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Mathematical Blunders in the Special Theory of Relativity

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1. **Abstract:** Einstein formulated certain definitions in the special theory of relativity, but in its implementation, used different definitions for the same event. This is against the rules of mathematics. No theory, even if it has a 100% match with experimental results can claim it is a proper explanation of science. It is unfortunate that non-scientific non-mathematical theories match experimental results. Any correct theory not only needs that the results meet experiment, but it is also essential that the definition and formulation must be scientific and mathematically correct. If it is not so, then the theory is not scientific. Even if it provides satisfaction for the human mind, a non-scientific theory is no help in the advancement of scientific theory.

2. **Einstein,s special theory of relativity fails to explain the situation in three inertial frames of reference.**

Three-Frame Theory of Time Dilation

Abstract :
In the special theory of relativity, two new unresolved paradoxes arise. These paradoxes are displayed in the three-frame and in the two-frame physical scenario. For the understanding and communication of the paradoxes, the three-frame theory has been developed. In this theory, the following results are described.

Details of the three-frame theory:
There are three frames in space moving at the same velocity, meaning that the relative velocity among them is zero.

Through Fig. 1, we can show the situation:

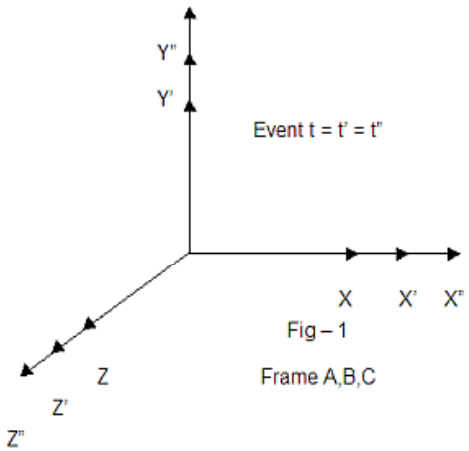
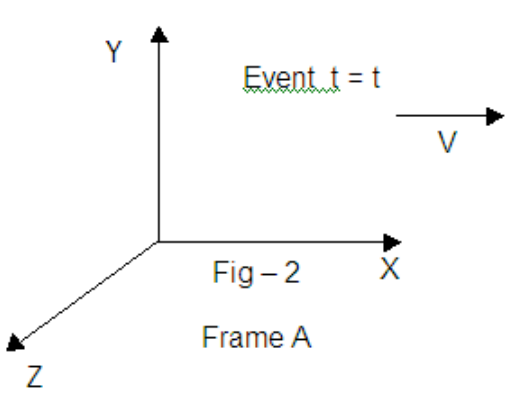


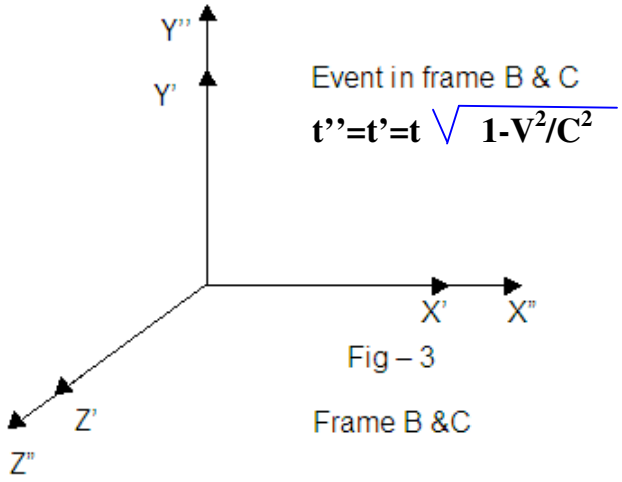
Fig – 1

After movement, frame B and frame C attain the same velocity V relative to frame A and in this situation, events in frame B and in frame C remain the same in both but because these two frames are in relative motion with A, means an event in these frames relative to frame A are dilated by a factor designated by special theory of relativity of

