

# General Existence & Motion Patterns of Matter in Cosmos

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## Keywords

Waveform Motion, Time, Light-Speed, Relativity

**M**otion status and variation of all state variables of matter system radically depend on PNT performance of instinctive covariant equilibrium between  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$ . If  $d(M \rightarrow m) = d(M \leftarrow m) = \text{certain constant}$ , absolute spacetime momentum " $m \cdot V = d(M \leftarrow m) \cdot Y$ " of matter system keeps constant and matter system keeps inertial motion state. If  $d(M \rightarrow m) \neq d(M \leftarrow m)$ , as presence of PNT equilibrium instinct of matter system,  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$  of matter system will spontaneously equilibrate toward new balance of  $d(M \rightarrow m) = d(M \leftarrow m) = \text{new constant}$ . And as instinctive covariant equilibrium variation of  $d(M \leftarrow m)$ ,  $m$  and  $Y$ , absolute spacetime momentum " $m \cdot V = d(M \leftarrow m) \cdot Y \Leftrightarrow V = d(M \leftarrow m) \cdot Y / m$ " of matter system change accordingly, matter system arises acceleration in accordance with instinctive equilibrium between  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$ . If PNT performance of matter system arises continuous periodic circulation of  $d(M \rightarrow m) > d(M \leftarrow m)$  and  $d(M \rightarrow m) < d(M \leftarrow m)$ , then, matter system motions in waveform state thereby. Light-wave is typical waveform motion " $m \cdot C = d(M \leftarrow m) \cdot Y \Leftrightarrow C = d(M \leftarrow m) \cdot Y / m$ " in cosmos. As the related state variables of  $d(M \leftarrow m)$ ,  $m$  and  $Y$  usually are not constants in universal spacetime, it's impossible for light-speed  $C$  to be constant in so-called "vacuum".

## Motion is Dynamic Embodiment of PNT Action of Matter System

Cosmos is homogenous originated from unique genesis and matter is lineal homologic proliferation outgrowth of spacetime along cosmic demiurgic evolution of sequential homologic multiplication have determined the inherent presence of PNT correlation between spacetime and matter. Any cosmic matter, as long as it has its positive mass and exists in spacetime, it must keep PNT (" $M \leftrightarrow m$ ") correction with its consort matter field, which practically materializes the activity heritance from dynamic spacetime to matter. As a result, any cosmic matter must possess absolute spacetime momentum:  $P = m \cdot V = d(M \leftarrow m) \cdot Y$ , so that "motion" is inherent attribute of matter, matter motion radically depends on PNT performance of matter system, in a simple word, matter motion is just dynamic embodiment in emulational representation format of PNT action of matter system in spacetime.

If  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$  of PNT performance keep constant and satisfy  $d(M \rightarrow m) = d(M \leftarrow m)$ , then the absolute spacetime momentum of matter system " $m \cdot V = d(M \leftarrow m) \cdot Y$ " keeps constant, matter system exists in inertial state. If the couple covariant taches  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$  of PNT performance keep unequal as  $d(M \rightarrow m) \neq d(M \leftarrow m)$ , as congenital presence of PNT equilibrium instinct of matter system,  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$  will spontaneously equilibrate towards new balance, the absolute spacetime momentum of matter system " $m \cdot V = d(M \leftarrow m) \cdot Y$ " is inconstant, matter system exists in accelerating state thereby, all state variables of matter system vary followed performance of covariant equilibrium between  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$ , and quantitative change of all state variables of matter system are subject to PNT dynamics. We here try to illuminate general existence & motion patterns of matter is of course mainly to introduce the typical and connatural covariant equilibrium instances between  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$ .

In terms of macroscopical object, as the magnitudes of  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$  of matter system are rather substantial, as a result, their adjustable variation range is rather abundant therein, and it is very easy for matter system to keep PNT equilibrium for its abundant adjustable variation range. Resultantly, the existence & motion state of macroscopical objects seems very mechanical and inertial. However, in terms of microcosmic objects, the condition is much different, as very limited genic cumulation, their PNT performance is consequently very special, and their motion status is very distinctive accordingly. we have introduced rather a lot about inertial motion and general motion of macroscopical objects in spacetime in ahead sections, in order to consummate the topic of connatural existence & motion patterns of matter herein, we now emphatically introduce

the motion status of microcosmic objects as a supplemental item —— waveform motion in spacetime.

## Waveform Motion in the Nature

### Waveform Motion is Physical Hypostatization of Periodical Bidirectional Equilibrium Rhythm of PNT Action

Original generation of matter in cosmos began with separate elementary genic units, in the beginning; there are only disseminative elementary genic units in spacetime, as spontaneous occurrence of instinctive PNT reciprocal equilibrium towards optimum PNT operation due to well-rounded presence of “reciprocal PNT equilibrium idiosyncrasy + feasible space overall arrangement for PNT reciprocity”, rich and colorful reciprocal PNT combinations coming into being, ——genic couple, particles,...atom, molecule ... gas, liquid, solid, ...celestial bodies, galaxy etc. Throughout cosmic demiurgic evolution from single elementary genic units to macroscopical objects, celestial bodies, galaxy, even galaxy combinations, existence & motion of matter were always changing accordingly.

