

Prabhakaran Natesan*

Working in UAE, Age:34, Home country: India, Area of interest: Modern physics

***Corresponding Author:** *PrabhakaranNatesan, Working in UAE, Age:34, Home country: India, Area of interest: Modern physics*

Abstract: To understand the theory of singularity and its need, one must know what are all the limitations and wrong assumptions with theory of duality (relativity). Duality confuses by causing illusions that prevents one's mind to see through the true nature of ultimate reality. Also, it keeps us trapped well between dual counterparts and thus, does not allow a step-by-step analysis to formulate the studies in a progressive manner towards destination. We will never find the start point and end point but keep on discussing and wondering about the behaviour of nature here and there whose concepts would still remain isolated from each other. Theory of singularity is an effort to stack the objects one over the other by finding what is one thing in common for every dual counterpart and thus, knowtheir hierarchy in existence.

Key points

(i)The gravitational filters all the ways ensure safety of the Universe we live, by stopping the raw nature of liquid darkness not to reach the evolved objects of life that floats on its surface called asSp-ti medium.

ii) Observer's reference frame or observer's point of view assuming space, time and speed (motion) are relative is only a perspective of duality that shall not be thought as physical changes happening out there in life, like believing time dilation would enable us to time travel.

iii) The real dimensions of space-time are untouchable and the life we are living is only in the shadow of those dimensions.

iv) The number system at quantum level comprises of binary 1s and 0s. If the bed of space-time itself has discrete nature, then the real dimensions must carry these values from depth to the surface of space-time medium and show how it is evolved to become decimal number system, is important.

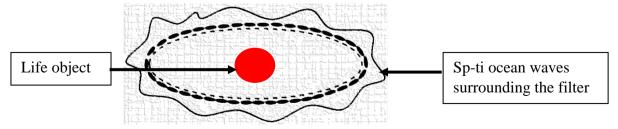
v) The useful space-time graph designed must be dimensional. Also, it must be flexible to stretch, to hide the deeperdimensions as well as enable us to zoom into graph to show those dimensions as required.

Keywords:*Gravitational filters, Gravitational stoppers, Sp-ti dimensional graph,Credit speed, Speed compensation,Perspectives, Shadow cone of real dimensions, Relativity (duality), Singularity, Speed of light, Misconceptions.*

1. INTRODUCTION

To begin with, we will continue with the previous journals that has notes about Gravitation in which, Fig 175 shows the Gravitational stoppers, that is preventing the raw liquid nature of darkness not to touch the evolved objects or the Universe we live. In fact, these stoppers are basically three kinds of filters associated with three real dimensions as follows,

1.1 Gravitational Boundary Filter - "ring-surround stoppers"



1.2 Gravitational Base Filter - "mat-spread stoppers"

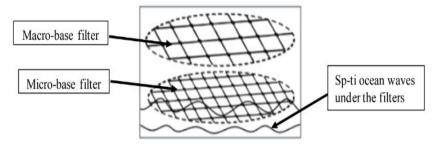
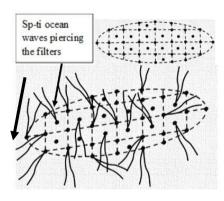


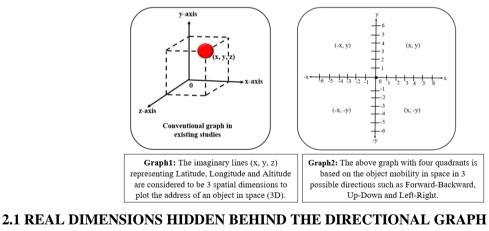
Fig 192 (b)

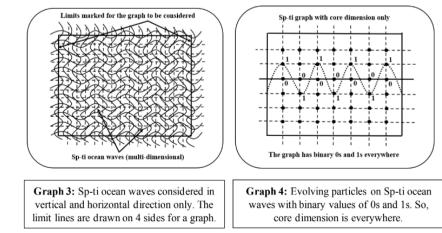
1.3 Gravitational Core Filter - "needle-point stoppers"

