

New Study of Gravitation in Singularity

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Abstract: The complete study of Gravitation is unknown in existing studies. It is a dual counterpart of orbitation in existence. When Gravitation emerges, it is like a thread and grows into a rope heading towards the surface of space-time. The orbitation part helps for the shape of the evolving particle to contain the amount of $sp-ti$ 0s required for its mass (that constitute the body) as well as the moving path for the particle to move around the deepest point of $Sp-ti$ 0. This is the basic of orbitation even at the surface of space-time, for one object to revolve around the other. Thus, Gravitation-Orbitation has a tie up from depth to surface of existence. Quantum gravity is nothing but the $Sp-ti$ 0 axis that runs towards the center point, about to be revolved whereas quantum orbit runs in the middle of a wave path of a particle motion around this center ($Sp-ti$ 0). In this paper, we will discuss with clear diagrams of how this fourth dimensional duality holds the existence with its web network (cross lines with $Sp-ti$ 0 intermediates). It serves the path for creation, preservation and destruction laws of nature governing the objects.

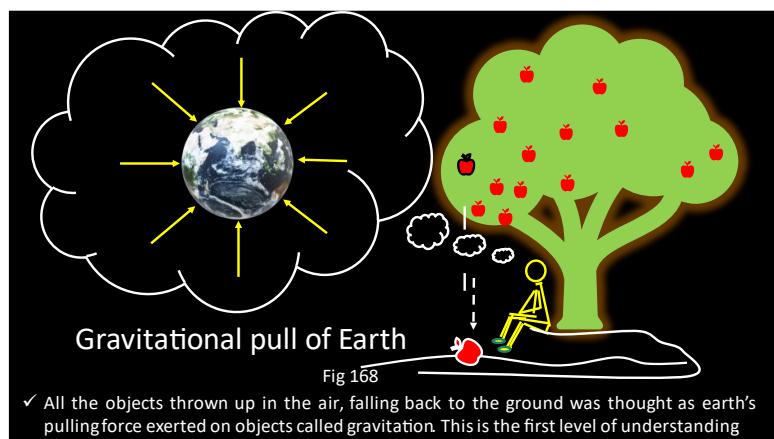
Key points:

- (i) Gravitation-Orbitation is a non-physical dual aspect that uses the loop holes of space-time and has unique features independent of objects. Motion of objects in this configuration is just a part indication to experience space-time which is also allowed by space-time only. To think mass and energy of objects to affect this setup like curvature or bending caused by object density, is an obstacle to visualize ultimate reality.
- (ii) Gravitation-Orbitation never enters into black holes. In fact, it is said to be terminating at the edges of open surface black holes and emerging from the edge of closed quantum black holes.
- (iii) Gravitation is just a path at any point of space-time and forces of creation, sustainment and destruction are applied through this duality of cross line configuration.
- (iv) Gravitation-orbitation, multi-dimensionally perpendicular to each other like a web network with $Sp-ti$ 0s as meeting points. $Sp-ti$ 0 axis is common between the $Sp-ti$ grid and this web network with a small difference resulting in two kinds of geometry, to be discussed.

Keywords: Gravitational pull, Gravitational force (Newton), Space-time fabric (Einstein), Gravitational stoppers, microscopic depth, Telescopic depth, black holes, dark matter, liquid dark ocean, Dimensional ribbons, $Sp-ti$ tolerance, heavy objects, Singularity, Neutron star, Gravitational rope, Fundamental fields, $Sp-ti$ bubble.


We have already discussed the major studies in our previous journals; this paper contains the finishing points of the theory of Singularity, which is mainly about deepest point of Gravitation, an ultimate nature (path).

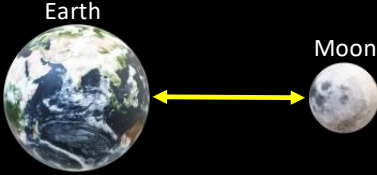
1. INTRODUCTION - HISTORY OF GRAVITATION



[The content of this journal is a self-discovery]

Sir Isaac Newton





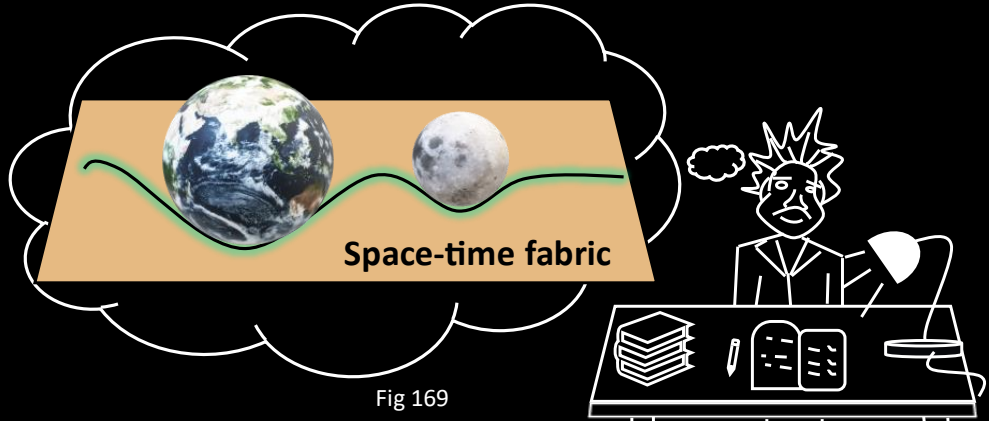
✓ Then, the two objects such as Earth (mass m_1) and moon (m_2) were thought to exert a force on each other and gravitation could be a force common between the two objects (masses) in space.

$$F = G \frac{m_1 \times m_2}{r^2}$$

F – Force of gravity
 G – Gravitational constant
 r – Distance between two objects

- ❑ Thus, gravitation called to be a force between two objects was the next level of understanding.
- ❑ It required two masses and also the distance between them, affecting this force.