In terms of single separate elementary genic unit in spacetime, apparently, once it performs PNT in space field, as single elementary genic unit, it's completely impossible for it to perform both negative towards positive transmutation and positive towards negative transmutation synchronously and evenly, but to perform negative towards positive transmutation (or positive towards negative transmutation) first, then to perform positive towards negative transmutation (or negative towards positive transmutation), and just always goes its PNT performance like this round and round.

That's to say, as single elementary genic unit, its PNT performance has been clearly separated into two sequential transmutation taches of negative towards positive transmutation “ $M \leftarrow m$ ” and positive towards negative transmutation “ $M \rightarrow m$ ”. And on the other hand, no matter it's negative towards positive transmutation on-going or positive towards negative transmutation on-going, the single elementary genic unit exists in two different acceleration states, such two sequential acceleration processes perform on elementary genic unit in spacetime round and round, it forms typical waveform motion. The displacement the elementary genic unit passed during the course of finishing performance a couple PNT cycle of “ $M \rightarrow m$ ” and “ $M \leftarrow m$ ” is just the wavelength  $\lambda$ , the interval the elementary genic unit experienced a couple PNT cycle of “ $M \rightarrow m$ ” and “ $M \leftarrow m$ ” is just the wave period  $T$ .

In terms of matter system consisting of two, three, or several more elementary genic units, as its preliminary genic cumulation scale, its PNT performance is not the same as the single elementary genic unit ——PNT performance is completely dissociated into two PNT taches of “ $M \rightarrow m$ ” and “ $M \leftarrow m$ ”, whereas, as its genic cumulation scale is still very limited, the covariant PNT couple taches of “ $M \rightarrow m$ ” and “ $M \leftarrow m$ ” are still very difficult to keep even or equivalent synchronously; instead, the performance of the couple inverse PNT taches always arise  $d(M \rightarrow m) > d(M \leftarrow m)$  a little now, and arises  $d(M \rightarrow m) < d(M \leftarrow m)$  a little then without remarkable intermission, and the both processes continuously perform on the matter system round and round. And on the other hand, as the both processes of  $d(M \rightarrow m) > d(M \leftarrow m)$  and  $d(M \rightarrow m) < d(M \leftarrow m)$  imply two different acceleration processes of matter system, once the two acceleration processes of  $d(M \rightarrow m) > d(M \leftarrow m)$  and  $d(M \rightarrow m) < d(M \leftarrow m)$  perform on the matter system round and round continuously, it forms typical waveform motion too. Compared to motion pattern of single elementary genic unit, their dynamic configurations are almost the same.

Generally, the less elementary genic units the matter system contains, the more accessible for the matter system to exhibit its uneven PNT performance, and the easier for the matter system to expose its PNT rhythm disparity of intensity between  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$ . And at the same time, as the mass of the matter system is very tiny, the matter system is very convenient and sensitive to embody the PNT rhythm disparity of intensity between  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$  upon its motion status. As a result, it is more sensitive to embody waveform characters, but not convenient to maintain its particle characters. Instead, the more elementary genic units the matter system contains, the easier for the matter system to eliminate and gloss over the PNT rhythm disparity of intensity between  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$ , and more difficult for the matter system to exhibit or expose its uneven PNT performance. And at the same time, as the mass of the matter system is relatively large, the matter system is always inertial and not sensitive to embody the PNT rhythm disparity of intensity between  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$  upon its motion status. As a result, it is not sensitive to embody waveform characters, but accessible and sensitive to embody its particle characters on the contrary.

Thus it can be seen that the waveform characters are gradually consolidated along the tendency from macrocosm to microcosmos, on the contrary, particle characters are gradually weakened along the same tendency. Inversely, along the tendency from microcosmos to macrocosm, waveform characteristics of matter system are gradually weakened, while particle characteristics tend to be more and more remarkable and typical.

Generally, electromagnetic wave are just limited in the waveform motion of matter system made up of few elementary genic units, we usually call the waveform motion of matter system with remarkable convergent cumulation of elementary genic units “matter wave”.

## Mathematic Analysis of Waveform Motion

Now, we come to analyze and formulate waveform motion according to PNT dynamics.

As PNT performance of wave origin arises sequential and periodic acceleration cycle of  $d(M \rightarrow m) > d(M \leftarrow m)$  and  $d(M \rightarrow m) < d(M \leftarrow m)$ , for expedience, we come to analyze and formulate the both acceleration processes of the sequential PNT performance cycle of  $d(M \rightarrow m) > d(M \leftarrow m)$  and  $d(M \rightarrow m) < d(M \leftarrow m)$  separately as following:

