Solving the Einstein twin's paradox

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Abstract: This paper is using the theory of quantized time - length and a new model of internal structure of elementary particles by my expression [1] to solve Einstein twin's paradox.

1-introdaction

Each observer in relativity theory has his own measurement of time and this leads to twins paradox.[2],[3]
Assume one of the twins named A, goes away from earth with a ship by speed of about 98 percent of the speed of light and after a trip of five years goes back to earth. The other twin named B remains on earth. Based on the theory of relativity twin A after returning will find out that his brother has aged more than five years**.** Now based on relativity theory assume twin A, is stationery and B in motion, this issue will produce a paradox

2-Solving the paradox

Einstein twin's paradox does not solve unless we take flag the certainty of moton's motion with speed of light in the time and length quanta of particles[1].By this and determination the reflection of this motion in proportion with a inertial system we can solve the paradox. In other hand, motion is not an abstractive issue which is given to particle but it is depended to the particle by his own.
We assume the twin A is consist of following motons

$$A = \sum_{n=1}^{n=k1} a_i \qquad (1)$$

and the twin B include the following ones

$$B = \sum_{n=1}^{n=k2} b_i \qquad (2)$$

Then according to formula

$$\vec{V}^2 = \left(\frac{\vec{l}_{1(so1)}}{\Delta\vec{T}_{1(so1)}} \times \frac{\vec{l}_{2(so1)}}{\Delta\vec{T}_{2(so1)}}\right) - \left(\frac{\vec{l}_{2(so2)}}{\Delta\vec{T}_{2(so2)}} \times \frac{\vec{l}_{3(so3)}}{\Delta\vec{T}_{3(so3)}}\right) \quad [1]\ (3)$$

speed of twin A equals

$$\vec{V}_A^{\ 2} = \sum_{n=1}^{n=k1moton} \vec{V}_i \qquad (4)$$

Speed of twin B equals

$$\vec{V}_B^{\ 2} = \sum_{n=1}^{n=k2moton} \vec{V}_i \qquad (5)$$

Formula (3) is consist of two parts which the absolute part is:

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$$\vec{V}_0^{\ 2} = \left(\frac{\vec{l}_{1(so1)}}{\Delta\vec{T}_{1(so1)}} \times \frac{\vec{l}_{2(so1)}}{\Delta\vec{T}_{2(so1)}}\right) = \vec{C}^2 \quad (6)$$

$$\vec{l}_0 = \vec{l}_1 = \vec{l}_2 \ (\text{so1}) = 1.409\times10^{-15}\text{m} \quad (7),$$

$$\Delta\vec{T}_0 = \Delta\vec{T}_1 = \Delta T_2 \ (\text{so1}) = 0.47\times10^{-23}\text{s} \ (8)$$

for measuring particle velocity a system should be used which take absolute part of formula as basis of its measurement. In the other words, the device should work almost in zero Kelvin temperature. By considering the absolute part the other part of the formula which is relative, will be measured.

$$\frac{\vec{C}^2}{\gamma^2} = \left(\frac{\vec{l}_{2(so2)}}{\Delta\vec{T}_{2(so2)}} \times \frac{\vec{l}_{3(so3)}}{\Delta\vec{T}_{3(so3)}}\right) \quad (9)$$

$$\vec{l}_3 \ (\text{so2}) = \frac{\vec{l}_0}{\gamma} \quad (10)$$

$$\Delta\vec{T}_3 \ (\text{so2}) = \Delta\vec{T}_0\gamma \quad (11)$$

$$\gamma \equiv \frac{1}{\sqrt{1-\frac{v^2}{c^2}}} \text{: Lorentz coefficient} \quad (12)$$

$$V^2 = C^2 - \frac{C^2}{\gamma^2} \quad (13)$$

$$\vec{l} = \frac{\vec{l}_0}{\gamma} \quad (14)$$

$$\Delta T = \Delta\vec{T}_0\gamma \quad (15)$$

$$|V| = \sqrt{c^2 - \frac{c^2}{\gamma^2}}$$

v: Relative velocity of the particle (16)

Then always we have: $\vec{V}_B \prec \vec{V}_A \prec \vec{C}$ (17)

so always we have $T_B \prec T_A$ (18)

So the twin A will be younger than twin B

Refrences

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