

**AN EXAMPLE OF WRONG AND RIGHT TRANSFER OF LENGTH
BETWEEN INERTIAL SYSTEMS**

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Two comments to my articles I see particularly suitable for a repeated emphasis on the relative problem. Once in previous article did this enough thoroughly on the first "**Even Galilei has formulated...**" (Anonymous January 30, 2012), now I will focus briefly and on the second.

For clarity, I will execute again the known staging: Inertial system **K'** is moving relative to a stationary system **K** with velocity **v** along the axes **X'=X**.

At a relative peace of the systems observer **K** and observer **K'** plot on the axis **X'** points **A'** and **B'** and determine the distance between them as a length **L₀**. After that system **K'** starts inertial motion.

The comment refers to the paradoxical disappearance of length **L₀** at multiple transfers between the two systems if the same follow the conclusions of the special theory, namely:

Transfer of length L₀ in the incorrect conclusions of the Special theory: Observer **K** with a **K** clock records the time **t₁** for crossing the length **L₀** from point **B'** to point **A'** and gets measured length **L₁=t₁.v**, which should have the shortened value **L₁=L₀.b** (as we know **b=(1-v²/c²)^{1/2}**). He affixes length **L₁** on the **X**-axis as a line segment **AB**. Now observer **K'** with a **K'** clock records the time **t'₁** for crossing the length **L₁** from point **B** to point **A** and gets measured length **L'₁=t'₁.v**, which should have the shortened value **L'₁=L₁.b**, i.e. **L'₁=L₀.b²**. In turn, observer **K'** affixes length **L'₁** on the **X'**-axis and observer **K** measures **L'₁** as the shortened value **L₂=L'₁.b=L₀.b³** etc. The result is abnormal (paradox): length **L₀** mysteriously melts away without any change in the initial condition (one condition – myriad decisions).

I consider that the example is quite clear. But, in fact, is not so which can be seen by the said comment. Here is a part of it (copy-paste): Anonymous January 16, 2012

"We will not accept you at the philosophers

- CONSECUTIVE SHORTENING - wrong logic!

Observer **K'** knows that observer **K** is measured at a shorter. What **K** plotted as a line segment has nothing to do with the line segment of **K'**. So that it is not correct **K'** to measure from **K** and correlate it with his line segment." etc.

And here is a part of my answer: **alniko** 17 January 2012

"Because I consider that the physics is not a narrative discipline I have given a particular decision of the example in a few orders - and mathematical, and logical, and physical." etc.

Cause bewilderment how come, according to Mr. "Anonymous" the lengths L_1, L_2 of K have nothing to do with these L_0, L'_1 of K' after being they are connected according $L_1=L_0 \cdot b$, respectively $L_2=L'_1 \cdot b$. The relativism blindly believes that it is able to find an explanation for any similar ludicrous situation. Tales of dupes. The case only means one thing – the consecutive absurdity caused by the mistaken relative concept. And the consecutive application of the on duty, pointless and antipathetic stubborn-tactics of the relativists instead to acknowledge their powerlessness and impasse, to sweep every paradoxical (relatively unsolvable) fact in the darkest corner of the mind, and let's hope be forgotten.

As I said, I return to this comment, because in it shines through full incomprehension of the physical-philosophy of the relative reality. And not only... The same is an illustration of the frequently encountered superficial attitude to the scientific problems produced by feeble cognitive possibilities. From wherever to look a man, the comment represents in highest degree below the mark model of scientific criticism – ungrounded, unprincipled and barren, which thoughts, feels and behaves as exempt from responsibility. This type of scientific practice is entirely unacceptable, but it seems to me, prevalent. Otherwise, at all I would not wasted your time with such mediocrity.

Either way, it is appropriate to give and the proper solution to the above example.

Transfer of length L_0 in the correct conclusions of the Principle of opposites: Observer K with a K clock records the time t_1 for crossing the length L_0 from point B' to point A' and gets measured length $L_1=t_1 \cdot v$, which should have the shortened value $L_1=L_0 \cdot b$ (for observer K , i.e. for the stationary viewpoint, is in force coefficient b). He affixes length L_1 on the X -axis as a line segment AB . Now observer K' with a K' clock records the time t'_1 for crossing the length L_1 from point B to point A and gets measured length $L'_1=t'_1 \cdot v$, which should have the elongate value $L'_1=L_1/b$, respectively, $L'_1=L_0$ (for observer K' , i.e. for the moving viewpoint, is in force coefficient $1/b$, which the relativists not comprehend). This is the normal result – as soon as the condition did not change, at observer K' returns the initial length L_0 (one condition – one solution).

The amateurish interest to the problem relatively mild grasped the essence of example. Therefore, it passes belief that one scientist implicates in it, emphasizing entirely wrong arguments. Because one is to make scientific error – with it creates prerequisites for the emergence of cognitive driving force. And quite another thing is the error-joke of inadequacy – it is useless...except that caricatures the mind, which invented it. Actually, maybe just that is why the comment is anonymous – approach which categorically must be rejected and condemned.

To a similar style in science – tolerance "zero"!