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Research Article

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THEORY OF REAL RELATIVITY AND $E=mc^2$ IS NOT CORRECT.

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1. Abstract :-

This is a new theory of relativity, which we call the theory of real relativity. The total energy of a system is made up of the inherent energy and the external energy. Each of these energies is associated with its own coefficient. These coefficients are distributed throughout the universe in space and time, providing symmetry and stability to every visible, invisible, living, and non-living, conscious and unconscious of the universe. Hence the inherent energy coefficient (G_1) and external energy coefficient (G_2) are responsible for the change of universe and nature.

Keywords

Relativity, Inertial and Non-inertial frame, Speed of light, Wavelength, Fundamental Particle, Inherent Energy and External Energy

2. Introduction:-

2.1 Importance of the subject of study-

After a long time, in the universe light has emerged in space and time. That is, even before the origin of light, the universe was moving at its own pace in the dark. The inherent coefficients and external coefficients also existed before the rise of creation.

2.2 Goal of the study its theory-

Therefore, the inherent coefficients and external coefficients are very important to use them to reach more ultimate truth.

When we consider energy, the whole energy is defined as

$$E_{(\text{Whole Energy})} = E_{(\text{Inherent Energy})} + E_{(\text{External Energy})} \dots\dots\dots(1)$$

$E_{\text{Inherent Energy}}$:

The inherent energy of a particle (or matter) is related to its internal nature. This energy does not manifest itself until there is external influence acting on the system. Very little or very large changes

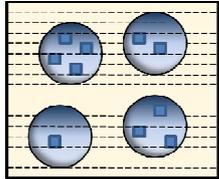
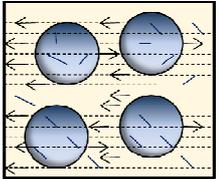
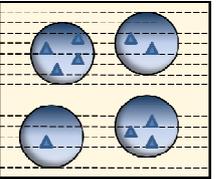
occur in the nature of the inherent energy. The inherent energy may undergo micro-changes or large-scale changes. The influence of inherent energy is greater than that the external energy. Thus any micro (or very smallest) changes or large-scale changes in a system are caused by its inherent energy. Thus the coefficient (G_1) for the inherent energy can be neglected for micro-changes changes, but it has to be taken into account for large changes occurring in the system.

$E_{\text{External Energy}}$:

External energy is the energy surrounding the particle (or matter) and due to which changes in the particle of matter occur. The external energy for any system can exist in the form of wave, heat, friction, pressure, gravity, or in any physical form.

The internal structure of a particle is determined by its inherent energy coefficient (G_1), whereas the shape of the particle is determined by its external energy coefficient (G_2).

From equation – 1 it is clear that when any mass changes into energy then along with itself it also affects another neighboring particle. The original particle of matter gets converted into a new particle or matter after a part of its mass is converted into energy¹⁷. This formalism is shown in **Figure – 1 Behaviors of energies and coefficients.**

The following figure shows the Formula-1 process		
Before	Action and reaction	After
		
<ul style="list-style-type: none"> -The old state of a particle G_1 of the old part - preliminary stage - G_2 of the outdoor environment - (Considered ${}^1\text{H}_1$) 	<ul style="list-style-type: none"> -Distribution of G_1 coefficients and coincidence with G_2 of external environment - Particle moving at the speed of light - Energy is in its entirety in this region. - $E_w = E_i + E_e$ - This part represents the deformed area of the mass. - (Let ${}^1\text{H}_1 \rightarrow {}^2\text{He}_4$) 	<ul style="list-style-type: none"> - Creating new particles G_1 of new particle - New particles come into existence - G_2 of the outdoor environment - (Let ${}^2\text{He}_4$)

3 THEORY OF REAL RELATIVITY:-

The theory of real relativity has the following postulates:

(a) The laws of physical phenomena are the same when stated in terms of two systems of reference in uniform translational motion relative to each other¹⁸.

(b) The velocity of light in a vacuum is a constant, independent not only of the direction of propagation but also of the relative velocity of the source and the observer¹⁸.

(c) The effect of inherent coefficient (G_1) and external coefficient (G_2) are always present in space and time¹⁷.

4. Derivation for equivalence of mass and energy^{4,9,21,22} :-

I derived the new real energy mass relation using the new developed concept of inherent coefficient (G_1) and external coefficient (G_2) because these are always present in space and time¹⁷. Hence required relation is as follows;

$$E_{Whole\ Energy} = G_1 mc^2 + \frac{1}{G_2} \left[\left\{ 1 - \left(\frac{3}{2} \right) G_2 \right\} mv_\mu^2 - \{ 2 - 4G_2 \} m v v_\mu \right] \dots\dots\dots(2)$$

Equation – 2 is a real energy-mass relation, where G_1 and G_2 are the inherent energy coefficient and external energy coefficient respectively. This real energy-mass relation is concerned with the following points –

- a. It is a maker of living and non-living things.
- b. It is the creator of nature and the universe.
- c. It is a helper of any fundamental particle.
- d. It is a demonstrator of the present, past, and future.
- e. It defines the real and imaginary possibility of fundamental particles.

