YET ANOTHER VERY SIMPLE ARGUMENT AGAINST SPECIAL RELATIVITY

by

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Tuesday, October 9, 2001

Here is yet another very simple argument which proves that Special Relativity must be mathematically flawed, for the Lorentz transformation equations — which are absolutely essential for the Special Theory of Relativity — can give results which contradict the Special Theory of Relativity itself.

[1] Let's say that somewhere out in deep space, the United Federation of Planets has a fairly large mother-ship of rest-length **D**, and clamped to its hull there is a fairly small run-about of rest-length **d** — both ships facing in the same direction.

[2] Let's say that when the run-about is stationary relative to the mother-ship, the mother-ship is exactly *ten times as long* as the run-about.

[3] Thus when the run-about is stationary relative to the mother-ship the ratio **d/D** is exactly **1/10** — or expressed decimally, **0.1**.

[4] Now let's say the clamps on the run-about are released, and the run-about fires its engines, moving away from the mother-ship in a straight line, and eventually reaching a constant rectilinear velocity **v** relative to the mother-ship.

[5] According to the Lorentz transformation equations, the length of the run-about must now be contracted compared to what it was in *[1]* above, namely **d**.

[6] The contracted length, **d'**, must be calculable by the Lorentz transformation formula $\mathbf{d' = d/\{1/\sqrt{[1-(v^2/c^2)]}\}}$.

[7] Of course **d'** cannot be greater than or equal to **d**, but must be less, because $\mathbf{(v^2/c^2)}$ must be a positive number, and so $\mathbf{[1-(v^2/c^2)]}$ must be less than **1**, so the square root of $\mathbf{[1-(v^2/c^2)]}$ must also be less than **1**, which means that $\mathbf{\{1/\sqrt{[1-(v^2/c^2)]}\}}$ must be greater than **1**.

[8] Under these conditions, however, the length **D** of the mother-ship cannot have changed from what it was when the mother-ship and run-about were clamped to each other, as was the case in *[1]* above.

[9] So in *[5]* and *[6]* above, the ratio **d'/D** cannot be **1/10** or **0.1**, but must be *less,* because **d/D = 1/10**, and **d' < d**.

[10] Let the run-about now turn around, return to the mother-ship and be clamped back onto its hull. The ratio between the lengths of the two is once again **1/10**.

[11] Now let the clamps be released a *second* time, but instead of the run-about firing its engines, let's say the *mother-ship* fires *its* engines and it moves away from the run-about in a straight line, eventually reaching a constant rectilinear velocity of **v** relative to the run-about.

[12] Under these condition, the length of the mother ship will now have contracted to **D'**, and according to the Lorentz transformation formula, $\mathbf{D' = D/\{1/\sqrt{[1-(v^2/c^2)]}\}}$.

[13] And **D'** cannot be greater than or equal to **D**, but must be less, because $\mathbf{(v^2/c^2)}$ must be a positive number, and so $\mathbf{[1-(v^2/c^2)]}$ must be less than **1**, so the square root of $\mathbf{[1-(v^2/c^2)]}$ must also be less than **1**, which means that $\mathbf{\{1/\sqrt{[1-(v^2/c^2)]}\}}$ must be greater than **1**.

[14] Under these conditions, however, the length **d** of the run-about *cannot* have changed from what it was when the mother-ship and run-about were clamped to each other, as in *[9]* above (and in *[1]* above also.)

[15] So now in *[11]* and *[12]* above, the ratio **d'/D** cannot be **1/10** or **0.1**, but must be *more,* because **d/D = 1/10**, and **D' < D**.

[16] *But,* and this is a ***B I G*** "but", according to the Theory of Relativity, there should be *no difference whatsoever* between *[5]* and *[6]* above on the one hand, and *[11]* and *[12]* above on the other: because the relative velocity between mother-ship and run-about is **v** in all these cases!

[17] This is contradicted by the fact that the results of the relative lengths of the mother-ship and run-about in *[8]* and *[14]* above are different from one another.

[18] And this in turn proves that results obtained by using the Lorentz transformation equations — which are absolutely essential for the Special Theory of Relativity — contradict the Special Theory of Relativity itself … proving that the Special Theory of Relativity must be mathematically self-contradictory.

P.S.: It should be noted that it is impossible for the length of the mother-ship to have contracted in *[7]* compared to what it was in *[1],* nor is it possible for the length of the run-about to have contracted in *[13]* compared to what it was in *[9].* That's because in both *[1]* and *[7]* above, absolutely *nothing* happens to the mother-ship; nor does anything happen to the run-about in *[9]* and *[13]* above. The only thing that happens in *[7]* above is that the *run-about* changes its *own* relative velocity compared to the mother-ship from what it was in *[1]* — namely zero — to **v**; and the only thing that happens in *[13]* above is that the *mother-ship* changes its *own* relative velocity compared to the run-about from what it was in *[1]* — namely zero — to **v**.

Any comments? e-mail me.