

## Lorentz Length Contraction Analysis (SR Discussions) (Part II)

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### Abstract

Paper Hypothesis

Human Realization process Is The Universe Reference Point

### 1- A Basic Argument

Let's remember our question in the previous paper

Lorentz Length Contraction Analysis (SR Discussions)

<http://vixra.org/abs/1911.0181>

The question was:

The relativistic features are:

- I. Length Contraction
- II. Time Dilation
- III. Mass Increasing

Why these 3 features only are effected by travel by light velocity (approximately)?

Let's try to analyze this question as possible

Einstein told us that – our false concepts are –

- (1) The time - interval between 2 events is independent of the condition of motion of the body of reference
- (2) The distance - interval between 2 events of rigid body is independent of the condition of motion of the body of reference

(Albert Einstein Book – Relativity: The Special and General Theory- Section 11)

Simply he tells that – Point motion effects one its time and distance definitions

Based on that – Spacetime Concept is created-

Based on what Einstein had supposed this idea? Based on Lorentz Equations

(1<sup>st</sup> Equation)

$$m = \frac{m_0}{\sqrt{1 - (v^2/c^2)}}$$

(2<sup>nd</sup> Equation)

$$T = \frac{T_0}{\sqrt{1 - (v^2/c^2)}}$$

3<sup>rd</sup> Equation)

$$\gamma = \frac{1}{\sqrt{1 - (v^2/c^2)}}$$

Equations 2 & 3 supports Einstein explanation – that time & distance depends on motion – based on which Spacetime concept is created

But

What about the first equation?

Mass Also Is Changing As Relativistic Effect – as similar to time and distance – now Spacetime concept doesn't include the mass! Why?

Let's try to analyze this point with some deep in following

### **Particle Length Contraction (Distance Contraction):**

In Einstein definition for length contraction – he used the distance and particle length as equivalent to each other...!

How to understand that?

In lorentz experiments particle length contraction is discovered, and in Feazu experiment the distance is contracted..!

Both experiments deal equally with particle length and distance contractions – how the distance can be considered equivalent to particle length?!

### **Now We Have**

- 1- The mass which changes as similar as the time and distance but spacetime concept ignored it
- 2- Particle length is contracted as similar to the distance

### **Shortly**

We have 4 players here:

Time, distance, mass and particle length

2 of them (**Time And Distance**) are used to create The Spacetime Concept – and

2 of them (Particle Mass and Length) were left as data without explanation

I want to say that – these 4 features must be changed based on the same reason – which we know– "**Light Velocity**"

Light velocity –which is a main player in the universe geometry – basically because of the equation  $E=mc^2$  which makes all matters are relative to light velocity

So the light velocity causes these 4 relativities effects (features)

### **Conclusion**

**Particle Data must be created based on Particle Motion (and relative to light velocity)!**

Now

We have no Particle Length Rest Concept, but we have A Rest Mass Concept –

Why we believe in rest mass concept –where particle length is changed as relativistic effect and no guarantee that length (rest) should be reserved – based on what Rest Mass concept is created and be acceptable?

## 2- Light Velocity As An Effective Player On The Universe Geometry

What do we know about light velocity?

- 1- It's A Basic Factor In Matter Energy ( $E=mc^2$ )
- 2- Relative to light velocity, particle properties (length, mass, time and distance) are changing
- 3- The human mind uses electric pulses (and may produce electromagnetic waves)
- 4- Solar Planets motions are light beams motions – but we see as matters motion because we are restricted and controlled by Earth motion and our bodies effect (Planet Motion Depends on Light Motion <http://vixra.org/abs/1911.0091>)

Again let's review our question

If a particle (with length  $L_0$ ) travels by speed of light (approximately), it will suffer from Lorentz length contraction and be seen with a contracted length ( $L_1$ )

So – the question is -

"What's happened For **The Particle Own Nature**?"

The theory states "The Proper Length  $L_0$  Never Change"!

We have 2 directions to choose from:

(1<sup>st</sup>) to accept the idea that – the particle own nature doesn't change and the contracted length is seen by us as a wrong vision (as mirage) but the particle length itself has no real change

Or

(2<sup>nd</sup>) to accept the idea that – the particle own nature changes with this motion – and by such way – the particle nature should be created relative to speed of light!

I choose the 2<sup>nd</sup> choice- Why?

Because – the 1<sup>st</sup> choice tells us that – The particle own nature is defined clearly when no difference in motions velocities between me and this particle – that means – I'm **The Universe Reference Point** – and this is similar to a person looks at a mirror

Specifically for the previous reason we should refuse the assumption that "**Particle Own Nature doesn't Change**" or the statement "The Proper Length  $L_0$  Never Change".... In fact ....**Particle length is changed already**

Let's consider this point with some deep analysis in following:

We deal here with the assumption "Particle length doesn't change and the contracted length is only an imaginary vision"

How do we measure the particle length in static case (before any motion)? and how do we measure the moving particle length?

Where we use **The Same Methods** in both cases – practically and logically – we have to consider both results are equal in power – no result is better than the other because both are produced by the same methods of measurements..

Moreover that I consider that –Particle in static should be considered as a special case because it moves by my velocity

### Conclusions

(1)

Particle own length is contracted by high velocity (light velocity approximately)

Because I'm not "The Universe Reference Point" I refuse the statement "The Proper Length  $L_0$  Never Change"

(2)

Particle Data is created relative to light velocity

(3)

Light Velocity should be a player in **Human Realization Process**

**i.e.**

**human mind realization process, light velocity and particle data are created relative to each other**

That Force Us To Provide The Following conclusion

### A Conclusion:

**Human Realization process Is The Universe Reference Point**

Research Paper "The observer effects on observation results (SR tells)"

<http://vixra.org/abs/1911.0040>

or

[https://www.academia.edu/40829783/The\\_observer\\_effects\\_on\\_observation\\_results\\_SR\\_tells](https://www.academia.edu/40829783/The_observer_effects_on_observation_results_SR_tells)

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