2. HIGHER LEVEL OF UNDERSTANDING ABOUT GRAVITATION



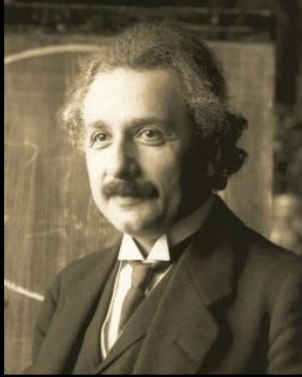
Space-time fabric

Fig 169

✓ Later, gravitation was discovered not to be a force but a curvature caused by heavy masses on space-time (fabric-like). Still it required mass of at least one object to affect it and the force was then assumed to be gravitational field bent by the objects resulting in other nearby objects to fall into it. This is the higher level of understanding in existing studies.

[The content of this journal is a self-discovery]

Sir Albert Einstein



➤ In the general theory of relativity, the Einstein's field equations relate the geometry of spacetime to the distribution of matter within it.

$$G_{\mu\nu} = 8\pi T_{\mu\nu}$$

[Ref: Google pages]

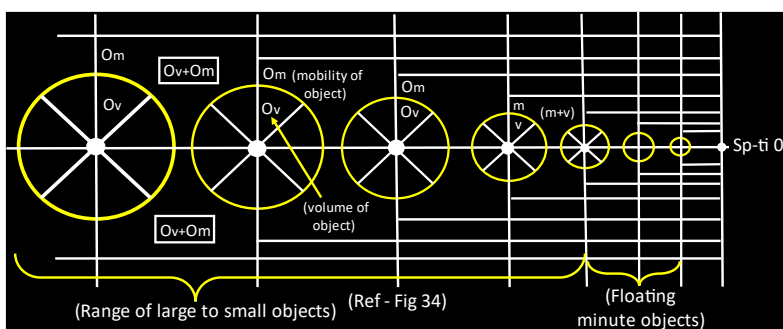
- On the left side of the equation is a tensor describing the geometry of space-time (the gravitational field)
- On the right is the tensor describing the matter and energy density (the source of gravitational field)
- Gravitation is described as a curvature of space and time caused by mass and energy.
- Mass and energy themselves have an equivalence between them governed by the equation $E = mc^2$ that any mass 'm' could be known as rest energy of mass into velocity of light squared (mc^2).

➤ We have seen deepest point of gravitation in our previous papers with its completion of where it begins / ends in space-time even beyond quantum level. Now, let us see more detailed drawings of visualizing the same.

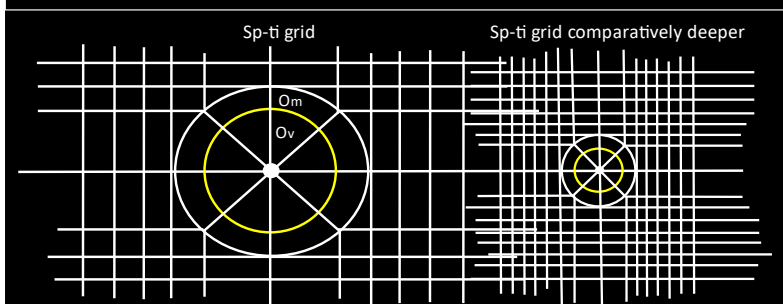
3. GENERAL NOTES ON GRAVITATION AND PREVIOUS REFERENCES

- We have traced gravitation from surface to depth of space-time and know the following facts,
 - 1) Gravitation is neither a force nor a field but a non physical dual aspect that begins from the edge of a black hole structure.
 - 2) Gravitation is a duality of orbitation and they together constitute a web network holding the existence of life objects.
 - 3) Gravitation begins as a thin thread from sp-ti 0 and grows into a rope towards the surface of space-time, as a fourth dimensional aspect.
 - 4) Sp-ti medium waves (caused during collision of two black holes) are different from line of gravitation and thus, gravitation is not a wave at any point in space-time as it is believed so in existing studies.
 - 5) Gravitational line is nothing but the sp-ti 0 axis that connects the macro-objects governed by general theory of relativity and nano-particles of quantum mechanics and thus, solves the contradictions between them. It further leads and reaches the quantum black holes of space-time called sp-ti 0s.
 - 6) Gravitation acts as stoppers for sp-ti medium (shoreless dark liquid ocean at the depth of space-time) not to reach to the objects evolved to the surface of life.