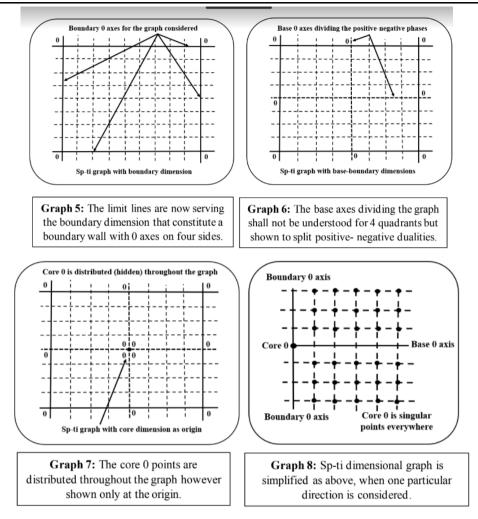




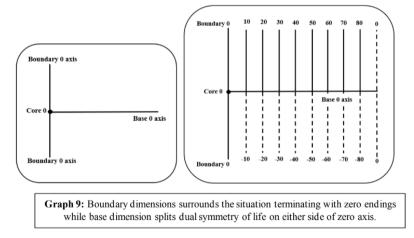
2. CONVENTIONAL GRAPHS (1 & 2) IN EXISTING STUDIES







2.2REPRESENTATION OF NEW SP-TI DIMENSIONAL GRAPH



2.3GENERAL NOTES ON DIMENSIONAL GRAPH

a) The core dimension is minimized to one point called origin.

b) The base axis has zero valuethat it is a reference between positive and negative phases. It also stops the object not to fall back into core dimension and serves a base.

c) The boundary axis surrounding the situation terminate with zero in all the directions instead of infinity, meaning structure of space-time is finite.

d) The graph could be brought to the surface level (Macro-scale) where the core dimension is minimized to an origin point(zero) with a baseline of zero axis.

e) The graph could also be placed at the depth of space-time to observe variations at quantum level where the values are binary (0s & 1s).

International Journal of Advanced Research in Physical Science (IJARPS) Page | 3

f) Core points all over the graph showing 0s and 1s everywhere means the particles existing along with their fundamental field waves where axis of the wave has value zero (0) and peak point of the wave has the maximum value of one (1) for the particle to exist.

Note_1: The above dimensional graph shows the values 1, 11, 21, 31, 41.... are beginning with base axis value zero, how come it will have the continuity of 10-11, 20-21, 30-31 and so on.

As we know at the bed of space-time it is 0s and 1s everywhere means, the quantum nature is the hidden ultimate reality and shall not be eliminated at the macro-world.

Thus, the graph brought to the macro-scale still has the coredimension at least in the origin. However, zerosare hidden intermediate points between every two consecutive numbers in any direction, to be noted. If everywhere it is 0s and 1s then, the counting starts only when a particular direction is considered like first 1, second 1, third 1, fourth 1.... which finally led to the decimal number system of 1, 2, 3, 4, 5... in our day-to-day life. Zero constitute a reference point or line that splits the duality. Further, the zero that comes after a number also becomes a number like 10, 200, 5000 and so on.

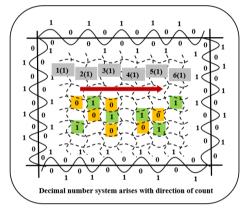
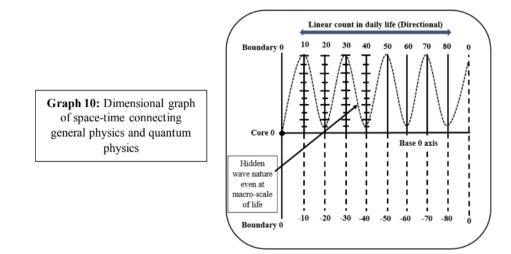


Fig 193

Hence, dimensions shall be minimized only for plotting feasibility but none shall be removed from the graph completely. When zooming into the graph for observing variations of objects at reduced space-time scale, these hidden dimensions come into play.