5. Proof of this theory:-

5.1 Proving the truth by graphical method:

It can be seen from the graph in **Figure – 2 (Shows energy difference between both theories)** that the real energy mass equation is more accurate than Einstein’s energy mass equation. This graph clearly shows the difference between both the above theories, which work constantly in every event of the universe.

It is obviously proved by the graphical method that the real relation between mass and energy is $E_{Whole\ Energy} = G_1 mc^2 + \frac{1}{G_2} \left[\left\{ 1 - \left(\frac{3}{2} \right) G_2 \right\} mv_\mu^2 - \{ 2 - 4G_2 \} m v v_\mu \right]$ which is true, when G_1 is neglected (in case of extremely small value). All the situation or events that take (occur) in the present or those will take place in future do so or will do so only in accordance with the above equation. Hence, the value of $E_{W.E.}$ is greater than Einstein’s energy according to table – 3..

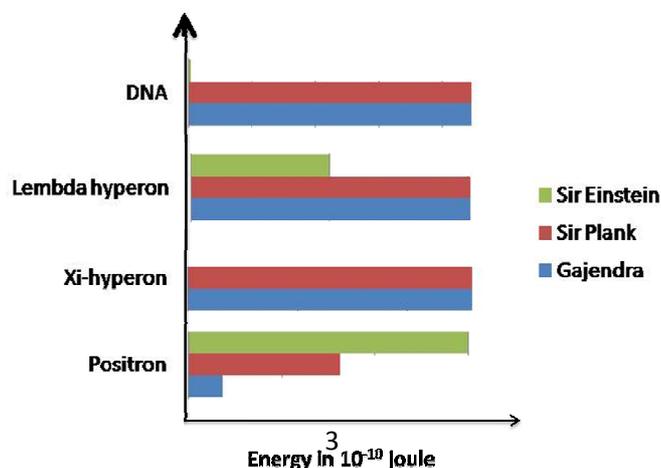


Figure -2 Graph Shows energy difference between both theories

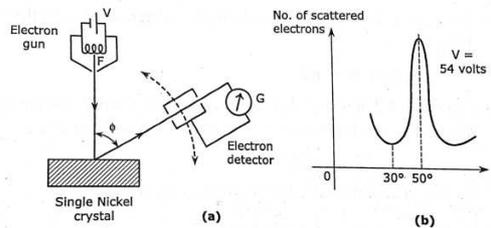
Energy in 10^{-10} joule

	Gajendra	Sir Plank	Sir Einstein
Positron	0.0008164	0.0008176	0.000819
Xi-hyperon	2.67523	2.67523	2.6751
Lambda hyperon	1.787101	1.787101	1.78705
DNA	1806.2727	1806.2727	1784.216

Here it is clear that the graph of positron, xi - Hyperion, lambda Hyperion, DNA and energy of respiration is shown in the diagram. The graph of the Plank energy in the image does not match the mass energy equation of Einstein's at all, while it is being matched with Gajendra's Mass Energy. Hence Gajendra's energy mass relation is more accurate than Einstein's energy mass relation. So the theory of real relativity is more correct. Here data are taken from table - 3.

5.2 According to the previous example:

In the Devission – Germer Experiment^{4,5} for an accelerating voltage of 54 volts and angle ($\varphi = 50^\circ$), the nickel crystal behaves as a grating in which the inter – planer spacing is $d_{111} = 0.911A^0$ and the wavelength $\lambda_{D.G.} = 1.649A^0$. The De – Broglie wavelength^{4,5} of electron is $\lambda_{D.B.} = 1.67A^0$. Therefore $\lambda = \lambda_{D.B.} - \lambda_{D.G.}$ or $\lambda = 1.67A^0 - 1.649A^0 \Rightarrow \lambda = 0.021A^0$, then energy according to this wavelength is $9.4614285 \times 10^{-14}$ joule.



Of course here, there is a considerable difference in the wavelength obtained in the De-Broglie wavelength and in the Devission – Germer experiment. While one wavelength was known for the particles and the other wavelength was known for the waves. Clearly, that difference should not have taken place. The need for a Theory of Real Relativity was felt to bridge this gap. According to which the new wavelength is obtained. It matches with this difference. Therefore, it is clear that the real energy mass relation obtained in the Theory of Real Relativity is very much correct and necessary.