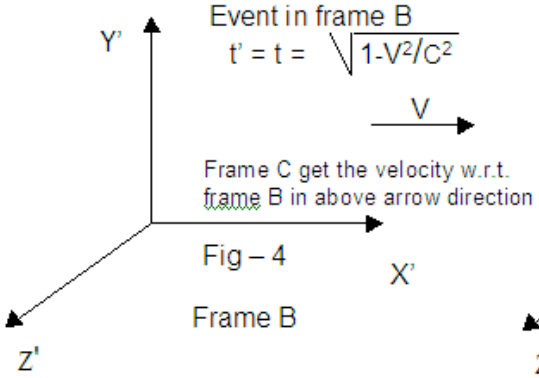
$$t'' = t' = t\sqrt{1-V^2/C^2}$$

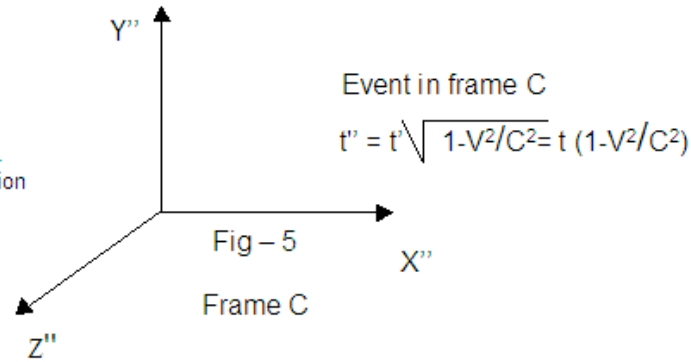
This situation is shown in fig – 2 & 3



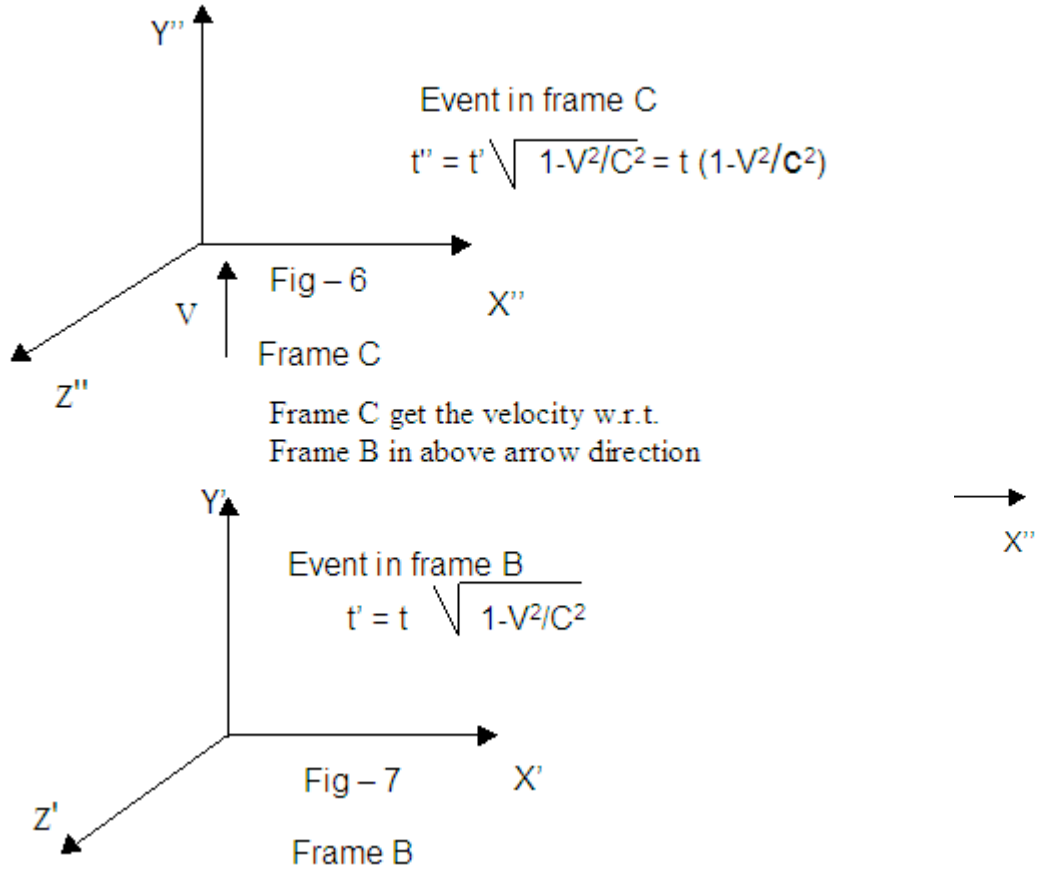


Now we know frame B and C are independent free space frames and we also know that they are independent of frame A. This means that A hasn't any effect on B and C and also B and C haven't any effect on A. Frame B and C are at the same velocity with respect one another and are free to achieve relative velocity in any direction with only the effect of velocity. Through the diagram we can show the first situation in which frame C achieves the velocity w.r.t. frame B in the direction parallel to the X axes (fig 4 & 5)