Note_2: The graph also shows that the values after 10, 20, 30 and so on, has to reach to the bottom and then raise from 11, 21, 31 and so on correspondingly, this will smoothly trace a waveform. What does this representation mean?

The intermediate zeros indicate the axis of the waveform where the value of a particle falls to zero. The particle again raises to one at peak point of the wave. This wave is even present at the macroscale but remains unobserved, to be noted. Even if only the positive phase of life is considered the waveform could not be eliminated. The scale between any two consecutive decimal values must have this hidden waveform. Hence, the scale of the dimensional graph chosen in 10s(Units) will have a wave track between 10-20; 20-30; 30-40 and so on, while 10, 20, 30 counts shall be linear for daily life calculations as shown in graph 10.



This way of understanding does not lose connectivity at any point. This is the point in existing studieswhere general relativity and quantum mechanics are left to be two different fundamentals isolated from each other with contradictions too.

3. THEORY OF RELATIVITY TO BE SOLVED FOR ITS DUALITY

The application of Sp-ti graph could be seen with the following examples.

Now, we will see some known thought experiments based on relativity and how their drawbacks are unnoticed in existing studies. And then plot them in singular perspective with the dimensional graph.

- 1) Observation on relative speed between train and a ball.
- 2) Human perspective of space and time appearing to be relative.
- 3) Twin theory paradox (aging difference with speed of light).

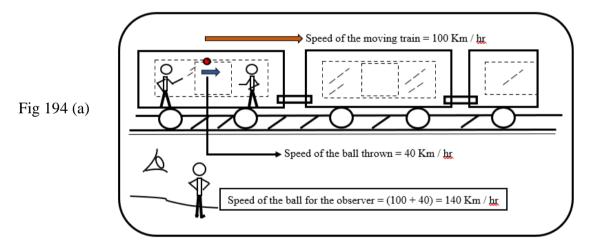
3.1 RELATIVE SPEED IS A MISCONCEPTION

According to relativity, there are two convenient values for one situation in terms of observation,

1) Children playing within the train compartment as shown in Fig 194(a) experiences the ball with the speed of 40 Km / hr.

2) The observer away from the train, sees the speed of the ball is already 100 Km / hr with the moving train and so the total speed is 140 Km / hr.

Now, we will see what are the misconceptions with this thought experiment in duality (relativity) and its solution in singular perspective.



We use the **Sp-ti dimensional graph** to plot the speed of the ball and the hidden factors associated with it.

Important Note: The speed of the train and the ball shall not be compared to be a mutual aspect, as the train has a constant acceleration from its driving energy source whereas the ball is thrown with the force of the person whose speed persist only for a while. And also, the ball is a dependent object as long as it is travelling in the train.

3.1.1 NEW INTERPRETATIONS IN SINGULAR PERSPECTIVE

Speed of the moving train = 100 Km/hr.

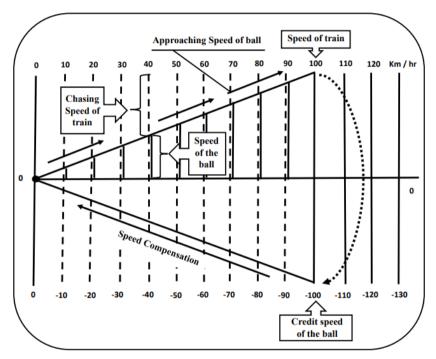
> The children playing with the ball thrown between them has a speed of 40 Km/hr within the compartment. The ball is a part of train, as long as one driving energy source of the train is considered.

As soon as the ball is released (thrown) from the hand in the direction of motion of the train, it loses the previous source of acceleration and thus its initial acceleration point is not zero but lags by -100 Km/hr.