From the theory of real relativity, precisely the same value of wavelength has been obtained for the difference in between the Devission – Germer and De – Broglie wavelength. This results for this wavelength for electrons along with those for other particle (or matter) is shown in table – 1 .

5.3 Proving through dimensionality:-

The whole energy is given in equation – 2. Thus

$$E_{Whole \ Energy} = G_1 mc^2 + \frac{1}{G_2} \left[\left\{ 1 - \left(\frac{3}{2} \right) G_2 \right\} m v_\mu^2 - \{ 2 - 4G_2 \} m v v_\mu \right]$$

Where, G_1 and G_2 are the inherent energy coefficient and external energy coefficient respectively.

Now dimensions of LHS = $[ML^2T^{-2}]$

And dimensions of RHS = $G_1 mc^2 + \frac{1}{G_2} \left[\left\{ 1 - \left(\frac{3}{2} \right) G_2 \right\} mv_\mu^2 - \{ 2 - 4G_2 \} m v v_\mu \right]$

Now removing the all coefficients from RHS, we get, RHS = $[ML^2T^{-2}]$

Hence LHS = RHS (Therefore above relation is correct)

6. Application :-

6.1 proof and explanation of De-Broglie wavelength:

We know that the equation for the dual nature of light, which is derived from equation - 2. It is as follows -

$$\frac{hc}{\lambda} = [p^2 c^2 + p_\mu^2 c^2 - 2pp_\mu c^2 + m_0^2 c^4]^{1/2} + \frac{1}{G_2} \left[\left\{ 1 - \left(\frac{3}{2} \right) G_2 \right\} mv_\mu^2 - \{ 2 - 4G_2 \} m v v_\mu \right] \dots (3)$$

When the effect of external forces is very small, then put $p_\mu = 0$, $v_\mu = 0$ and rest mass $m_0 = 0$, we have

$$\frac{h}{\lambda} = p \dots \dots \dots (4)$$

Hence our theory leads to the De - Broglie equation for wavelength^{2, 4, 5, 9}. When the probability of the momentum becomes small then the probability for the wavelength becomes high and light starts acting like a wave.

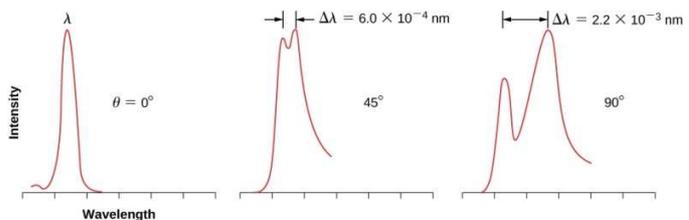
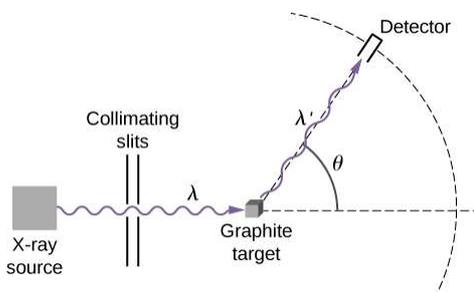
6.2 Proof and explanation of Compton Effect:

According to Prof. A.H. Compton^{1,5,9} (1921) the phenomenon of scattering is due to an elastic collision between two particle, the photon of incident radiation and an electron, which gets scattered. To explain the shift in wavelengths measured in the experiment, Compton used Einstein's idea of light as a particle.

The relation for the Compton shift: $\lambda_t - \lambda = \frac{h}{m_0 c} (1 - \cos \theta)$

The factor $\frac{h}{m_0 c}$ is called the Compton wavelength of the electron:

$$\lambda_c = \frac{h}{m_0 c} = 0.00243 \text{ \AA m}$$



We observe following energy and frequency relation in real relativity theory at wavelength $\lambda = 0.02426A^0$.

$$E^2 = p^2c^2 + m_0^2c^4 \dots\dots\dots (5)$$

It is clear that equation - 5 is derived from equation - 3. It also shows the Compton Effect. Therefore the real energy mass relation accurately expresses the principle of real relativity.

7. Behavior¹⁷ of coefficients G₁ and G₂:-

It is clear that the coefficients G₁ and G₂ determine the characteristics of the material produced. These coefficients represent the mathematical, physical, spiritual, philosophical, infinite immortality properties, the state of God-religion, the origin of creation, the characteristic of the universe, the reality of variable things, the nature of living beings and non-living beings. It is in motion from billions of years before the Big Bang.