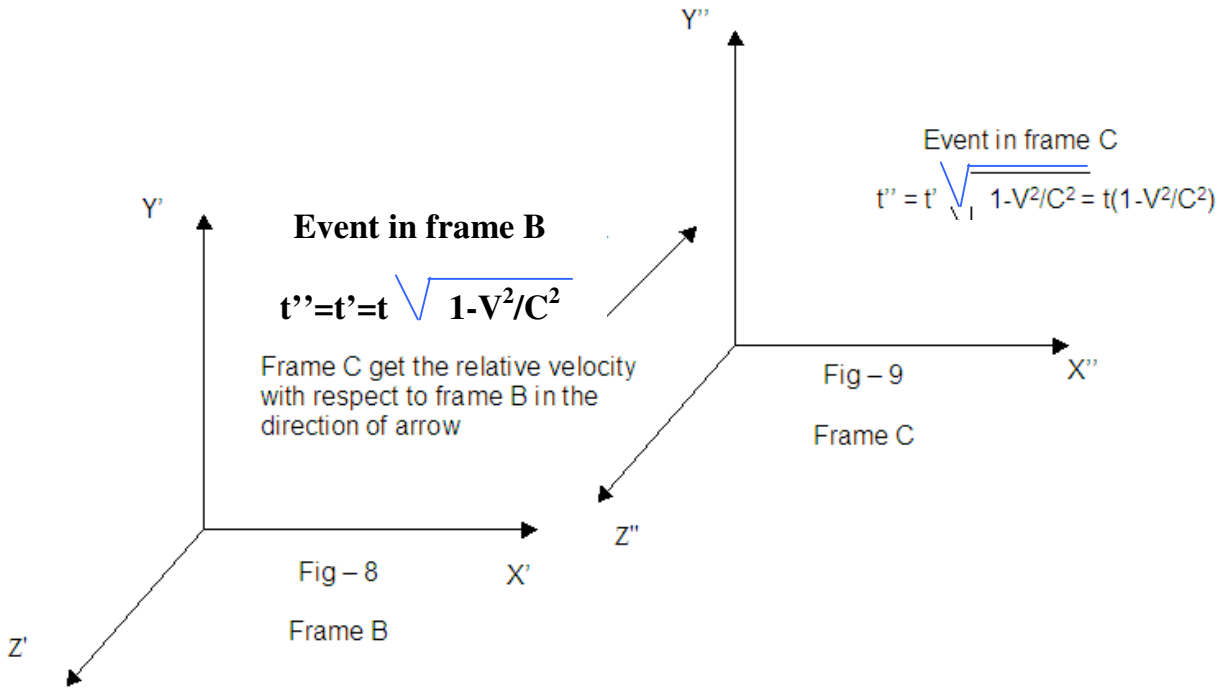




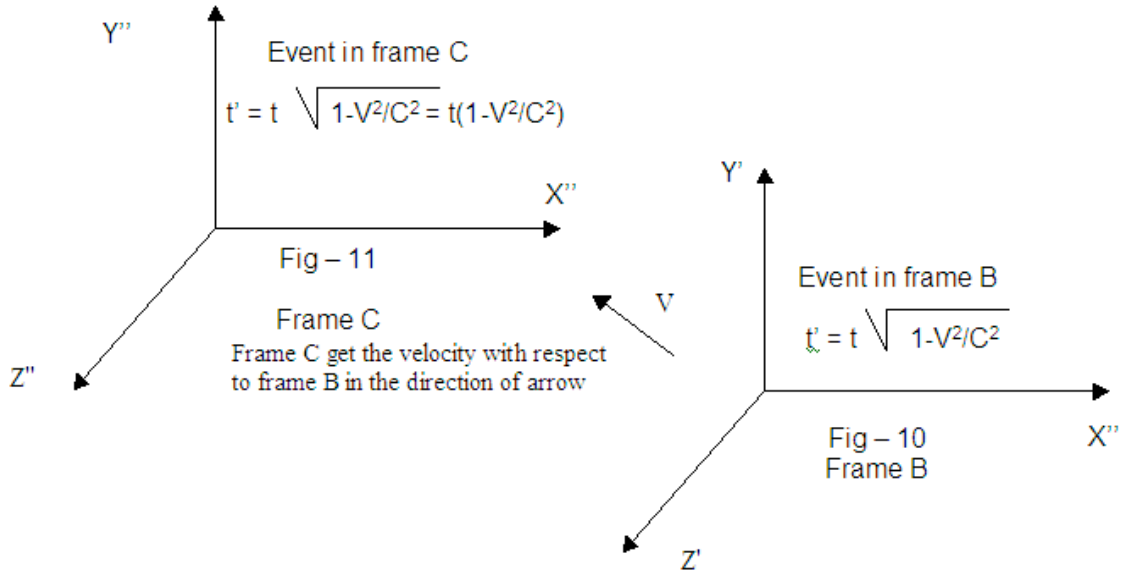
The second situation is where frame C achieves V velocity w.r.t. frame B in the direction parallel to the Y axes (fig 6 & 7)