First, the accelerating process of  $d(M \rightarrow m) > d(M \leftarrow m)$

Let's suppose the accelerating process of  $d(M \rightarrow m) > d(M \leftarrow m)$  lasts time  $t_1$ , and at any moment  $\tau$  within interval  $t_1$ , we denote the function correlation of variation of matter field mass  $M$  as  $\Delta M(\tau)$ , and at the same time, we denote the variation of positive mass  $m$  as  $\Delta m(\tau)$ , then the proper unbalanced matter inertial conservation equations change into:

$$\begin{cases} M - \Delta M(\tau) + m + \Delta m(\tau) = R(\tau) \\ (M - \Delta M(\tau)) / (m + \Delta m(\tau)) = K(\tau) \\ V(\tau) * (m + \Delta m(\tau)) = d(M \leftarrow m)(\tau) * Y(\tau) \\ L^3(\tau) * \alpha(\tau) = A * (m + \Delta m(\tau)) \\ Y(\tau) = B * \alpha(\tau) \end{cases} \Leftrightarrow \begin{cases} M - \Delta M(\tau) = K(\tau) * R(\tau) / (1 + K(\tau)) \\ m + \Delta m(\tau) = R(\tau) / (1 + K(\tau)) \\ V(\tau) = d(M \leftarrow m)(\tau) * Y(\tau) / (m + \Delta m(\tau)) \\ L^3(\tau) = A * (m + \Delta m(\tau)) / \alpha(\tau) \\ Y(\tau) = B * \alpha(\tau) \end{cases}$$

According to PNT dynamics, we can arrive at the acceleration equation of any moment  $\tau$  of matter system as below:

$$a(\tau) = Y(\tau) * K'(\tau) = B * \alpha(\tau) * [(M - \Delta M(\tau)) / (m + \Delta m(\tau))] \quad \text{..... (III-iii -1)}$$

The force that matter system stands at any moment  $\tau$  is as below:

$$F(\tau) = (m + \Delta m(\tau)) * a(\tau) = (m + \Delta m(\tau)) * B * \alpha(\tau) * [(M - \Delta M(\tau)) / (m + \Delta m(\tau))] \quad \text{..... (III-iii -2)}$$

The motion velocity of matter system at terminal moment of  $t_1$  is as below:

$$V = V_0 + \int_0^{t_1} a(\tau) d\tau = V_0 + \int_0^{t_1} B * \alpha(\tau) * [(M - \Delta M(\tau)) / (m + \Delta m(\tau))] d\tau \quad \text{..... (III-iii -3)}$$

The displacement of matter system in interval  $t_1$  is as below:

$$S_1 = V_0 * t_1 + \int_0^{t_1} a(\tau) d\tau d\tau = V_0 * t_1 + \int_0^{t_1} B * \alpha(\tau) * [(M - \Delta M(\tau)) / (m + \Delta m(\tau))] d\tau d\tau \quad \text{..... (III-iii -4)}$$

Second: the accelerating process of  $d(M \rightarrow m) < d(M \leftarrow m)$ .

Let's suppose the whole acceleration process of  $d(M \rightarrow m) < d(M \leftarrow m)$  lasts time  $t_2$ , at any moment  $\tau$  within interval  $t_2$ , we denote the variation of matter field mass  $M$  as  $\Delta M(\tau)$ , and denote the variation of matter mass  $m$  as  $\Delta m(\tau)$ . Then the proper unbalanced matter inertial conservation equations change into:

$$\begin{cases} M + \Delta M(\tau) + m - \Delta m(\tau) = R(\tau) \\ (M + \Delta M(\tau)) / (m - \Delta m(\tau)) = K(\tau) \\ V(\tau) * (m - \Delta m(\tau)) = d(M \leftarrow m)(\tau) * Y(\tau) \\ L^3(\tau) * \alpha(\tau) = A * (m - \Delta m(\tau)) \\ Y(\tau) = B * \alpha(\tau) \end{cases} \Leftrightarrow \begin{cases} M + \Delta M(\tau) = K(\tau) * R(\tau) / (1 + K(\tau)) \\ m - \Delta m(\tau) = R(\tau) / (1 + K(\tau)) \\ V(\tau) = d(M \leftarrow m)(\tau) * Y(\tau) / (m - \Delta m(\tau)) \\ L^3(\tau) = A * (m - \Delta m(\tau)) / \alpha(\tau) \\ Y(\tau) = B * \alpha(\tau) \end{cases}$$

According to PNT dynamics, we can arrive at the acceleration equation of matter system at any moment  $\tau$  as below:

$$a(\tau) = Y(\tau) * K'(\tau) = B * \alpha(\tau) * [(M + \Delta M(\tau)) / (m - \Delta m(\tau))] \quad \text{..... (III-iii-5)}$$

The force that matter system bears at any moment  $\tau$  is as below:

$$F(\tau) = (m - \Delta m(\tau)) * a(\tau) = (m - \Delta m(\tau)) * B * \alpha(\tau) * [(M + \Delta M(\tau)) / (m - \Delta m(\tau))] \quad \text{..... (III-iii-6)}$$

The motion speed of matter system at the terminal interval  $t_2$  is as below:

$$V = V_0 + \int_0^{t_2} a(\tau) d\tau = V_0 + \int_0^{t_2} B^* \alpha(\tau) * [(M + \Delta M(\tau)) / (m - \Delta m(\tau))]^* d\tau \quad \text{..... (III-iii-7)}$$

The displacement of the matter system in the interval  $t_2$  is as below:

$$S_2 = V_0 * t_2 + \int_0^{t_2} a(\tau) d\tau d\tau = V_0 * t_2 + \int_0^{t_2} B^* \alpha(\tau) * [(M + \Delta M(\tau)) / (m - \Delta m(\tau))]^* d\tau d\tau \quad \text{..... (III-iii-8)}$$

Integrated the first and second sequential acceleration phases above, we can arrive at the wave period as below:

$$T = t_1 + t_2$$

If it is regular waveform motion, then  $t_1 = t_2$ .

