

Re: O'Barr: The Absolute Reference Frame.

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- *From:* xxein@xxxxxxxxxxxxxx
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Gerald L. O'Barr wrote:

Title: The Absolute Reference Frame
By: Gerald L. O'Barr <globarr...@xxxxxxxxxx>
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Date: 11 Aug 2006

The Lorentz ether theory (LET) is basically correct. To more fully modernize it, we have to state that all forces presently known appear to follow the same mechanics as the electrical forces. Once this is assumed, then LET becomes as universal as Special Relativity (SR.)

The fact that this has to be assumed for LET is not a sign of weakness for LET. In SR it is automatically assumed that SR applies to all forces. To assume the same thing in LET is really no different. Both LET and SR were originally formulated back when only electrical forces were of concern. Since SR was the active science while additional forces were appearing, and they were observed to fit into an SR approach, then they were automatically included in the existing science, as would be expected. LET was totally dormant during these times, and was never brought up to date by any specific recognized group of people. Therefore, these differences are more due to an accident of history than to any scientific factor.

To understand the true relationship between SR and LET, we can say that LET is the correct physics for our reality, and SR is the correct math for our reality. Thus, these two theories are really the same theory. They are not the same in terms of the assumptions upon which they are based, but they are the same in terms of their results. In terms of their final equations, the equations that refer to what will be measured, they are the same.

Thus, in terms of any test result that involves a measurement, one theory cannot be correct without the

other being correct. Any test measurement that confirms one, confirms the other. To fail LET, one would have to fail SR, if the failure is one of test data or measurement. This is a most strange relationship. It has never occurred as strong as this before. And the only reason anyone can assign to this is that they really are the same theory. It must be said that LET begins at a lower level than SR. LET begins with assumptions as to what physical things (clocks, rulers and light) do, and from these physical acts, then LET determines what will be measured. The results of the physical base produces a situation where all frames have the appearance of being the same. It is at this point that SR begins, after all the physical explanations have been accomplished.

Once we reach this point of understanding, then we can no longer allow people to think that these two theories stand in opposition to each other. It is important that we understand both theories, and how they support each other.

Now as we do this, let us be as clear as we can be. Lorentz provided us with many concepts about his theory. For one example, he believed that there were free electrons throughout free space. Such thoughts have many benefits. But we do not have to accept any of these explanations. All that we have to really accept, to have SR, is very simple. All we really have to accept is just the mechanics. We do not have to consider the existing of electrons, or any of the explanations of why c is c . All we really need to accept is as follows:

- a. $L_v = L_o (1 - (v/c)^2)^{0.5}$
- b. $R_v = R_o (1 - (v/c)^2)^{0.5}$
- c. c = the constant velocity for light in free space

where L_o is the length of a ruler at rest in the ether. L_v is the length of the same ruler when it is moving in the direction of its length with absolute velocity v . R_o is the rate of a clock at rest in the ether. R_v is the rate of this same clock with absolute velocity of v .

By making these three simple assumptions, we find it adequate to develop SR. Therefore, all of the ancient explanations of why all these things are true are not critical to the theory. Full support can still be given to SR, and then as the theory develops, science can fill in the details as how and

why these things physically occur. Such an approach allows us to include all the other forces, and the addressing of the causes for all forces to result in the same mechanics can be addressed as our knowledge expands.

It is clear that physically there has to be an absolute reference frame so that all events can be coordinated. The free space at any one point has to be the same as any other free point of space, or else photons could not really know exactly how fast to move. And rulers would not know how far to shorten, and clocks would not know how much to slow their rates. Only an absolute reference could do all these things.

And LET explains to us why this absolute frame results in all other inertial frames producing the same form of math as the absolute frame, and thus the absolute frame becomes lost in the middle of all the other frames.