The coefficient of inherent energy (G₁) is responsible for any changes in the microstructure of the universe and nature. From numerical data, we have found that for small changes in which the release or absorption of energy in a minute the coefficient for inherent energy (G₁) satisfies the condition $-1/2 < G_1 < 1/2$. The coefficient of external energy (G₂), whose main function is to provide the existence of matter and to make the universe homogeneous, has the value $1 < G_2 < 1.001$. on the other hand, for all the major changes in the universe (e.g. Big-Bang), the value of G₁ takes the value $1 \times 10^3 < G_1 < 1 \times 10^{30}$. In this range of G₁, occur all the major changes of the universe. The value of G₂, however, lies between $1 < G_2 < 1.001$, since it works in the same way as in the earlier case.

8. Prediction with tables :-

8.1 Theory of real relativity gives the following results: -

TABLE – 1

Fundamental particle	Mass ^{4,9} in kg	Wavelength in $\overset{0}{A}$	Frequency in Hz	Value of 'G ₂ '	Energy in joule
Σ^0 hyperons	2334 m _e	0.02015	1.48×10^{20}	1.0001011	9.86×10^{-14}
P or n	1.67×10^{-27}	0.02129	....	1.0000832	9.33×10^{-14}
K^0 hyperons	970 m _e	0.02243	1.33×10^{20}	1.0000988	8.19011×10^{-14}
Zeeman effect	...	0.02830	1.17×10^{20}	1.00001	7.021×10^{-14}

Compton effect ^{1,5,9}	.....	0.02426	....	1.000029	8.82×10^{-14}
e ⁻ electron	9.1×10^{-31}	0.02453	1.222×10^{20}	1.000032	8.102×10^{-14}
Nickel ^{1,4,5,9}	....	0.02567	1.23×10^{20}	1.000021	7.742×10^{-14}
π^0 meson	264 m _e	0.02657	1.06×10^{20}	1.0000929	3.025×10^{-14}

Prediction – 1: Table – 1 shows data calculated using our theory. The wavelength values obtained for Compton Effect, Zeeman Effect, and Nickel match with experimentally obtained data, whereas for other particles no experimental results were available. Therefore the above data of wavelength and frequency for such particles are predication of the theory of real relativity.

8.2 SOME OTHER EXAMPLES RELATED TO OTHER FIELD: -

TABLE – 2

Applications	G ₁	G ₂	E _{Whole Energy} in joule	Result
Oxygen gas (O ₂)	4.3836138×10^{-6}	<u>1.000000033</u>	-1.1196×10^{-14}	G ₁ <G ₂
π^+ meson ^{4,5}	0.270072288	<u>1.000000033</u>	<u>1.21212×10^{-14}</u>	G ₁ <G ₂
Replication of D.N.A. ¹⁹	$-1.5976821 \times 10^{-12}$	<u>1</u>	7.086×10^{-14}	G ₁ <G ₂
Hydrogen (H ₂) ^{4,5}	1.9092327×10^{-3}	<u>1.000201296</u>	2.727×10^{-13}	G ₁ <G ₂
Fusion reaction of sun ⁴	4.2262777×10^{-4}	<u>1.000102098</u>	3.2×10^{-13}	G ₁ <G ₂
Photosynthesis (Zoology)	-0.347622048	<u>1</u>	-1.44288×10^{-8}	G ₁ <G ₂

Helium ⁴ (₂ He ⁴)	4.011879 × 10 ⁻³	<u>1</u>	2.773933 × 10 ⁻¹²	G ₁ <G ₂
Radioactivity (₉₂ U ²³⁵)	9.4903149 × 10 ⁻⁴	<u>1.000000015</u>	3.321808 × 10 ⁻¹¹	G ₁ <G ₂
Benzene C ₆ H ₆	-2.1775054 × 10 ⁻⁹	<u>1</u>	0	G ₁ <G ₂
Water (H₂O)	0	<u>1.000000002</u>	0	G₁<G₂
Respiration (Botany)	7.08758 × 10 ¹³	<u>1</u>	2813 × 10 ⁶	G ₁ >G ₂

Prediction - 2: (a) The theory of real relativity predicts mason particles, replication of DNA, hydrogen gas, fusion reaction of the Sun, energy values for oxygen gas. As given in Table - 2.

(b) If the data of 'G', g, c and m are calculated after every 1000 years, 10000 years or 100000 years. We will clearly see that they do not remain stable even after years.

Note - The baseline and italic data of the table - 2 are proofs for this theory.

8.3 **TABLE – 3** we see here that the energy-mass equation has been given by various scientists. Values of all energies are in joule.