The proper wavelength of matter system is:

$$\lambda = (S_1 + S_2) \cos \theta \quad \text{..... (III-iii-9)}$$

(In the equation above,  $\theta$  denotes the angle between the vibration direction and the transference direction of the wave, if the wave is a rather regular one, then  $S_1 = S_2$ )

The transference speed of the wave is:

$$V = \lambda / T = (S_1 + S_2) \cos \theta / (t_1 + t_2) \quad \text{..... (III-iii-10)}$$

According to the analysis of waveform motion above, we can find that the most typical distinctive character of waveform motion is that PNT performance of matter system arises sequential periodic rhythm intensity disparity between  $d(M \rightarrow m)$  and  $d(M \leftarrow m)$ , and the integrative PNT performance of matter system consists of couple sequential processes of  $d(M \rightarrow m) > d(M \leftarrow m)$  and  $d(M \rightarrow m) < d(M \leftarrow m)$  round and round, and the sequential couple PNT taches imply two different sequential acceleration process round and round. Not only light, electromagnetic wave, matter wave are like this, but also mechanical waves are the same too. In another word, from the electromagnetic waves to matter waves, to mechanic waves, as their dynamic configurations are very similar, their natural motion situations are rather similar therein, and indeed, their representative dynamic equations are almost in the same format.

## About “Light” and “Light-Speed”

One basal postulate of Relativity is “light-speed is constant in vacuum”, while Homogenous Cosmos Originated from Unique Genesis thinks there is non-existence of so-called “vacuum” in cosmic homogeneity system but hylic space field with specific field strength which is virtually lineal coordinate homology ahead of matter, and it’s impossible for light-speed to be a constant in so-called “vacuum”. Towards the proper clarification, I’d like to highlight three issues as below:

**Since Cosmos is Throughout Homogenous Originated from Unique Genesis, Vacuum Can Only Be Variable Hylic Space Field as Lineal Coordinate Homology Ahead of Matter, and It’s Completely Impossible for Light-Speed to Be Constant in So-Called “Vacuum”**

The reason Homogenous Cosmos Originated from Unique Genesis can introduce general precondition of Homogenous cosmos originated from unique genesis postulate boldly and resolutely is that more and more cases are favorably illuminating the factuality day by day that any discretionary two particles in cosmos are mutually convertible  $\curvearrowright$  for they ultimately possess the common component in certain configurable hiberarchy. And under precondition of Homogenous cosmos originated from unique genesis, as long as we have no tangible evidence to exclude spacetime out of category of homogenous cosmos, we have to admit “spacetime” must be coordinate homology of matter as substantial as matter; and if cosmos just consists of “spacetime” and “matter”, none coordinate component else, along cosmic evolution of sequential homologic multiplication, spacetime and matter must be filiation which means either spacetime is father and matter is son, or matter is father and spacetime is son. Under general precondition of Homogenous cosmos originated from unique genesis postulate, since spacetime and matter are coordinate homologies with lineal filiation, this of course implies remarkable divarication between Relativity and Homogenous Cosmos Originated from Unique Genesis.

In the face of presence of so deadly divarication, Homogenous Cosmos Originated from Unique Genesis can only frankly declare herein, as long as cosmos is homogenous originated from unique genesis through and through, and we have no tangible

evidence to exclude spacetime out of category of homogenous cosmos, vacuum can never be vacuum itself but hylc space field as coordinate homology of matter with specific field strength, and it's completely impossible for light-speed in so-called "vacuum" to be constant therefore. Meanwhile, in terms of "Relativity", if Relativity is still ready to persist in itself, I am afraid, Relativity has to stand out to offer negative evidence to issues, —either cosmos is not homogenous originated from unique genesis or even if cosmos is homogenous originated from unique genesis, whereas, spacetime is something out of category of homogenous cosmos; otherwise, so-called vacuum must be variable hylc space field as coordinate homology of matter with specific field strength, and it's completely impossible for light-speed in so-called "vacuum" to be constant therefore. Oh, respectable Relativity, if you can not say "No" to the both challenge issues justly, you'd better deny yourself a little of your cock-a-hoop official mansions first, keep silent aside!

Because, if we have no tangible evidence to negate the general precondition of Homogenous cosmos originated from unique genesis postulate, under precondition that cosmos is completely homogenous originated from unique genesis, entire cosmic contents is but a cosmic-scale well-regulated homogeneity system through and through, any substantiality belong to category of cosmos is either cosmic genic origin  $i_0$  itself or radically originated from cosmic genic origin  $i_0$  along cosmic demiurgic evolution of sequential homologic multiplication. In terms of any substantiality in cosmos with a view to cosmic original demiurgic evolution of sequential homologic multiplication, as long as it's possible to be generated originally along cosmic original demiurgic sequence of homologic proliferation, it of course implies, all related active segments or process along cosmic original demiurgic sequence of homologic proliferation towards generation of the substantiality must be sequentially variable so as to form the successivity of progenitive cause and effect towards original generation of the very substantiality, otherwise there is no way for cosmic demiurgic evolution of sequential homologic multiplication to approach generation of the very substantiality, —there is none possibility for original generation of the very substantiality at all.

