velocity of point charge A is as below:

$$V = V_0 + \Delta V = V_0 + \int a(t) dt = V_0 + \int B * \alpha(t) * \{M + (\Delta M(S, t) - \Delta m(S, t)) / (m + \Delta m(S, t))\}' dt \tag{III-i-8}$$

If the point charge does not move in electromagnetic field, but in a conductor, and let's suppose the total charges the point charge has is q , the length of the conductor is L , and there are totally N units such point charges in this conductor. Then we can know the current $I(t)$ in conductor can be expressed as below:

$$I(t) = NqV/L = Nq(V_0 + \int B \cdot \alpha(t) \{M + (\Delta M(S, t) - \Delta m(S, t)) / (m + \Delta m(S, t))\}' dt) / L \quad (\text{III-i-9})$$

Conductor has resistance but implies that the point charge transfers some of its kinetic energy to atoms of conductor in thermal format, the presence of resistance never impact the dynamic principle that point charge must be subject to.

It indicates electromagnet force is not any essential force in the nature; it's too unbalance PNT equilibrium domino effect only with distinctive causative inducement factor to impact normative PNT operation as to cause PNT performance inconstancy.

“Strong Interaction” and “Weak Interaction”

Strong Interaction

To any particle with very tiny mass, the PNT process of matter system is generally not as regular as the macroscopical ones, the performance of the couple inverse tache of “ $M \rightarrow m$ ” and “ $M \leftarrow m$ ” of PNT are usually not synchronous and even. For example, there is a single elementary genic unit in space field, when it involves PNT, it's apparently impossible for it to perform negative transmutation and positive transmutation just synchronously, but to perform negative transmutation first, then to perform positive transmutation. Thus, its PNT process is completely separated into two sequential different process of negative transmutation “ $M \leftarrow m$ ” & positive transmutation “ $M \rightarrow m$ ”, the two different processes periodically go round and round. To any matter systems whose mass are a little bigger than single elementary genic unit, although their PNT process are not separated as clearly as single elementary genic unit, but as their mass is still very limited, the couple inverse PNT tache are still very difficult to keep equivalent and even every moment, as a result, their PNT process usually exhibits similar waveform periodic variation, ——positive transmutation is regnant a little now and negative transmutation is regnant a little then, and the both regnant transmutation rhythms go round and round. The dynamic process is very similar as the natural motion of pendulum.

To any two particles whose couple inverse PNT tache of negative transmutation and positive transmutation are not exactly equivalent and even, when the one is performing negative transmutation or negative transmutation is regnant, while at the same time, the other is just performing positive transmutation or positive transmutation is regnant, as the both transmutation process can be mutually reciprocal, if the both particles with inverse regnant on-going transmutation are closed enough, consequently, the couple inverse reciprocal regnant transmutation will spontaneously link up expediently and combine into an internal reciprocal PNT link. We may just call this reciprocal PNT combination between particles as internal reciprocal positive and negative transmutation link, a single pendulum style dynamic pattern link of PNT combination performance. Internal reciprocated positive and negative transmutation link between particles joint the both particles firmly, and the reciprocal PNT combination performance in pendulum dynamic pattern is just the mechanics origin of strong interaction.

As the presence of single pendulum dynamic reciprocity of internal reciprocated positive and negative transmutation link between particles, strong interaction does never exhibit as a constant force, but a periodic variable force as mechanical pattern of single pendulum, both the magnitude and direction of strong interaction are similar as mechanical pattern of single pendulum, its variation incarnates characters of waveform, only its period is very short. And indeed, if we try to unchain the internal reciprocated PNT link between particles and let the separate particles exist in spacetime freely, we can then find their separate motion exhibits waveform characteristics. Of course, reciprocated PNT link can exist between two particles with phase disparity of the couple inverse PNT taches, and can exist among several more particles with phase disparity of couple inverse PNT taches too, as long as their phase disparities are mutually reciprocal due to their common PNT operational consummation.

Now we come to analyze strong interaction according to PNT dynamics.

Let's suppose there is reciprocated PNT link between particle A and particle B. For expedience, we just choose the particle A as our study objective. We denote the matter field mass of particle A as M , and denote the positive mass of particle A as m . during the course of the performance of PNT reciprocity between particle A and particle B, we denote the function correlation of mass transferred between particle A and Particle B with functor t as $\Delta m(t)$, t denotes time, then we can know, during the course of performance of PNT reciprocity (Strong interaction), the unbalanced matter inertial conservation equations of

particle A can be expressed as following:

$$\left\{ \begin{array}{l} M + \Delta M(t) - +m + \Delta m(t) = R + \Delta M(t) \\ (M + \Delta M(t))/(m + \Delta m(t)) = K(t) \\ V(t) * (m + \Delta m(t)) = d(M \leftarrow m)(t) * Y(t) \\ L^3(t) * \alpha(t) = A * (m + \Delta m(t)) \\ Y(t) = B * \alpha(t) \end{array} \right\} \longleftrightarrow \left\{ \begin{array}{l} M + \Delta M(t) = K(t)(R + \Delta M(t))/(1 + K(t)) \\ m + \Delta m(t) = (R + \Delta M(t))/(1 + K(t)) \\ V(t) = d(M \leftarrow m)(t) * Y(t)/(m + \Delta m(t)) \\ L^3(t) = A * (m + \Delta m(t))/\alpha(t) \\ Y(t) = B * \alpha(t) \end{array} \right.$$