S.No.	1	2	3	4	5	6	7	8	9	10
Name of Scientist	Sir Max Planck (1907)	Sir Albert Einstein (1905)	S. Tolver Prenton (1875)	Jules Henri Poincare (1854)	Olinto De Pretto (1904)	F. Hansenohrl (1904)	F. Hansenohrl (improvement)	Ajay Sharma (2003)	Hambusch, Thierus, Bakhoum and Jyanti Prashad	Myself (Gajendra Shankhwar)
Positron	8.176378 × 10 ⁻¹⁴	8.19 × 10 ⁻¹⁴	8.19 × 10 ⁻¹⁴	8.19 × 10 ⁻¹⁴	8.19 × 10 ⁻¹⁴	2.184 × 10 ⁻¹³	1.092 × 10 ⁻¹⁴	8.19 × 10 ⁻¹⁴	8.19 × 10 ⁻¹⁴	8.1637033 × 10 ⁻¹⁴
Xi-hyperons	2.67523 × 10 ⁻¹⁰	2.6751 × 10 ⁻¹⁰	2.67510 × 10 ⁻¹⁰	2.6751 × 10 ⁻¹⁰	2.6751 × 10 ⁻¹⁰	7.133 × 10 ⁻¹⁰	3.566 × 10 ⁻¹⁰	2.67519 × 10 ⁻¹⁰	2.675199 × 10 ⁻¹⁰	2.67523 × 10 ⁻¹⁰
Lambda Hyperons	1.787101 × 10 ⁻¹⁰	1.787058 × 10 ⁻¹⁰	1.787058 × 10^{-10}	1.787058 × 10^{-10}	1.787058 × 10^{-10}	4.765488 × 10 ⁻¹⁰	2.38274 × 10 ⁻¹⁰	1.787058 × 10 ⁻¹⁰	1.787058 × 10 ⁻¹⁰	1.787101 × 10 ⁻¹⁰
Neutron	1.5053413 × 10^{-10}	1.5053413 × 10^{-10}	1.5053413 × 10^{-10}	1.5053413 × 10^{-10}	1.5053413 × 10 ⁻¹⁰	4.01419 × 10 ⁻¹⁰	2.00709 × 10 ⁻¹⁰	1.505341 × 10 ⁻¹⁰	1.505341 × 10 ⁻¹⁰	1.5053413 × 10 ⁻¹⁰

DNA	1.8062727×10^{-7}	1.784216×10^{-7}	1.7842165×10^{-7}	1.7842165×10^{-7}	1.784216×10^{-7}	4.7579106×10^{-7}	2.34388×10^{-7}	1.7842165×10^{-7}	1.784216×10^{-7}	1.8062727×10^{-7}
Respiration	2.6916202×10^{-8}	2.6916200×10^{-8}	2.6916200×10^{-8}	2.6916200×10^{-8}	2.6916200×10^{-8}	3.5888266×10^{-8}	2.6916200×10^{-8}	2.6916200×10^{-8}	2.6916200×10^{-8}	2.6916202×10^{-8}

Sir Planck has given the equation of wave energy, whereas the light particle is considered by De Broglie to be of both wave and particle nature. Therefore, the values of the energies of all scientists should match the wave energy of the planks, while they do not meet. Even Einstein's energy equation does not match the Planck's wave energy. Therefore, it is clear that my actual mass-energy equation is more accurate and correct, because its values match both wave and particle nature.

9. Result:-

- The values of the real energy mass relation and the Planck energy equation are the same.
- Replication of DNA, photosynthesis in the plant, respiration of living things, wavelength value of uranium etc. indicate the beginning of living creation and consciousness.
- The small values of the wavelength of oxygen, water and benzene represent the product of living things, which produce very significant at this range of wavelengths.
- Some of the larger values of the wavelength of the masons, the fusion of the Sun, the case of hyperons, neutrons, protons, and radioactivity show an inside response and are closest to the outside of the nucleus.
- Wavelengths of water, photosynthesis in plants, respiration of living and benzene etc. indicate the initial food for a living organism. For this, the values of G_1 and G_2 are approximately equal to one.
- In some cases the speed of some fundamental particle is greater than the speed of light.
- Every change, which is taking place in space and time, is in accordance with this principle. The prediction of this theory is that the practical values and given values in the table should be the same.
- All graphs show the accuracy, sharpness and genuineness of the principle of true reliability.

10. Acknowledgments:-

I want to express my gratitude for all the biotic and non-biotic things (elements) of the universe, which are present at this time, existed and will continue to exist in the age to come¹⁷.

I would also like to thank those who know or do not know me. This is only due to his detailed comments, action aids and suggestions, which led to the necessary revision and improvement in my research paper.

11. Reference:-

Authors//Book/Journal//Publisher/Edition/Volume//Page Number//Year

- Gupta-Kumar-Sharma, Quantum Mechanics, Jai Prakash Nath and Company, 5, 25-29, 2001
- Prof. B.K. Agrawal, Physics of class 12th, Ratan Prakashan Mandir , 42-49, 67-122.