And at the same time, any substantiality radically originated from cosmic genic origin  $i_0$  still must be sequentially variable along cosmic original demiurgic sequence of homologic proliferation as well, otherwise, once cosmic demiurgic evolution of sequential homologic multiplication approaches proliferation of the very substantiality, there is no way for cosmic demiurgic evolution of sequential homologic multiplication to extend further, and the very substantiality consequently becomes the deadly obstacle of cosmic homologic multiplication and normal integrative circulative operation. If so, there are only possibility, either the substantiality end up cosmic demiurgic evolution of sequential homologic multiplication, or the substantiality is completely washed out of integrated demiurgic proliferation & circulative operation of cosmic homogeneity system for its incompliant invariability, whose existent effect relative to cosmos is completely equivalent as object out of cosmos. On the point of correlation between motion and variation, motion must inherently imply variation, any invariable object can never motion in its connatural way, there are non-existence without inherent motion as well as there are non-existence invariable in cosmos.

This is apparently not normal way of cosmic evolution who is always ready to orient perfection by the light of nature, and it of course implies it's not only impossible for nature to proliferate any invariable substantiality along cosmic demiurgic evolution of sequential homologic multiplication, but also it's impossible for cosmos to adulterate any invariable substantiality in its normal prolific & existent circle operation. As cosmic homologic substantiality, vacuum, light-speed in so-called vacuum can never be exceptions, —neither so-called "vacuum" as meaningless and monotone as Relativity defaulted in silence nor constant light-speed in vacuum as Relativity introduced as postulate in its theory.

### Light-Speed Definition in Relativity Is Virtually Value of " $m_c/m_p$ "

In accordance with definition of absolute spacetime momentum  $mV=d(M\leftarrow m)Y$ , when the "m" in equation denotes the mass of a photon, the "V" in equation just denotes the light-speed. That's to say, in accordance with definition of absolute spacetime momentum  $mV=d(M\leftarrow m)Y$ , light-speed C can still be expressed as below:

$$m * C = d(M \leftarrow m)Y \Leftrightarrow C = d(M \leftarrow m)Y/m$$

We can see, even if at any waveform phase, the value of  $d(M\leftarrow m)/m$  can keep some certain constant, (In fact, it's impossible), while in wide open spacetime, the magnitude of Y is usually variable, it at least implies, in different space fields with physical discrepancy, as the variation of time dynamic speed Y, light-speed can never keep constant.

For convenience to clarify our suspicion further, let's suppose there are a photon and a clock in the same space field. We define the motion situation of the clock as below:

$$m_c V_c = d(M \leftarrow m)Y \Leftrightarrow V_c = d(M \leftarrow m)Y/m_c$$

(In the equation  $m_c$  denotes the mass of the clock;  $V_c$  denotes the velocity of the clock)

And we define the motion situation of the photon as below:

$$m_p * C = d(M \leftarrow m)Y \Leftrightarrow C = d(M \leftarrow m)Y / m_p$$

(In the equation  $m_p$  denotes the mass of the photon;  $C$  denotes the velocity of the photon)

Of course, the displacement the photon transmitted in certain natural interval  $T$  is as below:

$$C * T = d(M \leftarrow m)Y * T / m_p$$

And “time” the clock practically recorded in certain natural interval  $T$  in spacetime is virtually just the displacement the clock performed by its connatural motion too, so that we can express the recorded time quantity as below:

$$V_c * T = d(M \leftarrow m)Y * T / m_c$$

According to our conventional definition of light-speed  $CT = S/t$ , apparently, in this equation,  $S$  is the displacement the photon transmitted in the certain interval  $T$ , and ‘ $t$ ’ is the displacement the clock performed in the same interval  $T$  too, just as below:

$$S = C * T = d(M \leftarrow m)Y * T / m_p \quad t = V_c * T = d(M \leftarrow m)Y * T / m_c$$

Substitute the two equations above into conventional definition equation  $CT = S/t$ , we then arrive at:

$$\begin{aligned} C_T &= C * T / V_c * T = C / V_c \\ &= [d(M \leftarrow m)Y / m_p] / [d(M \leftarrow m)Y / m_c] \\ &= m_c / m_p \end{aligned}$$

This of course indicate, during the course of our practical measure, if magnitude of  $m_c/m_p$  is variable, we will find light-speed variable, if not, we will find light-speed is constant.

However, if we just keep the both clock and photon connaturally motioning as themselves in generally similar spacetime condition, the magnitude of both  $m_c$  and  $m_p$  will strictly vary in accordance with law of identity due to common essentiality of matter in spacetime, as a result, the quotient of  $m_c/m_p$  always keep constant, we are straightforwardly led to conclusion that light-speed in vacuum is constant therefore. Even if there is tiny discrepancy in external spacetime conditions of clock and photon, as their uniform essentiality of matter which radically predestines the common dynamic fundamental of existence & motion, it's still accessible for us to be fucked that light-speed is constant in so-called vacuum.

Oh, my God, what's the confounded magic?