This speed held by the object (ball) is called as **credit speed**. This credit speed is actually provided by the moving train to the ball (at rest position in it). Now, if the ball is thrown at a speed less than the speed of moving train (Within the credit range of 0 to 100 Km/hr), it results in two case studies,

Case1: When the ball is considered for a forward throw, the train speed is available as credit speed of the ball. So, as soon as the ball takes its new speed, it has to account for the previous speed accordingly, which could be termed as **speed compensation**.

Case2: If the ball is thrown opposite to the direction of motion of train, the credit speed still has opposite face however this time, reverse throw assists for quick speed compensation than the previous case.





> The path of the ball entering into new speed value is shown to jump from +100 to -100 initially and then has to go through speed compensation to reach 0 first.

From zero, the ball has to again approach the speed of train through which, at any point in its approaching path, it is caught by the chasing speed of the train which is trying to cancel it, for the ball to attain the initial credit speed (come back to its rest position).

However, this cancellation is not happening due to catch-throw-catch played between the two children alternatively, changing the direction (forward and reverse) of the ball.

> Only after all the compensation of speed with the previous source active with +100 Km/hr, the ball could be assumed for its actual speed calculation.

 \succ So, the dimensional graph of space-time clearly plots and traces the path of the ball entering and leaving the other unobserved dual symmetry of life.

Thus, the speed of the ball is not relative at any point of space-time. And it could not be taken for two granted values such as 40 Km/hr for the children playing and 140 Km/hr for a person not involved in the activity and observing the train from a distance.

Case 3: If the ball is thrown more than the speed of moving train (say) 120 Km/hr now, its actual speed is 20 Km/hr in singular perspective (observed by nobody).

> Now, to what extent this value is real or is it possible to realize this speed in daily life? As this value is not seemed to be applicable for the children experiencing their play speed inside the compartment (40 Km/hr) or the person observing the ball speed from outside the train (140 Km/hr) either.

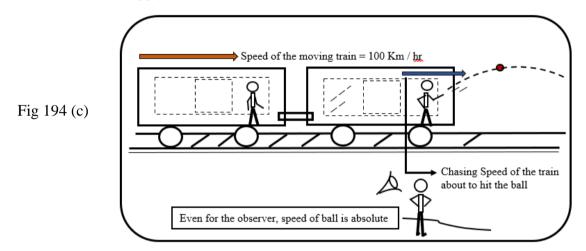
 \succ Of course, this value could be realized in the same situation. The children playing within the compartment will never know the chasing speed of the train. The ball could be hit by the train for the following two reasons,

The speed of the ball does not have a constant acceleration and just thrown with a force that keeps dropping down its speed.

Even if some constant accelerating source maintains the ball speed but it is less than the train speed, then also the train hits the ball.

This could be realized if one of the children possibly stand in the first compartment and throw the ball right in front of the moving train, where it is not caught by his partner but it is only the train that catches the ball at every point in its travelling path.

It literally means that the real values obtained at some other point of space-time as in the above illustration, does not apply for human **observation point of viewfrom different reference frames**.



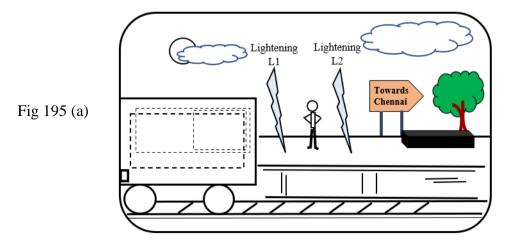
> Thus, the reality is filtered for every individual consciousness varying from one another to serve each one's life purpose separately, which is possible only in terms of **Sp-ti frames**. [Ref: Previous journal on particle physics].