3. Prof.B.K. Agrawal, Naveen Physics, Shivalal Agrawal & company, 266-287,162-165, 1-4.
4. Dr. R.P. goyal, Unified Physics B.Sc. III, Shivalal Agrawal & company, 1-28,309-330,335-54,375,407-428.(2000)
5. S.L.Gupta & S. Gupta, Concept of Modern Physics, Dhanapt Rai & sons, 42-78, 82-88, 104-109,114-119, 1993.
6. B.K. Sharma, Unified Chemistry, Krishna Prakashan Media (P) Ltd., 1-41.
7. R.K. Gour & S.L. Gupta, Engineering Physics, 7th edition, Dhanpat Rai & Sons, 4-9, 81-84,341-355, 414-415,1001-1015(1998).
8. Francis W. Sears, Mark W. Zemansky, Hugh D. Young, University Physics, 713-715.
9. Authur Beiser, Concept of Modern Physics, Mc-GRAW Hill, 1-28,36-44,40-58,72-75,160-174,475-505, 1999.
10. Peter Renton, Nature, Particle physics, vol-428, issu no.-6979, 141-144, March 11'2004.
11. Matias Zaldarriage, Nature, Background comes to the fore, vol-420, issue no.-6917, 747, Dec.19'2002.
12. O. Bertotti, L. less, & P. Tortora, Nature, A test of general relativity using radio links with the cassni space craft, vol-425,issu no.-6956, 374, Sept.25'2003.
13. Dan Falkinresting ation, Nature, Worlds apart, vol-422, issu no.-6933, 659, april17'2003.
14. Howard E. Bond, Arne Henden, U. Munari ..., Nature, An energetic stellar outburst accompanied by circumstellar light echoes, vol-422, issu no.-6930, 405, Mar.27'2003.
15. Devid Wark, Nature, now you see them, now you don't? Particle physics, vol-421, issue no.-922,485, Jan.30'2003.
16. Do Collaboration, Nature, A precision measurement of the mass of the top quark, vol-429, issue no.-6692,638-641.
17. My self-thought, self-understanding of universe and nature and study of sunrise and sunset.
18. J.B.Rajam, Atomic Physics, De-Broglie Waves, reprint of first edition 2004, 464-470,(2004).
19. Anthony J.F. Griffiths, Jeffrery H. Miller, David T. Suzuki, Richard C. Lewontin, William M. Gelbart, Genetic Analysis, The Structure of D.N.A., 313-327, 1998.
20. Albert Einsteins , The meaning of Relativity, Oxford and IBH Publication, 1968.
21. Robert Resnick, Introduction to special theory of relativity, Johnwiley and sons, 33-40,1998.