When Einstein came to define light-speed, he introduced a clock in his pocket, and the resultant measure is just the relativity domino effect of existence & motion of photon in reference of existence & motion of clock subject to the same dynamic fundamental of law of identity under the similar external condition of spacetime, ——Introducing existence & motion of clock under spacetime condition A as quantification scale to judge existence & motion of photon under similar external condition as spacetime condition A, as both existence & motion of clock and photon under generally similar spacetime condition A are connaturally subject to the same dynamic fundament of law of identity, the result is of course self-evident that we find the relativity domino effect of existence& motion of photon referred to existence & motion of clock under the similar spacetime condition A is constant, ——light-speed in vacuum is constant. The situation is similar as, a hen and a cock standing still in the same moving carriage, no matter what offbeat existence & motion of both hen and cock implemented with the moving carriage observed by man on the ground, if we regard the existence & motion of the hen as quantification benchmark to scale the existence & motion of the cock, our conclusion can only be that the speed of cock is constant.

It Seems There's Default Sense Behind Historical Conclusion Light-Speed Is Constant in Vacuum

1) The existence & motion of photon in vacuum is absolutely unconditional, as a result, light-speed in vacuum is unconditionally constant. What's more, our practical measure of relativity domino effect of existence & motion of photon in reference of existence & motion of clock subject to the same dynamic fundament of law of identity in the similar spacetime complimented the default sense indeed.

2) “Clock” is purely clock but not belonging to category of general existence & motion of matter in cosmos, as a result, no matter what kind of dynamic fundament existence & motion of matter in cosmos must be subject to, it has nothing to do with operation of clock for clock is substantiality out of category of existence& motion of matter in cosmos.

However, considered by Homogenous Cosmos Originated from Unique Genesis

A) Connatural operation of clock is but a special instance belonging to category of general existence& motion of matter in cosmos——standard motion sample for reference of comprehensive motion, the root cause clock can be regarded as “clock” by us



is just because it's special substantiality with distinctive existence & motion which substantiated the most connatural and general existence & motion in the nature. In another word, "clock" is but special substantiality of existence & motion which is regarded as "benchmark" of existence & motion to scale comprehensive existence & motion speed in the nature, the root cause we regard it as benchmark existence & motion specimen to scale comprehensive existence & motion speed in the nature is that the distinctive esse of existence & motion of clock can substantiate the most general existence & motion straightforwardly steadily and virginally (which means there is not substantial possibilities for it to be intervened). In the nature, the substantiality that can straightforwardly steadily and virginally substantiate the most general existence & motion in the nature best usually possesses of the most substantial qualification to take role of clock.

B) As "benchmark" of existence & motion to scale comprehensive existence & motion speed in the nature, the existence & motion of clock must be subject to the general dynamic fundamental in the nature as well, which of course implies the connatural existence & motion of clock is subject to the definition equation of absolute spacetime momentum too:

$$m_c V_c = d(M \leftarrow m)Y \Leftrightarrow V_c = d(M \leftarrow m)Y/m_c$$

But comparably, as substantiality of absolute spacetime momentum, dynamic substantiation of clock is the most straightforward, steady and virgin one, this is just the most substantial qualification of clock to take role of "benchmark existence & motion specimen" to scale comprehensive existence & motion speed of matter in the nature.

C) Of course, existence & motion of photon in so-called vacuum is subject to definition equation of absolute spacetime momentum too.

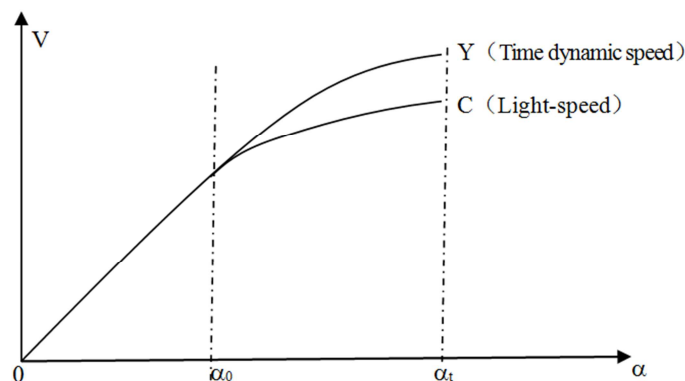
$$m_p * C = d(M \leftarrow m)Y \Leftrightarrow C = d(M \leftarrow m)Y/m_p$$

Since there is none constant vacuum, it of course implies time dynamic speed  $Y$  of so-called inconstant vacuum is proportionally variable, as a result, light-speed  $C = d(M \leftarrow m)Y/m_p$  must be inconstant. That's to say, the existence & motion of photon in so-called vacuum is not unconditional, if the related active external conditions vary, light-speed must vary accordingly. And virtually, time dynamic speed of spacetime is one of the active external conditions of existence & motion of photon in spacetime, since time dynamic speed of so-called vacuum is not constant, it's of course impossible for light-speed in so-called vacuum to be constant.

Whereas, the existence & motion of photon in so-called vacuum is almost the same type of clock, which is the most straightforward, steady and virgin dynamic substantiation of general existence & motion in the nature, as a result, the relativity domino effect of existence & motion of photon in reference of existence & motion of clock is substantively similar as that a hen and a cock standing still in the same moving carriage, no matter what offbeat existence & motion of both hen and cock implemented with the moving carriage observed by man on the ground, if we regard the existence & motion of the hen as quantification benchmark to scale the existence & motion of the cock, our conclusion can only be that the speed of cock is constant.