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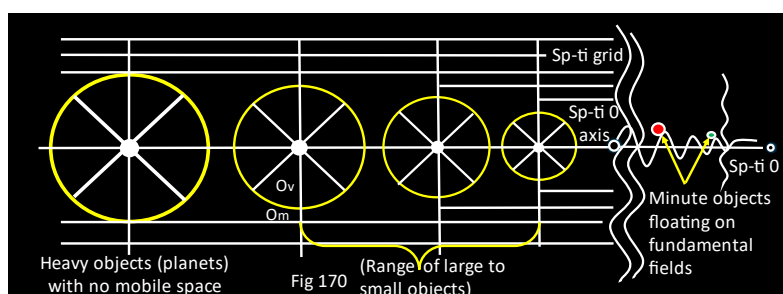
- We have zoomed in to see the range of macro-objects reaching the smallest object and beyond which the objects are said to be floating in fields and called as minute objects.
- Same way, now we shall check for the largest possible objects that does not affect the space-time grid. So, the objects above this limit are said to be heavy objects in space-time.



(Ref - Fig 35)

- We have also seen, ideally every object is surrounded by the space-time lines pertaining to its size. However, there is a fact that sp-ti lines of the small object is not felt by it when it enters the range of large objects, means it would be more spacious for mobility of small objects. Now, let us move on to heavy objects in space-time.

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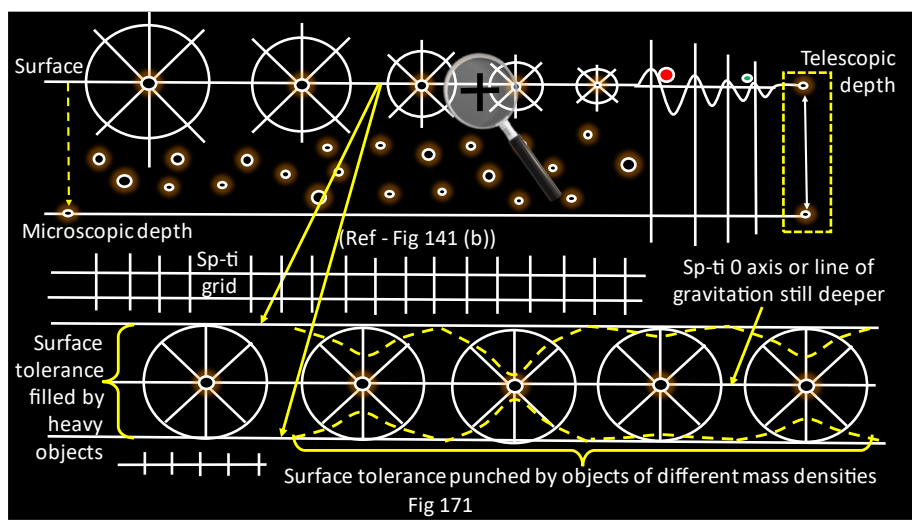


- Heavy objects are the ones that has no mobile space, as it exceeds the limit of large objects and starts punching the space-time grid. So, either side of the range of macro-objects, particles are said to be floating in fundamentals fields which is unlike sp-ti grid, on one end. On the other side, the massive objects like planets, punches the sp-ti grid towards its center.
- However, this punching of space-time grid shall not be interpreted as bending of space-time lines by the objects but it is represented by the 4th dimensional aspect called 'Gravitation'.

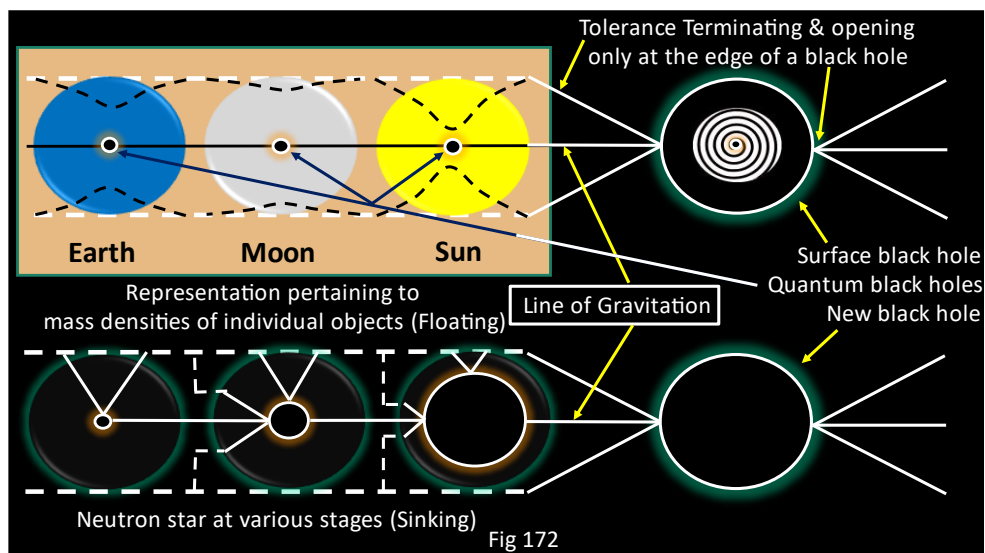
4. INTERPRETATION AS CURVATURE OF SPACE-TIME, IS NOT REQUIRED

- Why space-time grid shall not be understood as curvature of field lines caused due to heavy massive objects? The answer is, space-time already bends itself for volume of objects internally and mobility of objects externally in space-time medium. Again to represent the bending of sp-ti grid stressed with mass density is not required as there is 4th dimensional dual aspect called gravitation-orbitation to represent the same.
- Also we know, the sp-ti 0 axis is seem to be common for space-time grid and gravitation-orbitation web, then what is the difference between these two dualities? While the existing study is assuming even sp-ti lines to be same as gravitational field lines.
- In reality, gravitation need not be numerous lines constituting a field, it is a single line representation that connects various heavy objects in the existence and also it is a non-physical aspect. Let us see how gravitation at macro level (general relativity) is different from nano level (quantum mechanics) and at the same time how it smoothly connects the two studies without contradictions.