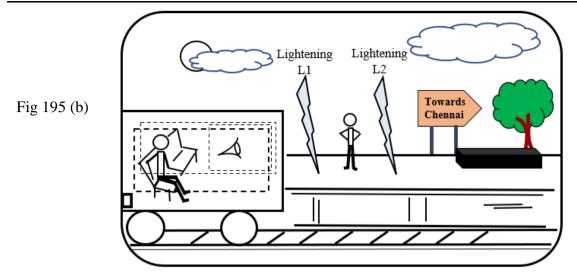
3.2RELATIVE SPACE AND RELATIVE TIME ARE ALSO MISCONCEPTIONS

Sir Einstein discovered that the **speed of light is constant** in vacuum for all observers in all reference frames. With this, he imagined a thought experiment as follows,

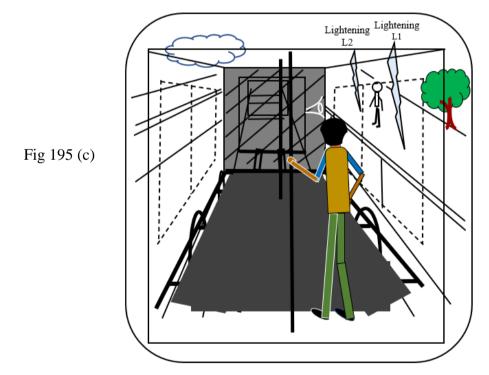
A person standing in a railway platform, two lightenings strike the ground on either side of the person at the same time. So, the person sees the strike to be equally hitting the ground with same timing.

How does this situation appears to an observer in a train approaching the platform. He sees the first lightening towards him, to strike the ground first and the second one later. Due to this cross perspective, Sir Einstein concluded the space and time are relative to the observers of different reference frames. It could be visualized as follows,



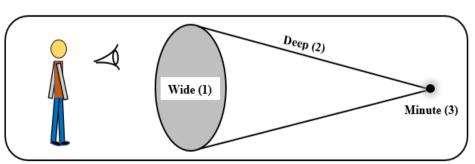


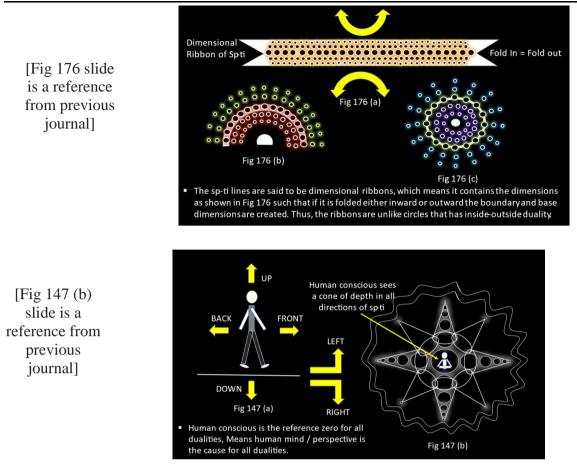
• How the above said perspective is misleading could be shown and solved with real dimensions of space-time. Space is said to be relative based on the appearance, that the length of lightening L1 (closer) is more than the length of the farther one, L2 as shown in Fig 195 (c). Here, time is said to be relative based on the appearance of lightening L1 striking the ground first and L2 later.



• Literally, with the angle of view of the observers of different reference frames, the space and time are said to be relative. How come the appearance of life from different angles could be considered to cause physical changes? Or could be assumed for physically different situations from one another? Anyway, we will bring the real dimensions to apply here.

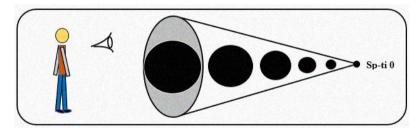
Fig 196(a)





Now, with the above reference figures 147 (b), 176 (b) and 176 (c), the cone of depth or the dimensional cone could be represented as follows,

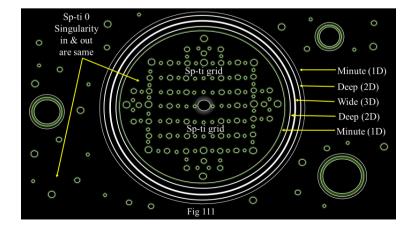
Fig 196 (b)