The third situation in which frame C get the V velocity w.r.t. frame B in the direction inclined to X axes as in direction of arrow (fig 8 & 9)

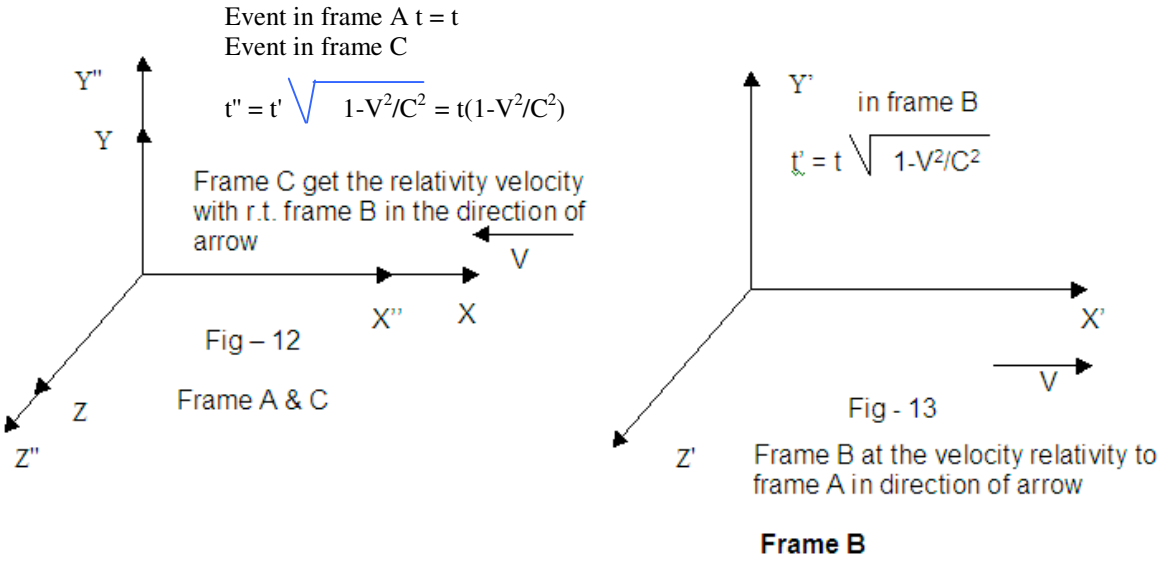


Fourth situation in which frame C achieves the V velocity w.r.t. frame B in the direction inclined to the Y axes as in the direction of the arrow (fig 10 & 11)



i.e.we can achieve infinite frames of reference in different directions with the same effect on events in all directions. In the above infinite references, one reference frame can achieve the velocity of frame C with respect to frame B in the direction of frame A. In such a situation, the velocity of frame C becomes equal to the velocity of frame A with respect to frame B and in this situation, frame A and C are at the same velocity. We can show this through the diagram

The fifth situation in which frame C gets the V velocity w.r.t. frame B in the reverse direction & parallel to the X axis (fig 12 & 13)