Figures

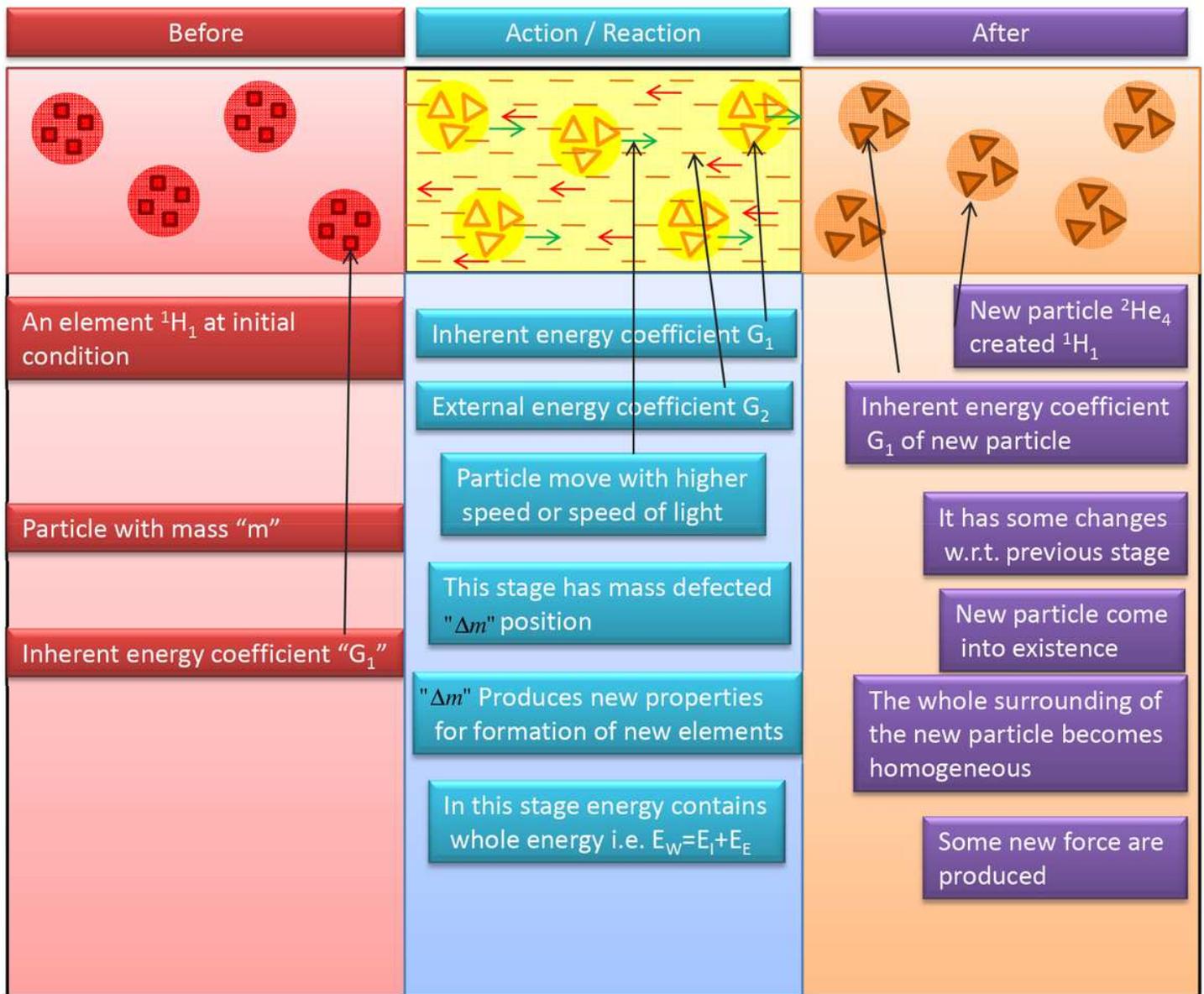


Figure 1

Behaviors of energies and its coefficients

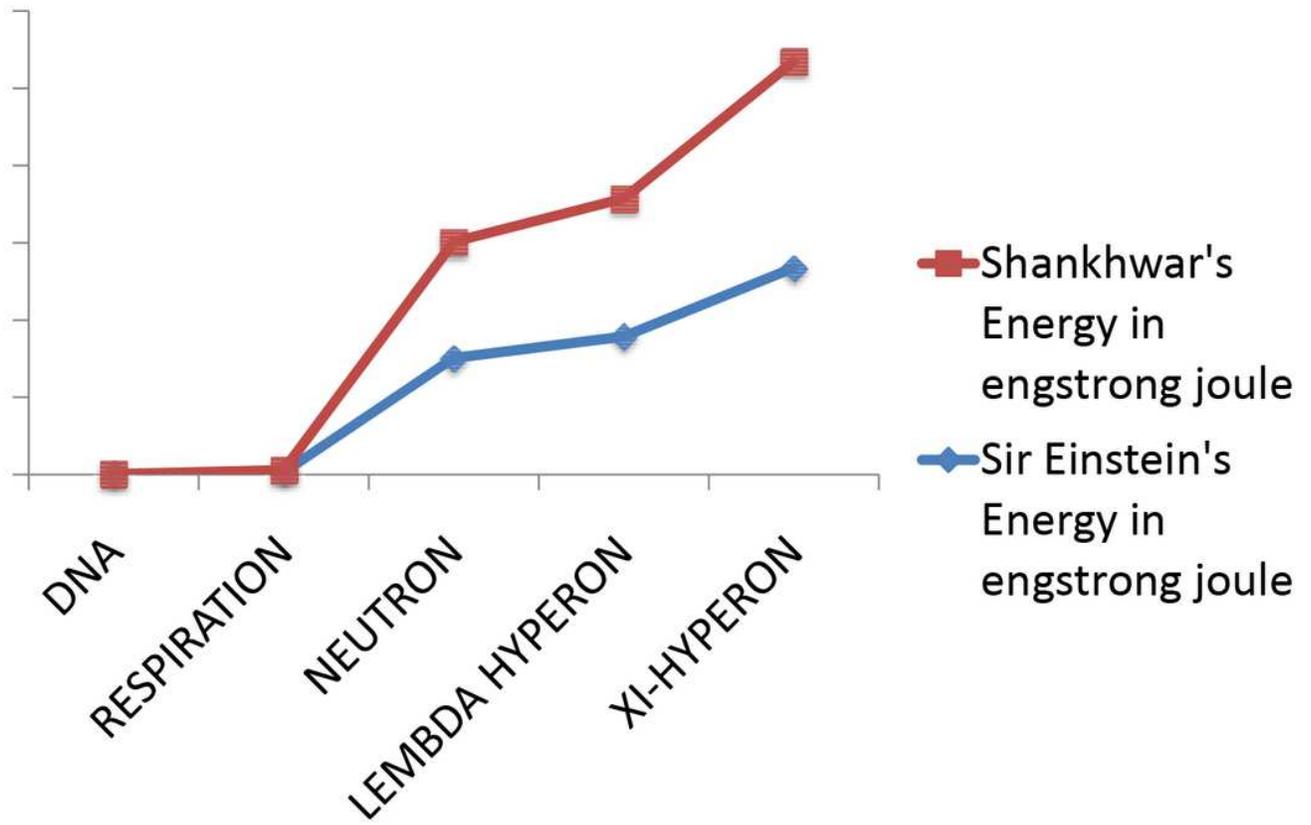