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5. NEW REPRESENTATION IN TERMS OF SP-TI TOLERANCE




[The content of this journal is a self-discovery]

- Surface is shown with a wideness representing the tolerance of space-time. Sp-ti grid is actually not punched by the heavy objects to cause some curvature or bending. Tolerance lines are required for understanding these changes with impact of objects in space-time with different densities.
 - Thus, lines of tolerance entering into the neutron star represents the object starting to be independent of other objects and when it touches the quantum black hole at its center, the object is said to be sinking in sp-ti medium. Means until the tolerance not bitten by the objects to touch its center, the objects are said to be floating in the surface of space-time. They behave to be a set of objects dependent on each other through gravitation and tend to revolve one another in a systematic way.
 - Here, the small objects revolving the big objects is based on the fact that, they try to attain the sp-ti 0 of the neighboring big objects by free falling into it. They never realize that every object itself have a sp-ti 0 in it. Result of which, small objects tend to revolve around the large one beyond certain limit or fall into it when entering inside the limit.
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- Eventually, the small objects gets trapped in big objects by free falling and hitting the ground, gets stopped there. This is the reason behind apple falling from the tree to the ground, its attraction is towards the center of the earth. However, Earth has its attraction to the center of sun, to be noted, which is far beyond free fall distance such that, it revolves around the sun rather than falling into it. Means even if the apple reaches the core of the Earth, its attraction is not fulfilled.
 - In case of Neutron star, the tolerance touches the center of its own body, encounter the quantum black hole in it and has no need to be dependent on another object through gravitation. Thus the object is said to start sinking in space-time medium.
 - Now, why we have chosen tolerance lines to represent these changes and not involving the sp-ti lines and Gravitational line for any curvature? Sp-ti medium is the creator of objects with mass and energy. But our way of understanding science is like, objects are causing changes in space-time. It is absolutely wrong and meaningless.
 - Gravitation and space-time exists even without objects and have their own features from sp-ti medium end. We have already seen those, still will make it clear in this paper.

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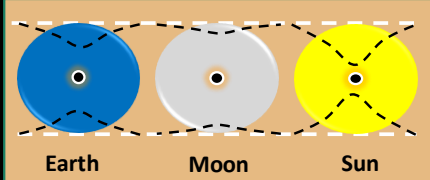
Fig 173 (a)



Earth Moon
Space-time fabric

Sir Einstein's representation of Space-time

Fig 173 (b)



Earth Moon Sun
New representation of Space-time tolerance

- One may think this tolerance line is even if necessary, but this is the most important line that separates one-eye perspective (Singularity) and human perspective (duality). As we have already seen abode of God is simply a light and has no dimensions and perspectives. We make an effort to derive the studies from singularity. So, it is obvious that there is a point where two perspectives meet. This must be marked and have a line of separation.
- No object is smaller or bigger in singularity, to be noted.

6. PHYSICS OF GRAVITATION AT THE SURFACE LEVEL OF SPACE-TIME

Set of heavy objects in a Solar system

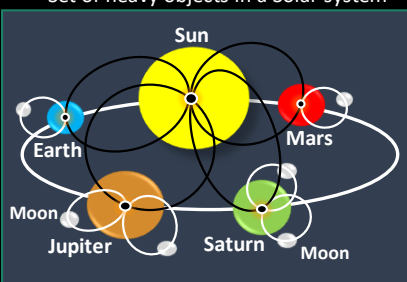
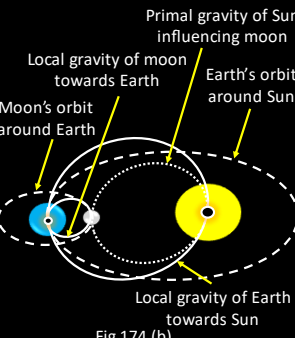


Fig 174 (a)



Primal gravity of Sun influencing moon
Local gravity of moon towards Earth
Earth's orbit around Sun
Moon's orbit around Earth
Local gravity of Earth towards Sun

Fig 174 (b)