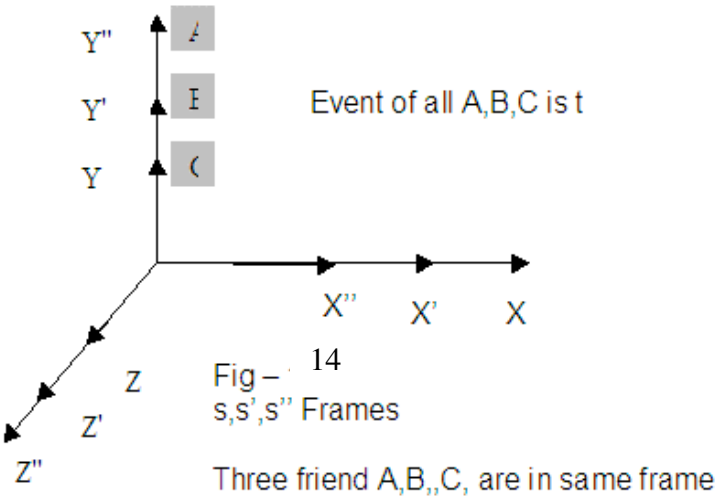
We know from the above, frame C and frame A are at the same velocity. This means that events must remain the same in both frames according to the special theory of relativity, but in the above described and achieved situation, the time of events are different in frame A and in frame C by the factor

$$t'' = t' \sqrt{1-V^2/C^2} = t(1-V^2/C^2)$$

This means the situation explained and achieved by the three-frame theory is a major contradiction to the special theory of relativity.

UNRESOLVED NEW PARADOX OF TIME DILATION IN SPECIAL THEORY OF RELATIVITY

Situation One in which three friend A,B,C are in same frame (fig – 1)



14

Fig – s,s',s'' Frames

Three friend A,B,,C, are in same frame

Situation two, in which two friends, B & C arrive in another frame which is moving at V velocity w.r.t. the first frame in which friend A is stationed (fig – 15 & 16).

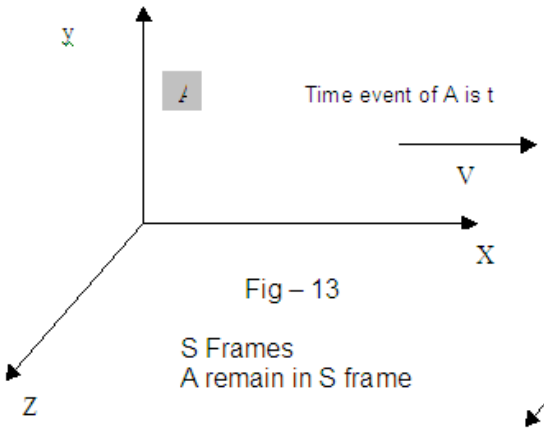


Fig – 13

S Frames
A remain in S frame

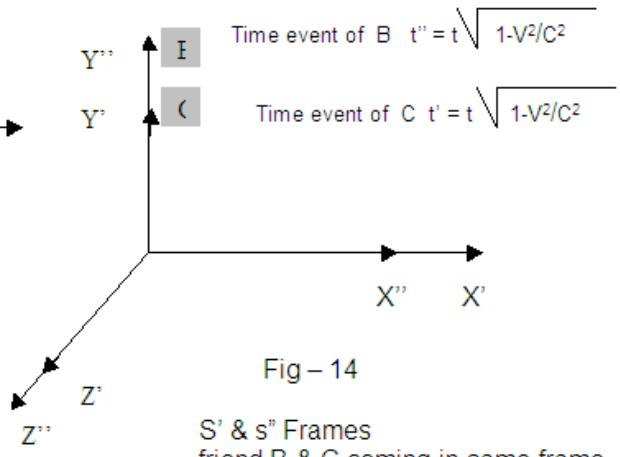


Fig – 14

S' & s" Frames
friend B & C coming in same frame

Situation three in which friend B comes back into the frame of friend A which is at V velocity w.r.t. the frame of friend C (fig – 15 & 16)