Then we can arrive at the acceleration equation of particle A at any moment as below:

$$a(t) = Y(t) * K'(t) = B * \alpha(t) * \{M + (\Delta M(t)/(m + \Delta m(t)))\}' \quad (\text{III-i-10})$$

The strong force particle A stands at any moment is:

$$F(t) = (m + \Delta m(t)) * Y(t) * K'(t) = (m + \Delta m(t)) * B * \alpha(t) * \{M + \Delta M(t)/(m + \Delta m(t))\}' \quad (\text{III-i-11})$$

The orientation of strong interaction depends on the negative or positive value of $\Delta M(t)$ and $\Delta m(t)$, the periodic variation of strong interaction is synchronous with periodic waveform variation of value of $\Delta M(t)$ and $\Delta m(t)$.

Weak Interaction

As I know very little about weak interaction at present, I am afraid; I'm not convenient to analyze weak interaction further now. But considered by Homogenous Cosmos Originated from Unique Genesis, force is but dynamic domino effect of instinctive PNT reciprocal equilibrium towards optimum PNT operation due to presence of PNT operational disturbance. The distinctive characters of certain kind of force but depend on what kind of inducement factor in PNT operation mechanism disturbed the PNT operation of matter system. In terms of weak interaction, if I do not misunderstand, weak interaction is too dynamic domino effect of instinctive PNT reciprocal equilibrium towards optimum PNT operation due to presence of PNT operational disturbance of some certain inducement factor in connatural PNT operation mechanism.

All in all, force is but dynamic domino effect of instinctive PNT reciprocal equilibrium towards optimum PNT operation due to presence of PNT operational disturbance. What causative physical disturbance in PNT operation mechanism affect PNT operational balance as to cause dynamic domino effect of instinctive PNT reciprocal equilibrium towards optimum PNT operation never impact the hypostasis. After all, one cosmos can only be dominated by unique coherent fundamental; two different fundaments dominated cosmos can never be one!

——Firstly written in Dec. 1995, literal revision was done in Dec.2004

Acknowledgement

This paper is originally a section extracted from monograph of Homogenous Cosmos Originated from Unique Genesis. For lightsome comprehension of the whole idea of Homogenous cosmos originated from unique genesis, you are welcome to turn to the whole monograph.

English version of the whole monograph: <http://www.docin.com/p1-1271731321.html>

Chinese version of the whole monograph: <http://www.docin.com/p1-1222290984.html>. (Old version)



Guosheng Yang

I am a Chinese man who was born in Dec. 1972, my native place is Zhenzhu town Wugang City, Hunan Province. I am a self-educated man, and I am just a common worker in a manufactory. I finished my monograph Homogenous Cosmos Originated from Unique Genesis in both Chinese and English after hours.

My email is marktin-yang@163.com. You are welcome to contact me for any necessity.

References

- [1] J. Foster, J.D.Nightingale. A Short Course in General Relativity, Peking, Springer-Verlag, 1998
- [2] Steven Frautschi. Beyond the Mechanical Universe, Peking, Peking University Publishing Company, 2000
- [3] Stephen Gasiorowicz, Quantum physics, Peking, Higher Education Press, 2006
- [4] Yang guosheng, Historical progress of science, Wuhan, hans publication organization 2013.
<http://www.hanspub.org/journal/Paperinformation.aspx?paperID=12407#abstract>
- [5] Fan J H, Romero G E, lin R.G 2001 Chin. Astron. Astrophysics. 25 282
- [6] Yang-hujia. Atom Physics, Peking, Higher Education Press, 1997
- [7] J. phys. A: Math. Theor. 48 (2015) 153001 <http://iopscience.iop.org/1751-8121/48/15/153001>
- [8] Yang guosheng, Anterior Half of Compendium of "Homogenous Cosmos Originated from Unique Genesis". AASCIT Journal of Physics. Vol. 1, No. 3, 2015, pp. 180-189.
- [9] Yang guosheng, Hind Half of Compendium of "Homogenous Cosmos Originated from Unique Genesis". AASCIT Journal of Physics. Vol. 1, No. 4, 2015, pp. 263-274.
- [10] Yang guosheng, Mathematical Definition of "Homogenous Cosmos Originated from Unique Genesis". AASCIT Journal of Physics. Vol. 1, No. 4, 2015, pp. 229-235.
- [11] Yang guosheng, Connotation Hypostatization of Homogenous Cosmos Originated from Unique Genesis. International Journal of Modern Physics and Application. Vol. 2, No. 4, 2015, pp. 28-37.
- [12] Yang guosheng, Freewheeling Logic Extension of Connotation Hypostatization of Homogenous Cosmos Originated from Unique Genesis Hind Half of Positive & Negative Transmutation Dynamics. American Journal of Science and Technology. Vol. 2, No. 5, 2015, pp. 202-214.