All in all, considered by Homogenous Cosmos Originated from Unique Genesis, there is no possibility for cosmic demiurgic evolution of sequential homologic multiplication to proliferate any invariable substantiality through and through, it's completely impossible for cosmos to adulterate any incompliant invariable substantiality throughout the integrative homologic multiplication and circulative operation. As all wool and a yard wide substantiality in homogenous cosmos, there is no way for vacuum and light-speed to be exceptions.

The comparable variation situation of light-speed and time dynamic speed can be generally illustrated as below:



**Illustration 1.** Comparable variation situation of light-speed and time dynamic speed.

(In the illustration above,  $\alpha$  denotes the space field strength,  $V$  denotes the magnitude of speed,  $C$  denotes light-speed,  $\alpha_0$  denotes the critical space field strength when space field strength is adequate to generate elementary genic units in space field,  $\alpha_t$  denotes space field strength of cosmic “today”.)

Of course, light-speed is not the utmost speed in cosmos too.

### **Discrepancy Between Traditionary Sciences and Homogenous Cosmos Originated from Unique Genesis is Historical Inevitability of Scientific Knowledge Multiplication Along Progressive Succession of Science**

As remarkable discrepancy of thought kindling and logic multiplication<sup>①</sup>, Homogenous Cosmos Originated from Unique Genesis and traditionary sciences must be inevitably different, and it's almost impossible for them to be identical in coherent logic extension.

Illation exchange from “any discretionary two particles in cosmos are mutually convertible” to “Homogenous cosmos originated from unique genesis postulate” and logic extension from “Homogenous cosmos originated from unique genesis postulate” to “universal existence & motion of matter in cosmos” as coherent linear logic system crown all traditionary sciences 100 over 100, none traditionary sciences about existence & motion of matter in cosmos is out of logic extension of “Homogenous Cosmos Originated from Unique Genesis”. Whereas, on the other hand, as coherent linear logic system, universal existence & motion of matter in cosmos extended from “Homogenous cosmos originated from unique genesis postulate” is so different from historical travelogues of traditionary sciences about rich and colorful specimen like omnifarious smallwares in a basket.

This is not my personal morbid fancy but external logic extension by freewheeling and makes things self-explanatory. Before coming up against such illation divarications and illogicalities, I genuinely had no intention to be dead against any ready-made thesis or issue of traditionary sciences. My effort is but to sublimate the newly highlighted factuality of “any discretionary two particles in cosmos are mutually convertible” into “Homogenous cosmos originated from unique genesis postulate”, and outspreaded the logic connotation of “Homogenous cosmos originated from unique genesis postulate” with auxiliary rational support of another hypothesis that cosmos just consists of spacetime and matter, no more coordinate component else. Whereas, once I hypostatized the idea of homogenous cosmos originated from unique genesis to comprehensive hypostatic existence & motion in cosmos, I suddenly found the illation divarications and illogicalities compared to tradition, which made me jittery and no way to shy away.

If Einstein were still alive, once he finished reading my monograph of Homogenous Cosmos Originated from Unique Genesis, he must madly rap the table and stand up from his chair with huffish astonishment, “Hi, stupid fellow, what's your nonsense!? Vacuum is space field with specific strength? It's impossible for light-speed in vacuum to be constant!?”

I would like to respond his astonishment with cap in hand: “sir, it's not my personal eisegesis, I have none intention to violate your authority. And virtually, when the idea primarily came into being, I was but a virginal senior high school student, I had no intention to aim at any ready-made notion or thesis. However, when I involved in the factuality that any discretionary two particles in cosmos are mutually convertible by chance; I thought cosmos must be homogenous originated from unique genesis through and through and entire cosmic contents should be a grand homogeneity system. And as long as we have no reasons to exclude spacetime out of category of cosmos, spacetime must belong to the category of cosmic homogeneity system too, so spacetime must be coordinate homology of matter in cosmos as substantial as matter, and if cosmos just consists of spacetime and matter, none coordinate components else, along cosmic demiurgic evolution of sequential homologic multiplication, spacetime and matter must be homologic filiation. As excluded the alternative filiation possibility between spacetime and matter that matter is father and spacetime is son, I arrived at the lineal homologic filiation between spacetime and matter, PNT action between spacetime and matter is self-evident. Successively, as introduction of Instinctive PNT equilibrium postulate, existence & motion of matter in cosmos betrays itself and PNT dynamics is formulated accordingly. Thus, Homogenous Cosmos Originated from Unique Genesis primarily hypostatized idea of homogenous cosmos originated from unique genesis into universal existence & motion of matter in cosmos thereby.