Figure 2

Shows energy difference between both theories

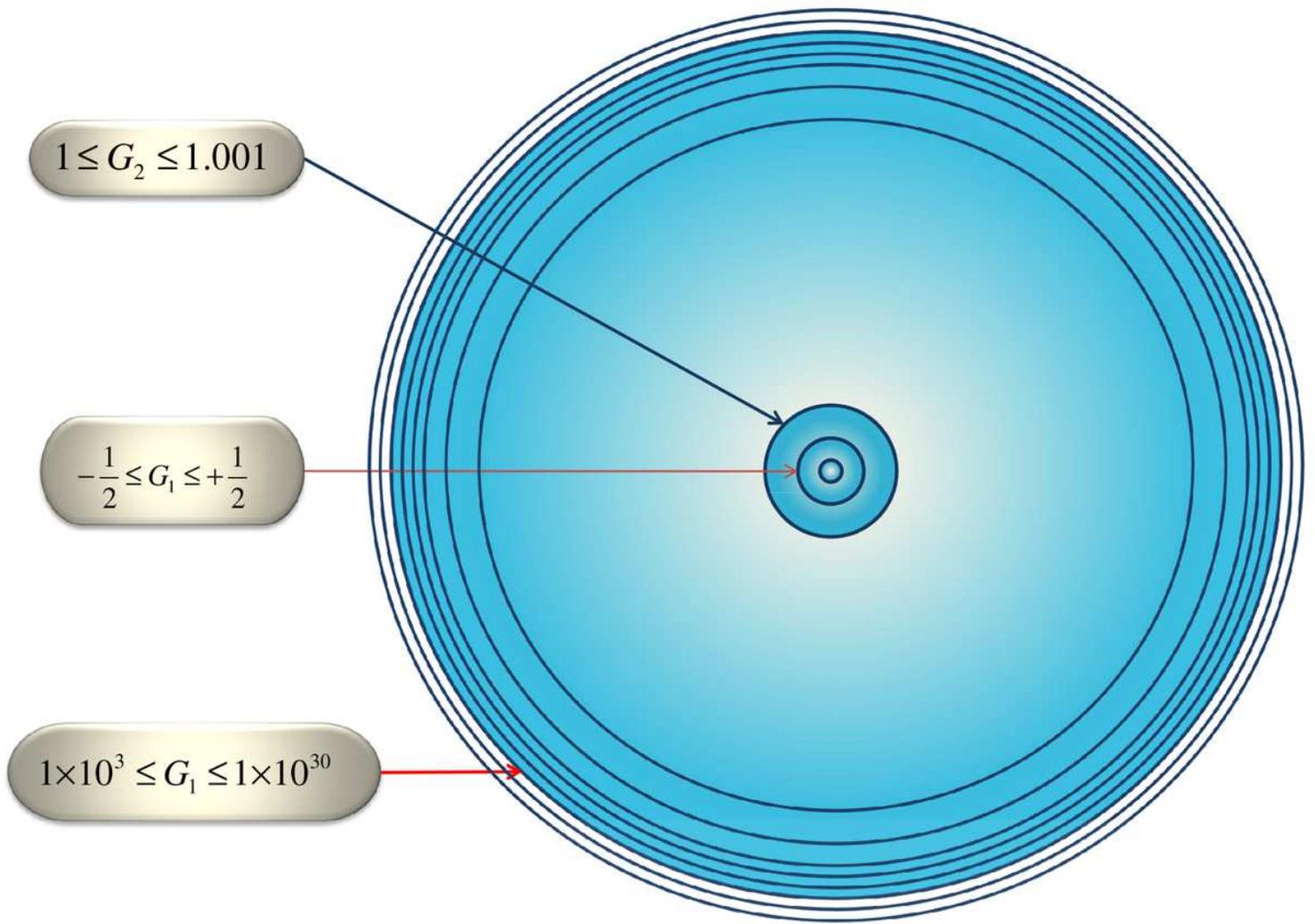


Figure 3

Behaviors of coefficients G_1 and G_2