3.2.1 SHADOW OF REAL DIMENSIONS

To prove space and time are not relative pertaining to observers of different references frames, we need to show how human perspective sees the cone of dimensions. Moreover, does this cone really exists in space-time? If so, how it is formed? discussion as follows,

[Fig 111 slide is a reference from previous journal]

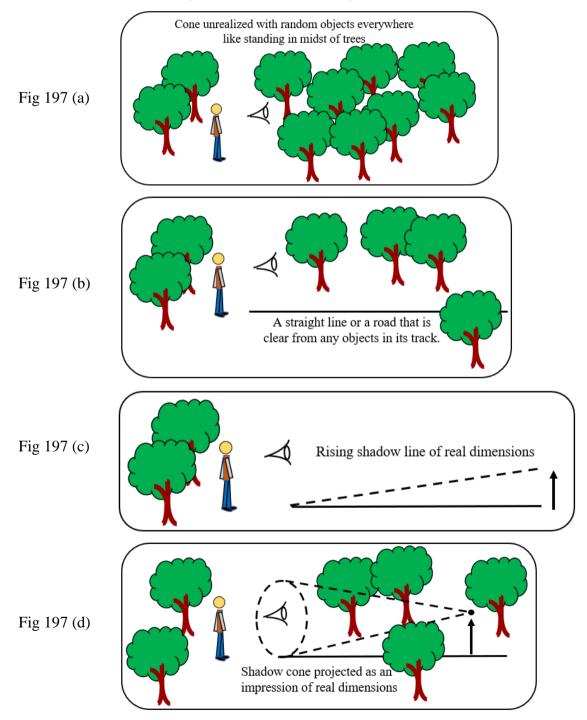


The ref Fig 111 is showing only the base and boundary dimensions, each to have one set of aspects. However, as per Fig 176 (a), single dimensional ribbon has a base-boundary duality created while folding the same ribbon inward or outward.

So, we shall consider the outer rings as one set of aspects (Wide, deep and minute) is shared between base-boundary dimensions, while another set on the inner side is associated with core dimension. Means, though it appears like 2 set of aspects, there is also a hidden third set of aspects but could not be shown in this representation.

The base-boundary dimension constitutes the picture of life in space-time medium. This picture appears like a cone to human consciousness. This cone is an impression left by the objects of space-time due to their associated dimensions. The outer dimensions (base-boundary) are actually shared by the objects and the medium, in common for mobility. The inner core dimension is associated with the individual objects for its evolution and purpose of living.

Now, how to trace the cone impression of dimensions in space-time medium shall be seen as follows,



• When we stand in a highway tunnel, it appears like a cone with an end point. The way the objects are seated with wide, deep and minute aspects associated with base-boundary dimensions has an overall appearance of a cone.

• Fig 197 (d)shows that it is just a shadow cone clearly seen from side view including the observer, while the size of the trees does not undergo any physically changes whereas, from observer's view, even the same size of the trees in a row, appears smaller towards the end point as shown in Fig 198 (b).

• Thus, the cross perspective of space and time said to be relative to observers of different reference frames is a misconception, as it is a projection called as **"Shadow cone of real dimensions"**.

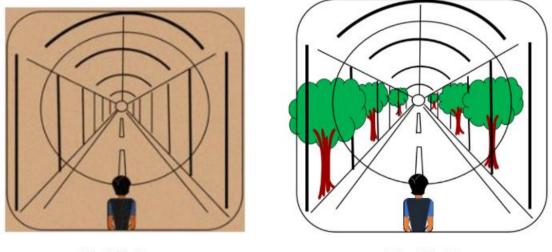


Fig 198 (a)

Fig 198 (b)

It is obvious that, if there could exists a real cone of real dimensions? Of course, it exists however it is inaccessible, as human life is limited to space-timeprovided in terms of physical plane whose nature to us, is samelike **"a fish born in the sea cannot live beyond the sea"**.