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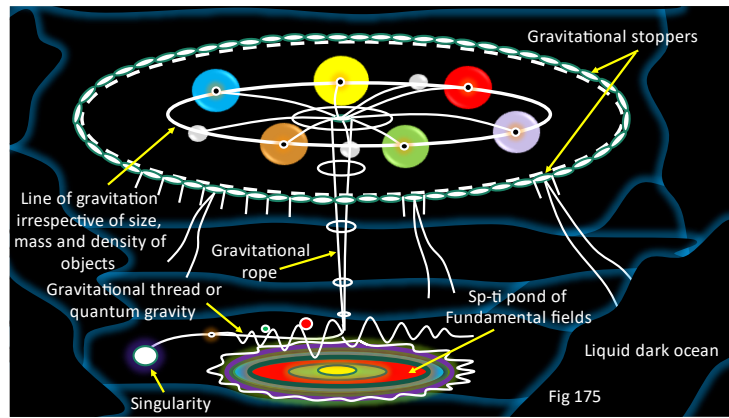
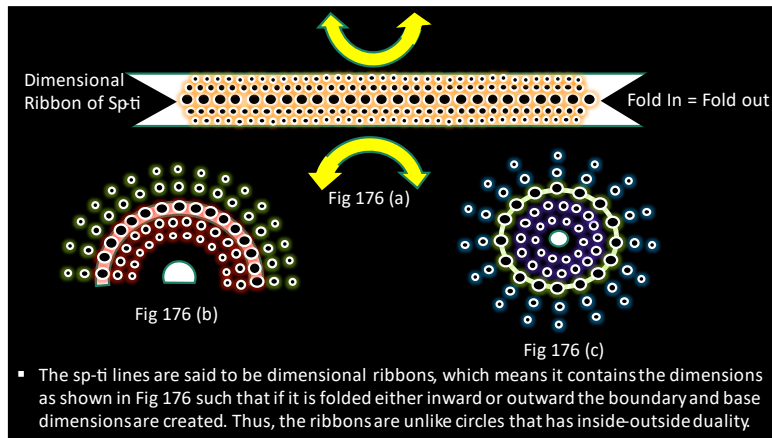


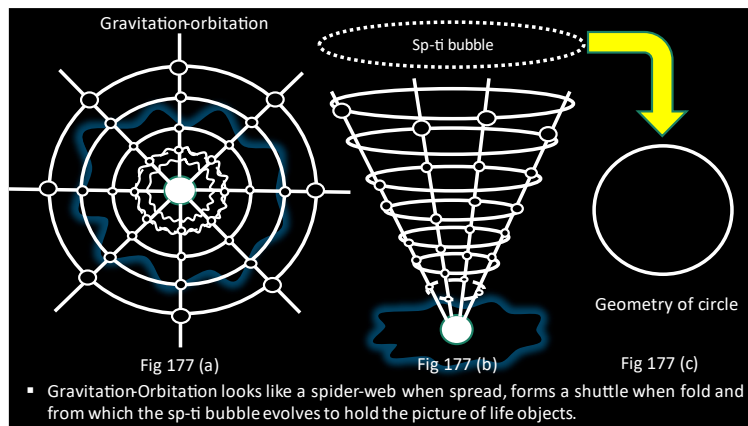
Fig 175

7. DIMENSIONAL RIBBONS OF SP-TI



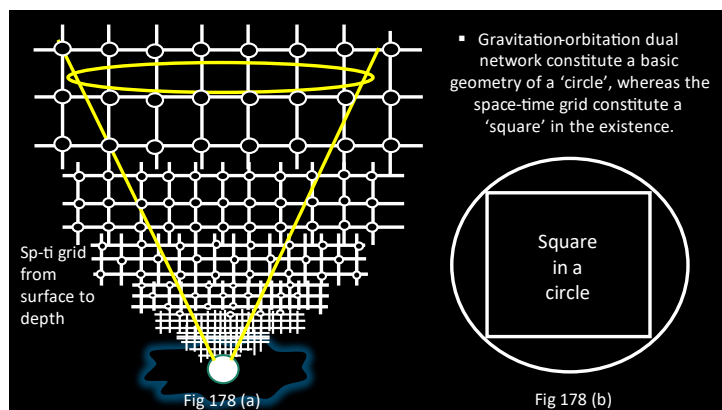
▪ The sp-ti lines are said to be dimensional ribbons, which means it contains the dimensions as shown in Fig 176 such that if it is folded either inward or outward the boundary and base dimensions are created. Thus, the ribbons are unlike circles that has inside-outside duality.

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▪ Gravitation-Orbitation looks like a spider-web when spread, forms a shuttle when fold and from which the sp-ti bubble evolves to hold the picture of life objects.

8. GRAVITATION-ORBITATION NETWORK AND SP-TI GRID



▪ Gravitation-orbitation dual network constitute a basic geometry of a 'circle', whereas the space-time grid constitute a 'square' in the existence.

9. INTERPRETATION OF MASS-ENERGY EQUIVALENCE IN SINGULARITY

- Mass-Energy equivalence means, mass could be equal to energy and completely transmutable as one another under certain condition. Mass and energy are said to be two different manifestations of the same thing. This point is understood as every mass 'm' has the rest energy, to be referred to as mc^2 , where 'c' is the velocity of light.

$$E = mc^2$$

- Here the relative mass 'm' is said to increase as the speed of the object increases. By the time the object reaches the speed of light, its mass would be infinite. This is based on the fact that an object in motion possess kinetic energy and this energy increases with increase in mass or velocity (directly proportional)
- All these assumptions rely upon the empty space, to be free, open and infinite without any resistance for moving objects. However, we have arrived the finite structure of space-time, let us see how finite nature, has its impact in the existing studies.
- Space-time grid is the underlying configuration in vacuum and affects the motion of the objects. The term relative mass in singularity is nothing but the virtual resistance increasing within the volume of the object whose rest mass is actually unchanging pertaining to speed.

- Basically, the rest mass itself is the amount of Sp-ti Os held by the object for its life in the existence which is even without any applied speed (only natural motion).
- When the virtual resistance V_r , reaches the maximum with the volume of the reserved mass in motion, then the V_r of mobile space available for the object start increasing till it touches the surface of the object. Beyond this limit, real or actual resistance applies to the object by the space-time medium.
- Means the object has utilized the maximum allowable limit of sp-ti tolerance with its volume as well as mobility and started to push the medium itself. However, no object could bend the space-time lines with its speed or motion and the medium allows the object to take a smooth curved path instead.