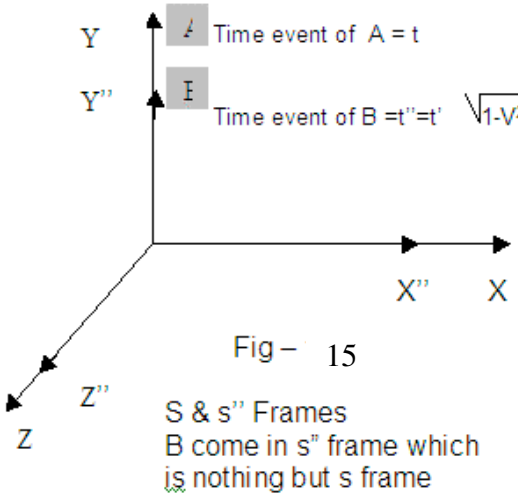


Fig – 15

S & s'' Frames
B come in s" frame which
is nothing but s frame

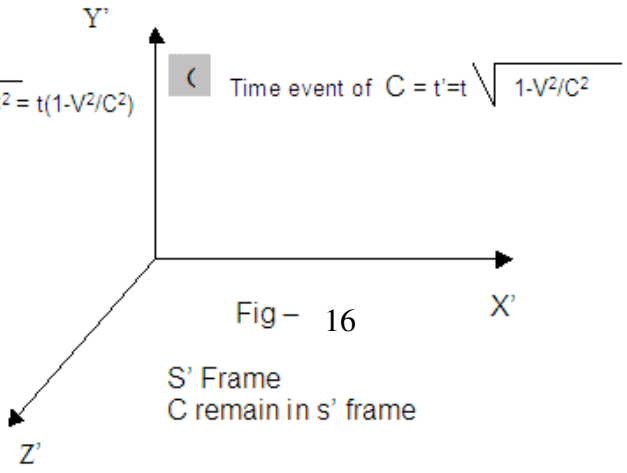


Fig – 16

S' Frame
C remain in s' frame

Consider a physical scenario shown by above diagram (fig - 14) in which three friend A,B, C are in the S frame and they plan a space journey, and they are also familiar with the special theory of Relativity. But the spaceship has only two seats, so only two friends, B and C are allowed for the journey. Thus two friends, B and C (fig – 16) go on the journey with velocity V compared to light. The third friend A (fig -15) remains in the S frame. In the spaceship, the two friends B & C discuss the results of the special theory of relativity determining that their third friend A will become much older than they. A also thinks the same thing. After some time, the friends in spaceship forget that they came from the S (fig - 15) frame. They plan that one friend go for some time on a space journey and other remains in the same position (fig - 18)

Friend B starts his space journey. Fortunately his direction is in the direction of frame S and after some time he reaches in frame S (fig - 17) the position where the third friend A is living.

Now we can see that what the three friends A,B,C think about each other.

Friend C thinks that the friend A is becoming older at faster time rate than he, and (C) is becoming older at a faster time rate than friend B. Friend A also thinks the same thing. But we know that the same frame have the same older time rate. In the above created and explained situation, the two friends A and B h are in the same frame but having different aging time rates. This is a great unresolvable paradox in the special theory which proves that the theory doesn't have any logical ground.

UNRESOLVED NEW PARADOX OF LENGTH CONTRACTION IN SPECIALTHEORY OF RELATIVITY

Consider the following physical scenario

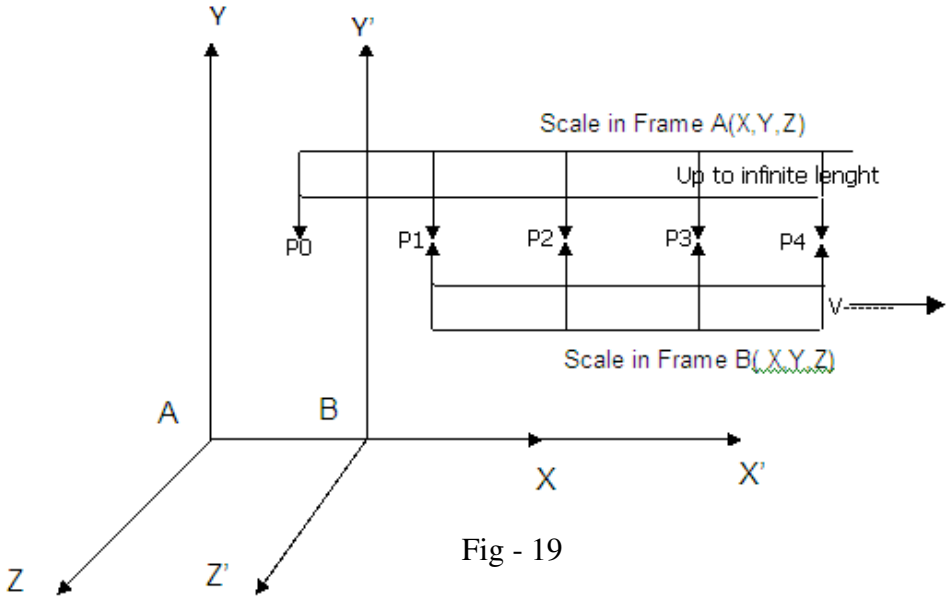


Fig - 19

There is in the above diagram, two frames. In one frame, say A(x, y, z,) the observer has an infinite length rigid scale, points of which are marked at equal lengths. In the other frame, say B (x',y',z') there is a scale similar to the scale of frame A (x,y,z), but this scale has a definite length of say, four marks placed as shown in the diagram. If it has a velocity then it remains in touch with the scale of frame A (x,y,z), and is arranged so that when a point of both scales are in touch with each other, then a light signal is sent to each frame. Once this is arranged, the frame B(x',y',z') starts to accelerate and achieved a velocity.