3.3MISCONCEPTION IN TWIN THEORY BASED ON SPEED OF LIGHT

We have already discussed how speed factor of light causing time dilation is not about the measure of time but it is indicating the depth of space-time. Still, we interfere in the concept of relativity for its misconception even logically.

Consider twin brothers, one of them is sent to space where he would travel at the speed of light. The other person is allowed to live on earth. According to relativity, travelling at the speed of light the clock slows down to reach time zero. After so many years of space travel at light speed the twin brother on his return, remains younger than his brother on earth who would have passed those many years and obviously must have grown old.

Now, we will discuss how blunder the concept is conveyed. Please note that the object itself travelling at a speed does not realize time dilation and it is only the observer who sees the variation from a different reference frame and accounting for the time dilation.

So, physical changes in time, is not happening at any point, it is still an observation point of view. However, in case of twin theory, the observer itself is eliminated and the theory takes advantage of time dilation, assuming it a workingmodelwhich does not require an observer anymore and the twins will directly undergo the aging process differently.

- The age of twin brothers = 20 years old
- One of the brothers, **Ram** is leaving to space and travelling at the speed of light.
- The other twin brother, **Laxman** continues to live on earth.
- After several years, Ram on his return from space, meets his brother Laxman on earth.

International Journal of Advanced Research in Physical Science (IJARPS) Page | 11

• According to the theory of relativity, the age of Ram remains almost the same (20), while Laxman who passed those many years must have become older.

- What is misleading here? Consider the no. of years the twins were separated is 40.
- Now, from whose point of view between the twin brothers this aging has to be calculated?

• For example, Laxman says his age is 20+40 = 60 years now and Ram has returned to earth after travelling 40 light years in space so, his age also must be 20+40 = 60 years.

• How come travelling even in light years would make the person remain young?

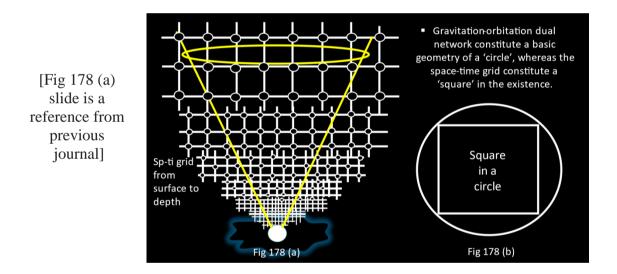
• In general light years means, distance travelled by light in one year time. So, here the **light** years, means only the distance and not time. So, Ram could not exaggerate that it is light years of travel for him because, the count is just 40 years for Laxman on earth.

• Hence, travelling so many miles in space does not result in slow aging is the acceptable truth.

4. GENERAL DISCUSSION

Points to remember

 \bullet If it is possible to access the **real cone of real dimensions** then a person could reach the string-like representation shown in Fig 178 (a) at its bottom lineand find oneself in the shoreless ocean of liquid darkness appearing to have infinite ends same like the Universe we live now, which is on its surface.



• The shadow cone is traced from side view with no change in size of the objects, however for the person or observer's straight vision, the objects in the cone are reducing in size towards the end point which is clearly, just an appearance.

• The shadow cone is an impression of real dimensional cone which is inaccessible for human to touch or alter it. Means nature provides the medium of space-time for all objects including human and contains them inside the box through some special means called **"dimensions"**.

• The objects of the Universe appear and disappears through real dimensions but does not realize or find them to exist separately, as the objects evolve – grow - live and finally collapse, all along with their dimensions in singularity.

• The directional graph that is followed in existing studies with the dualities such as Forward-Backward; Left-Right and Up-down have the hidden basic duality of base-boundary dimensions, to be noted.