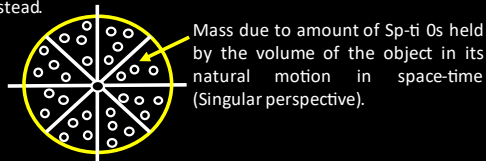


Fig 179

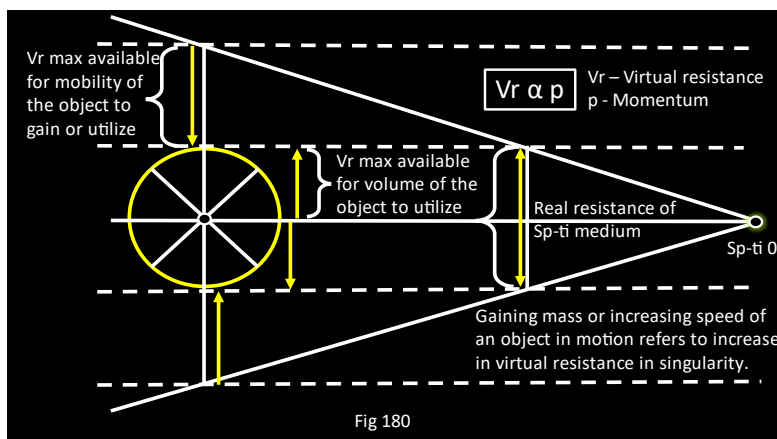
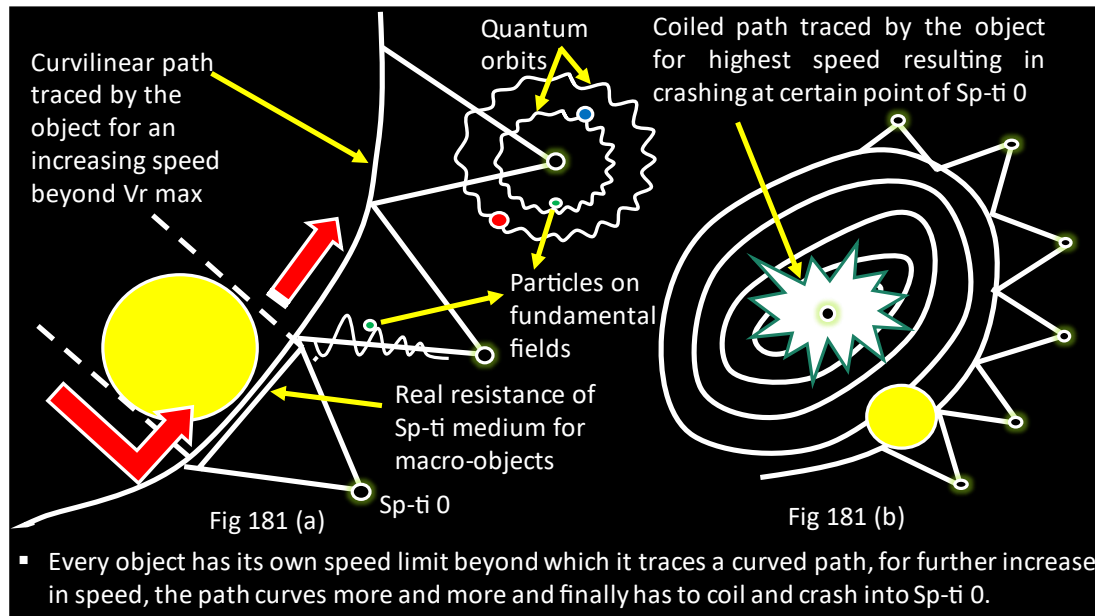


Fig 180

- Further, mass-energy equivalence is based on the observation that certain amount of mass in a chemical reaction is converted into energy. This means, the released energy was before a reserved energy in the form of mass. Thus mass could be assumed to be a packed energy content or energy could be assumed as a loose mass content in space - time. So, at certain condition there is a possibility of both absolutely transformable as one another.
- Here, what is misleading us to be noted, If $E = M$, it also means that energy is independent of mass such that the diminishing source of mass in sun, releasing energy in the form of light and heat energies is said to exist even after the life-time of sun that has disappeared into a point in Space-time. It is meaningless to relate mass and energy to be equal for its mutual transmutation at certain point.
- Then what is the relation between mass and energy in reality? The answer is, mass and energy are two different manifestations of same thing is true however, it is a duality that one cannot exist without the other and has a dependency factor between them. Means at no point or condition mass and energy are transmutable to exist independent of each other.