With all this for a background, then we are ready to understand why our reality is so difficult to understand. Because of the three rules assumed in LET; a, b and c; then we know that the tools we have and must use to make our measurements (our rulers and our clocks) are changeable tools. And being changeable, then what we measure with these tools might not be what reality really is. Thus, we have two realities. We have the real reality, the reality of what actually happens, and then we have the reality that is measured. The measured reality is what is given to us by SR.

Let us repeat the above, since it is so important: SR is an approach that presents to us the world as it will be measured. This science is vital, and is absolutely necessary, and must be studied and understood. It is our first and most direct link to reality. But it is not our reality. A more basic reality exists below the measurements, and this is what LET addresses.

What is measured (and as it is presented in SR) can become very confusing, with breaks in symmetries, with jumps in times, with some results that can appear to be paradoxes. But with a knowledge of LET, then we see that all real physical acts are always very simple, with no true breaks in symmetries, with no real jumps in times, etc. With SR, one can always tell one another that all this is true, but in LET, it is absolutely established to be

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correct.

Let me conclude with some comments about what is actually occurring. We have to know, that because of the nature of our physics, we cannot presently know when we are in our absolute reference frame. And thus, we cannot at present know for sure how much difference there might be between what we are measuring and in what is actually occurring.

But we definitely know that if we were in our absolute reference frame, that in this frame, all rulers would be perfect in their lengths, and all clocks would be perfect in their rates, and the syncs would all be a perfect absolute sync. Thus, all our test results would be a correct match to what reality was really doing. And with these perfect tools, we would measure the length of mover rulers to shorten, and rates of clocks to slow. And these measurements would all be absolutely correct, proving that such acts are correct and real.

Thus, even though we might not really know what things are really doing in any frame we might now exist in, we do know that there are real changes going on. And depending of course which direction we might be measuring, as compared to which frame we might be in, we from time to time might be making measurements that are very close to actual acts.

It is important that we come to see these correct relationships between LET and SR. It is important to our ultimate progress. It is important to our personal sanity. It is important so that we know where to look for our next advancement in science.

Thanks for reading.

Gerald L. O'Barr <globarr...@xxxxxxxxxx>

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xxein: How come it took you so long to express yourself in this way? I shouldn't talk because this is what I have come to understand also, and didn't find the words to describe it as you have done. I must confess that I didn't think that you would come to this succinct conclusion. It is not part of your history.

But I have an 'out'. I still realise that when one attempts to explain something like this, gravity will say that you would not be as 'complete' as GTR. Where is LET with gravity? It isn't. LET was left in the bullrushes as Einstein captured the day. But that was 90 yrs. ago!

Although you didn't say it this way, SR is a correct math-measurement for what we will measure. The fact that this concept allows GR to

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function in the same way (with an additional concept – curved spacetime) is no sure–fire solution to a physic other than that it is a workable and allowable concept for such a math–measurement theory.

The real–actual physic is different, as you have already figured out, but it still lacks the gravity consideration. This is where I step in (and can't find the words to explain it to SR–GR diehards in a language–concept that they will accept). So I don't really try hard to explain LET–SR to them (and hardly a real gravity for the GR).

You mentioned an absolute frame. Well, there is none that appears forthcoming from your great post. Universal expansion and gravity will take that away. But there is a frame that allows us to consider it as absolute much the same way as SR is a special case of GR.

Follow the energy. Gravity is the fluid dynamic of energy. Source, movement, equilibrium/time and sinks. I don't know why matter is tied up in energy knots, but I do know that matter requires energy to defeat inertia in its circular or helical innards. Matter rides on the river/flow of the energy without friction (stay in motion). But the energy requirement of being matter also causes $1/r^2$ for the inward velocity of energy around a mass. This causes any mass to accelerate to mass and $v v$.

All LET lacked was a gravity expressed in its own terms like SR–GR. Guessing a good or proper context/conception for LET appears to have almost everyone stymied. That's why I call my theory/concept 'the ugly duck'. But it works to high heaven.

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