Now we know that what happens to the length of the scale of frame B(x',y',z'). When this frame starts to accelerate, we can discus point-wise and first see at point P3, it advances towards to point P4 and after some time point P3 reaches point P4 and point P4 advanced to the next point and so on. We can show when point P3 reaches point P4, point P2 reaches point P3 at the same time and Point P1 reaches point P2 and this process advances with time.

Now the great Question regarding length contraction is, why a point has not reached the next point, when it has reached the previous point because in the frames, all points are at equal distance according to the special theory of relativity. This is the great unresolved paradox of length contraction in the theory.

3. Three main mathematical Blunder in special theory of relativity:

1. An event in a reference frame defined in the theory has a velocity C, assumed in consequence as stationary i.e. zero velocity.

2. For formulation of the theory, the derived quantity (velocity) is used as a fundamental quantity.

3. Defined time-dependent Co-ordinates in the theory on implementation in an event uses time-independent co-ordinates.

On the basis of the above blunders, the special theory of relativity theory produces false, unnatural and unacceptable results. Unfortunately, the theory appears to explain some experimental results. But the result may be otherwise explained. This is a wrong theory and gives little satisfaction to the human mind.

4. Wrongly defined consequences in the theory:

1. **Length contraction:** This is defined as an event which is in relative velocity with respect to an observer and which appears to contract the length. This is derived through the formula.

$$X'_2 - X'_1 = \frac{(x_2 - x_1) - V(t_2 - t_1)}{\sqrt{1 - v^2/c^2}}$$

In above formula it is assumed that, $t_2 = t_1$ which achieves,

$$X'_2 - X'_1 = \frac{x_2 - x_1}{\sqrt{1 - v^2/c^2}}$$

But this is mathematically wrong because x'_2 , x'_1 , x_2, x_1 are all time dependent co-ordinates if $t_2 = t_1$ Then $x'_2 = x'_1$ and $x_2 = x_1$ because X changes only with time and X' also changes only with time and it is defined in the theory.

$$X^2 + X^2 + Z^2 = C^2 t^2$$
$$X'^2 + Y'^2 + Z'^2 = C'^2 t'^2$$

2. **Time Dilation:** This is defined as an event which is in relative velocity with respect to the observer and appears to dilate time. This is achieved by the formula,

$$t'_2 - t'_1 = \frac{t_2 - t_1}{\sqrt{1 - v^2/c^2}} - \frac{v/c^2(x_2 - x_1)}{\sqrt{1 - v^2/c^2}}$$

And in the above formula, $X_2=X_1$ is assumed and reaches

$$t'_2 - t'_1 = \frac{t_2 - t_1}{\sqrt{1-v^2/c^2}}$$

But this is wrong because X_2, X_1 are dependent on time. If $X_2 = X_1$ then this means $t_2 = t_1$

3. Relativity of Simultaneity:
This is defined as a simultaneous event in one reference frame, is not simultaneous in another reference of frame if they are in relative motion and it is achieved by

$$t'_2 - t'_1 = \frac{t_2 - t_1}{\sqrt{1-V^2/C^2}} - \frac{v/c^2(x_2 - x_1)}{\sqrt{1-V^2/C^2}}$$

And in the above equation, we put $t_2 = t_1$ and then they reach

$$t'_2 - t'_2 = \frac{(-v/c^2 x_2 - x_1)}{\sqrt{1-v^2/c^2}}$$

But this is wrong because if $t_2 = t_1$, then $x_2 = x_1$ must be because X is dependent only on time t if time t' changes then only X changes if time does not change, X does not change because X = Ct

5. Conclusion: Conclusively, it can be stated that the special theory of relativity gives only satisfaction to the human mind and does not rest on scientific ground. It also does not have a mathematical or logical basis.

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