[The content of this journal is a self-discovery]



10. GENERAL DISCUSSION

Points to remember

- Sp-ti 0 axis is common to Gravitation-Orbitation web and Sp-ti grid with difference of two kinds of basic geometries such as 'Circle' and 'Square'.
- Ideally gravitation is a path that straight away leads to the quantum black holes, beyond which there is an impeller force in action governing the space-time medium.
- The term non-physical aspect does not help for any experimentation ideas, means it cannot be governed as per human willingness but have to be undergone by the way it is.
- Gravitation is also a life path of truth that takes oneself to the destination.
- Gravitational stoppers not only prevent the raw nature to reach the objects but also holds the sp-ti picture frame of life, without waves. If there is no Gravitation then we see the appearances like trying to see the bed bottom of a water pool whose picture is interrupted by waves on its surface.
- Representation of Gravitational stoppers is same like super-position of particles. However, quantum mechanics is observable in third dimension and its working shall be assumed in fourth dimension of space-time. But Gravitational stoppers are quite unimaginable even for theoretical assumptions.
- Two black holes colliding in faraway distance in light years, is said to cause Gravitational waves, but they are actually the waves of space-time medium itself. Further the web network of Gravitation helps to carry the surface objects, like a float and preserves the existence of life.
- Increasing speed of an object hits a triangle at certain point beyond which for the further increase in speed, the object has to deform or bend towards Sp-ti 0. But space-time offers has a curved path as an alternative.
- However, for increasing high speed, the object traces a coiling path rather than a curve and crashes at some point of Sp-ti 0. Thus, it is impossible for any object to travel at the speed of light anyway. The highest possible speed of any object implies its non-existence in space-time.

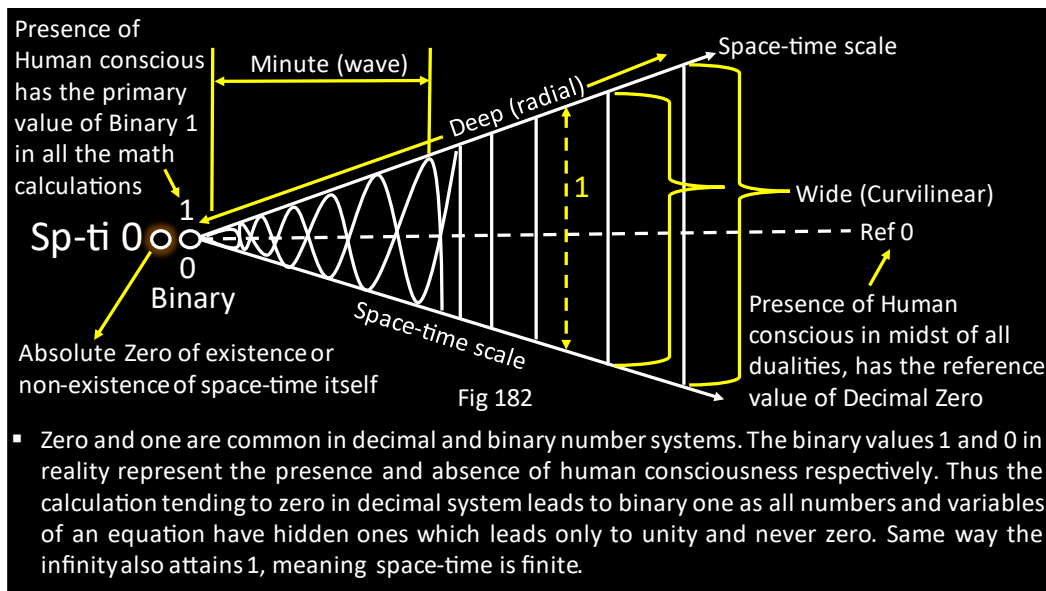
11. CONCLUSION

Gravitation is a downstream towards Sp-ti 0 by nature however, the path of Gravitation is common for upstream, downstream, in and out of everything. All forces, fields and energies have directional flows through the lines of gravitation spread all over the existence. At macroscopic level the Gravitation has a cyclic path trapped within dualities that all the objects including human are helpless to undergo the life processes and laws governed by nature without knowing the boundary of travelling or ending. This

paper could not be concluded as it is the beginning of science within finite limits. For example, there cannot be a closed system obeying law of thermodynamics.

Ideally, a closed system is a loop in which energy can neither be created, nor be destroyed, it can only be transformed from one form into the other and thus energy is said to be conserved. But the truth is, if the main stream of life itself is a closed loop of source and destination that every created object has to destroy and every appearing thing would disappear in space-time then where is the point of conservation? Energy exists as long as its source exist.

There cannot be an infinite energy source in a finite space-time. Life is simply a continuous evolution or changes that nothing could be held as constant. Also, the fundamental numbers Zero and infinity cannot be accessed by human in reality.



Thus, the new study of Gravitation in singularity, serves the fundamental for the two major branches of physics such as general relativity and quantum mechanics, which are believed to be contradicting to each other in existing studies.

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[The content of this journal is a self-discovery]