5. CONCLUSION

The thought experiments of relativity are discussed to show the misconceptions in it. The Sp-ti dimensional graph is new for studies whereas the conventional graph is only based on moving of the

object in three possible directions namely Forward-Reverse; Left-Right; Up-Down dualities on the surface of sp-ti medium. The conventional graph is applicable for daily life examples at macro-scale. However, the Sp-ti graphdeveloped based onreal dimensions, helps in plotting theobjects starting from the point of creation (Sp-ti 0) – nano particles at quantum range - objects at macro-scale – heavy objects like planets, stars – till black holes of space-time medium, in singular perspective. The **Sp-ti dimensional graph** could show the path of evolution of every object traced from depth to the surface of space-time medium through core – base – boundary dimensions and then only, enter into the **conventional graph based on directions**. Means the graph of macro-scale, when taken deep into space-time, becomes non-directional where real dimensions are revealed. Thus, the**"theory of duality (relativity)"** is shown to solve in singular perspective. **Gravitation** is an unknown aspect in existing studies while our articles are even explaining its **functions as filters** protecting the evolved life objects or the Universe itself from Sp-ti ocean waves, whose studies are new and concerned with technical knowledge of space-time.

REFERENCES

[1] Self-reference_1: Length contraction and time dilation with real dimensions of space-time. [Volume-9, Issue-8, 2022]. (International Journal of Advanced Research in Physical Science (IJARPS) – www.arcjournals.org).

[2] Self-reference_2: Length contraction and time dilation are experimental but non-physical variations in space-time. [Volume-9, Issue-8, 2022]. (IJARPS – www.arcjournals.org).

[3] Self-reference_3: General relativity Vs Quantum mechanics; Incompatibility solved with real dimensions of space-time. [Volume 9, Issue-9, 2022]. (IJARPS – www.arcjournals.org).

[4] Self-reference_4: Particle physics based on real dimensions of space-time. [Volume 9, Issue 10, 2022]. (IJARPS – www.arcjournals.org).

[5] Self-reference_5: Fundamental study of space-time – (Zero, One and Infinity). [Volume 10, Issue 01, 2023]. (IJARPS – www.arcjournals.org).

[6] Self-reference_6: Fourth dimension of space-time – Study of gravitation; part-1. [Volume 10, Issue 01, 2023]. (IJARPS – www.arcjournals.org).

[7] Self-reference_7: Fourth dimension of space-time – Study of gravitation; part-2. [Volume 10, Issue 02, 2023]. (IJARPS – www.arcjournals.org).

[8] Self-reference_8: Fundamental Theory of Singularity. [Volume 10, Issue 03, 2023]. (IJARPS – www.arcjournals.org).

[9] Self-reference_9: New Study of Gravitation in Singularity. [Volume 10, Issue 04, 2023]. (IJARPS – www.arcjournals.org).

[10] Self-reference_10: Fundamental Theory of Singularity; Formulated study – 1. [Volume 10, Issue 08, 2023]. (IJARPS –www.arcjournals.org).

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	One-eye (Singular)	Physical
2D	Width	Deep	Base	Human Conscious (Dual)	Meta-physical
3D	Height	Minute	Core	-	Spiritual
4D (a)	Surface radius	Gravitation (rope)	Singularity	-	-
4D (b)	Deep radius	Orbitation (belt)		-	-

AUTHOR'S BIOGRAPHY



Prabhakaran Natesan, Tamil Nadu, India. [shanatcop@gmail.com] Bachelor's degree in Electrical and Electronics Engineering (2011) - Affiliated to Anna University, Chennai. General relativity and Quantum mechanics are followed to be two fundamentals of nature, contradicting each other. "New study of gravitation and fundamental theory of singularity" published recently - year 2023, serves a single frame work that accommodates the above said, two major branches of papers "Theory physics. The series of 9 nos. on of **singularity**"(**unformulated**)are published as it is originally worked, to be useful for everybody's reference.New series of journalsshall containformulatedstudyof

singularitywith more details and technical drawings,for easy understanding toserve educational purposes.

Citation:*Prabhakaran Natesan (2023) "Fundamental Theory of Singularity; Formulated study - 2"International Journal of Advanced Research in Physical Science (IJARPS) 10(10), pp. 1-14, 2023.*

Copyright: © 2023 Authors, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.