However, I was then astonished to find the pestilent illogicality between idea of homogenous cosmos originated from unique

<sup>①</sup>Note: The thought kindling of Homogenous Cosmos Originated from Unique Genesis is “any discretionary two particles in cosmos are mutually convertible”, in logic multiplication, Homogenous Cosmos Originated from Unique Genesis directly encash the factuality of “any discretionary two particles in cosmos are mutually convertible” into “Homogenous cosmos originated from unique genesis postulate”, then deduce universal existence & motion of matter as freewheeling logic extension of connotation hypostatization of Homogenous cosmos originated from unique genesis postulate with supplementation of two 0.5 grade auxiliary hypothesis of Spacetime-matter fully embodying cosmos postulate and Instinctive PNT equilibrium postulate.



genesis and your famous postulate of light-speed is constant in vacuum. Considered by Homogenous Cosmos Originated from Unique Genesis, there are neither so-called “vacuum” nor “invariable objects” in cosmos, after all, there is completely no possibility for cosmic demiurgic evolution of sequential homologous multiplication to proliferate any invariable substantiality, and it’s almost impossible for cosmos to adulterate any invariable substantiality in its integrative dynamic circulative operation.

As hypostatic cosmic endosome, both vacuum and light-speed must belong to category of cosmic homogeneity system, any substantiality in cosmic homogeneity system must be convertible along cosmic inherent demiurgic proliferation clue leastways, this of course implies any substantiality is compliantly convertible in cosmos throughout. And just because of this, entire cosmos are comprehensively related.

And indeed, when I primarily slid into the issue, I knew nothing about Relativity. And virtually, the naissance if idea of homogenous cosmos originated from unique genesis has nothing to do with Relativity, no more successive logic multiplication of Homogenous cosmos originated from unique genesis postulate. Whether vacuum is substantial vacuum, whether light-speed is constant in vacuum are substantively questions in another world, Homogenous Cosmos Originated from Unique Genesis but minds whether cosmos is really homogenous originated from unique genesis, if cosmos is really homogenous originated from unique genesis, what homogenous existence & motion of matter in cosmos can be as a living organic integrity. Of course, vacuum is space field and light-speed must be variable are consequence along logic extension of Homogenous cosmos originated from unique genesis postulate.

Otherwise, would you please try to think whether there are still possibilities for cosmos to be compound originated from multi-genesis or unintelligible originated from none-genesis? Or even if cosmos is just homogenous originated from unique genesis, are there still some possibilities to educe different conclusions even your accordant conclusions?

Of course, at any rate, we all should admit, under the historical cognition groundwork of early 20th century, Relativity could break loose of temporal conventionality and unify energy and mass into coherence was really revolutionary pioneering work and remarkable milestone of science progress of 20th century. No matter how far away it still is from pure verity of nature, it’s substantively a progressive step towards natural authenticity of that age. But do you insist it’s just the ultimate milestone of science progress? And even, any further science progress can never overstep your ready-made prediction!?

Not only divarications and contradictions between Relativity and Homogenous Cosmos Originated from Unique Genesis are like this, all divarications and contradictions between traditionary physics and Homogenous Cosmos Originated from Unique Genesis are just the same. In fact, as both low-down man and typical traitor, I was so frangible to counterwork against so altisonant science aristocracy with full jurisdiction of science free press admittance in hand. In order to avoid the agony caused by mortal illogicalities between authoritative conformist and Joe Blow nonconformist, I was always ready to shy away this mortal way. Whereas, I was so sad that the impersonal logics completely made it no way for me to, and as a result, I am still bitterly struggling under esoteric control of temporal science aristocracy till today.

Virtually, besides their pioneering exploration flame under the very historical background and some pioneer talent involved in, the even more important causes for Relativity and Quantum theory to accomplish and consolidate their modern popularity were but history had favored them colorful stage, history had pawned them substantial ante and even favored them jurisdiction of free press admittance of science in the coming days (For you see, with full jurisdiction of free press admittance in hands, they of course had substantial facility to predominate the coming knowledge metabolism campaign at their pleasure, what should be eulogized and what should be restrained were all under their will).

And now, history has gone so far away from it, can they still offer more wonderful repertoire for this stage? How much ante can still be pawned on them? How much authoritative benefit can be harvested upon their possession of full jurisdiction of free press admittance?

I don’t know, you may know it well, you don’t know, he may know it well, he doesn’t know, the God may know it well. 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. As freewheeling historical cognition succession extended from newly highlighted factuality that any discretionary two particles in cosmos are mutually convertible, Homogenous Cosmos Originated from Unique Genesis successively implemented two pioneering exploitation actions:

The first, it sublimated the newly highlighted factuality any discretionary two particles in cosmos are mutually convertible

into Homogenous cosmos originated from unique genesis postulate.

The second, with supplementation of two 0.5 grade auxiliary postulates, it outspreaded and hypostatized the logic connotation of Homogenous cosmos originated from unique genesis postulate.

For lightsome comprehension of the whole idea of Homogenous cosmos originated from unique genesis and some related contents in the paper, you are welcome to turn to the whole monograph.

English version of the whole monograph: <http://www.docin.com/p1-1197348288.html>

Chinese version of the whole monograph: <http://www.docin.com/p1-1197348289.html> ■



**Guosheng yang**

I am author of Homogenous Cosmos Originated from Unique Genesis. I am a Chinese Joe Blow, I was born in Dec. 1972, and I now work at a Manufactory 8-11 hours per day for subsistence, after hours, I work at my New World Manufactory a little now and a little then.  
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