APPENDIX A

<p>1) திருக்குறள் (Thirukkural) பிறவிப் பெருங்கடல் நீந்துவர் நீந்தார் இறைவனடி சேரா தார். (குறள் எண்:10)</p> <ul style="list-style-type: none"> It is impossible for anyone to swim the shoreless ocean of birth-death cycles, however those who surrender the feet of God shall attain their destination. <p style="text-align: right;">- Thiruvalluvar</p> <p>2) திருவாசகம் (Thiruvagasam) ஆழ்ந்து; அகன்ற; நுண்ணியனே! - மாணிக்கவாசகர்</p> <ul style="list-style-type: none"> Praising the God's presence in terms of dimensions of space-time such as - Wide; deep and minute. <p style="text-align: right;">- Manickavasagar</p> <p>Minute nature is a) Distributed points of Sp-ti 0s in 4D. b) Gigantic point of Sp-ti 0 (Vishwarupam) in 0D.</p>	<p>3) திருவருட்பா (Thiruvarutpa) எல்லையில் பிறப்பெனு மிருங்கடல் கடத்தியென் அல்லலை நீக்கிய அருட்பெருஞ்ஜோதி</p> <ul style="list-style-type: none"> - திரு அருட்பிரகாச வள்ளலார் Praising the God for having saved him from the hardship of repeated birth-death cycles of the shoreless dark ocean. அருட்பெருஞ்ஜோதி- God(singularity) as pure form of light (ever-existing). <p style="text-align: right;">-Thiru Arutprakasa Vallalar</p>
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<p>4) பரசிவ வெள்ளம் (Cosmic liquid)- பாரதியார் கவிதைகள் (Bharathiyar poems)</p> <p>அ) உள்ளும் புறமுமாய் உள்ளதெலாந் தானாகும் வெள்ளமொன்றுண்டாம் அதனை தெய்வம் என்பார் வேதியரே.</p> <p>ஆ) காணுவன நெஞ்சிற் கருதுவன உட்கருத்தைப் பேணுவன யாவும் பிறப்பதந்த வெள்ளத்தே</p> <p>இ) தன்மையொன் றிலாததுவாய்த் தானே ஒருபொருளாய்த் தன்மைபல வுடைத்தாய்த் தான்பலவாய் நிற்பதுவே.</p> <p>ஈ) எல்லாந் தானாகி யிருந்திலும் இஃதறிய வல்லார் சிலரென்பர் வாய்மையெல்லாங் கண்டவரே</p> <p>உ) காலமென்றே ஒரு நினைவும் காட்சியென்றே பல நினைவும் கோலமும் பொய்களோ அங்கு குணங்களும் பொய்களோ</p>	<p>In and out of being everything there is a liquid form, whose existence is said be divine nature by Vedic scholars.</p> <ul style="list-style-type: none"> All the appearances, thoughts of mind, conscious everything is born from this godly liquid. Being the singular object, this liquid itself does have any characteristics of its own but it is the one behind every different forms of nature standing as different appearances of existence. Even though, existence of this liquid is revealed, only very few people realize - said by the masters, gone through all the truths of existence. <p>Considering time factor alone, whatever we see is a motion picture and so there cannot be a fixed geometry and characteristics(solidity) in the existence.</p>
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APPENDIX B

Table of real dimensions and their kinds - Summarized					
S. No. (D)	Measurements	Aspect	Position of Sp-ti 0	Perspective	Plane
0D	Space-time	Space-time	Singularity	-	-
1D	Length	Wide	Boundary	Human Conscious (Dual)	Physical
2D	Width	Deep	Base	One-eye (Singular)	Meta-physical
3D	Height	Minute	Core	-	Spiritual
4D (a)	Surface radius	Gravitation (rope)	Singularity	-	-
4D (b)	Deep radius	Orbitation (belt)		-	-

[The content of this journal is a self-discovery]

New scientific terms & important keywords introduced in the series of journals published on 'Theory of Singularity'

□ Sp-ti 0; Sp-ti 0 axis, Deep radius, Real dimensions of space-time, Fourth dimensional aspect of Gravitation-Orbitation duality, Gravitational stoppers, Line of Gravitation, Circle of Orbitation, Primal gravity, local gravity, Great orbit, local orbit, Sp-ti grid, Sp-ti bubble, Liquid dark matter, Dimensional rings, Dimensional ribbons of sp-ti, Structure of a closed quantum black hole, Open surface black hole, Surface and depth of space-time, Singularity, Finite structure of space-time, wave-particle, Path of quantum entanglement, Seating of zero, one and infinity in reality, Space-time overflowing and flickering nature, Sp-ti frames, Impeller of sp-ti, Spacious vacuum, Absolute vacuum, Retained dark matter, Primary and secondary sources of light in existence, Human conscious in duality, Abode of God in singularity, Microscopic depth, Telescopic depth, Dimensional cone of sp-ti, Dimensionally no access regions, Sp-ti waves, Sp-ti pond of fundamental fields, Male-Female dark energies, Sp-ti womb, Non-physical impact of length contraction and time dilation, Space contraction – Time reduction, Virtual resistance V_r - Virtual delay V_d , Dimensionally reduced space-time scale, Time in terms of aspect T_A (Kalam – time associated with nature) and measurement T_M (Neram – Clock-time), Absolute zero.

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Prabhakaran Natesan, Tamil Nadu, India. [shnatcop@gmail.com] Bachelor's degree in Electrical and Electronics Engineering (2011) – Affiliated to Anna University, Chennai. This work and effort made are dedicated to the lotus feet of the Rishi-Muni (master) **Kakabhusundar**. It is a drop of knowledge applied in modern physics from one of his ancient books of wisdom called "**Perunool Kaviyam Aayiram**" written about meditational techniques of "**Vaasi Yogam**" in the format of poems. **Bogar** – Maha Rishi (Ancient master of chemicals & medicinals) whose work is contributed in terms of "**Vaadham**", "**Vaithiyam**" in his book of wisdom called

"**Bogar 7000**". To comprehend the essence of these literary works would demand oneself to actually follow the path before attempting to formulate the ultimate practical study (Sithandham) of everything in space-time, to be useful for mankind.

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