Albert in Wonderland

The Make-Believe World of "Relativity"

A response to Russell Humphreys' Letter to the Editor

of the Creation Research Society

R. Sungenis: The Creation Research Society recently published a critique I made of the LIGO results and then allowed Russell Humphreys to respond to my critique. Humphreys titled his response as "Why Geocentrists Don't Like Relativity." I will respond to each of Humphreys' points below:

Humphreys: This letter is an interesting window into the thinking of one subspecies of relativity critic — the Geocentrists.

R. Sungenis: Not sure why Humphreys refers to his opponents as a "subspecies," which is a word commonly used for the animal kingdom. This gives us a little hint to what Humphreys thinks of those who criticize Relativity. We will see more examples of what seems to be an intellectual hubris in Humphreys' reply.

Humphreys: They want to believe the Earth is motionless with respect to something and that once a day (for some Geo-centrists) and once a year (for all of them), the entire universe revolves around the Earth. Many of them do not specify the "something" clearly, but I think that some of them say that it is space itself, or what I would call the fabric of space. I agree with them in believing there is such an absolute frame of reference. I disagree that the Earth is motionless in that frame.

R. Sungenis: Humphreys claims to have the Bible as his authority, which is why he uses the Bible against the theory of evolution. But when it comes to the Bible's clear teaching that the Earth is our absolute frame of reference because it is motionless, suddenly Humphreys abandons the literal interpretation of Scripture and relies on things the Bible rejects as motionless as his "absolute frame of reference." Humphreys knows he needs an absolute frame, but doesn't want to accept the Bible's one and only such frame. This will result in almost all of Humphreys science and hermeneutics being twisted to give some semblance of "understanding" Genesis.

Humphreys: For a recent creationist review and refutation of Geocentrism, see the online article linked below (Carter and Sarfati, 2015).

R. Sungenis: I recently wrote a detailed and comprehensive critique of Carter and Sarfati's paper, which can be seen at http://galileowaswrong.com/wp-content/uploads/2016/05/Why-the-Universe-does-not-revolve-around-the-Earth.pdf. Carter responded and then I wrote another criti8que of his second paper, which will be up on our website soon.

Suffice it to say, Carter and Sarfati's paper, as well as Carter's single effort, are just two more meager attempts by the Creationist crowd to try to defend themselves on not interpreting Genesis 1:1-20 in a literal fashion, while meticulously applying a literal interpretation to Genesis 1:21-31 in order to defend creationism against evolution. The Bible becomes a wax nose that they mold to their liking, depending on which theory they want to push. The same is true with Barry Setterfield's attempt to discredit geocentrism, which can be seen at: http://galileowaswrong.com/wp-content/uploads/2016/08/Critique-of-Barry-Setterfield.pdf

Humphreys: The Geocentrists rest their case on the famous Michelson-Morely (sic) experiment, which compared the speed of light in two legs of an interferometer six months apart. The experiment showed no change throughout the year. Geocentrists seize on that and say it was because the Earth was always at rest with respect to the fabric of space.

R. Sungenis: Here Humphreys attempts to minimize the geocentric argument by making it appear that Geocentrists "rest their case" on that one experiment. Nothing could be farther from the truth. From galaxy and quasar locations, to the CMB orientation, to 50-years of interferometer experiments from Michelson to Joos (1930) to Sagnac in 1913 and Michelson again in 1925, as well as discrediting all the traditional proofs for heliocentrism (e.g., stellar parallax, stellar aberration, retrograde motion, and many more), all show the same results, namely, that the Earth is motionless in the center of the universe. The sad thing about Humphreys is that his own findings of redshift values show vivid proof that we are in the center and he has spent a greater part of his career promoting this evidence to the world (http://creation.com/our-galaxy-is-the-centre-of-the-universe-quantized-redshifts-show). God-forbid that he would take the next step and declare that the Earth is motionless in the center.

Humphreys: But relativity provides an alternative interpretation (my form of it here): that the length of the interferometer contracted (or increased) as the Earth moved faster (or slower) with respect to the fabric of space in its orbit around the Sun. Length contraction is simply a logical consequence of the axioms of relativity.

R. Sungenis: Here we have the fallacy of *petitio principii*, that is, using as proof (Relativity) the very thing one is trying to prove (Relativity). Since Humphreys has dismissed a fixed Earth as a viable interpretation of Michelson-Morley, he is left with only one alternative—he forced to posit that the arm of Michelson's interferometer shortened in length, but not by scientific proof but as "simply a logical consequence of the axioms of relativity." This isn't science. Science does not form interpretations of experiments by presuming that a theory we hold must be correct and therefore can only be interpreted by the rules of that theory.

In brief, Humphreys believes in length contraction, whether he can prove it or not, because "relativity" demands that it be so. Obviously, then, Humphreys is wed to Relativity, not scientific investigation, and he will allow no other solution, no matter how credible it might be.

It wouldn't be so bad if Humphreys would just admit that a fixed Earth is a viable interpretation of Michelson-Morley. If he did, then he would be a true scientist. But his absolute dismissal of a fixed Earth (in the face of many other scientists, including Einstein, who at least said that a fixed Earth could explain Michelson-Morley and that his own General Relativity theory must allow a fixed Earth as a possible solution due to the very nature of relativity), Humphreys shows that his answer is formed from prejudice rather than science.

Humphreys: Geocentrists do not like that alternative, so they attack relativity.

R. Sungenis: Hardly. We attack Relativity because it is wrong, dead wrong. In the end, if Geocentrism is correct, then Relativity is falsified. That is, if there is an absolute in the universe (and something motionless qualifies as an absolute), then there can be no "relativity." Curiously, earlier Humphreys said: "I agree with them in believing there is such an absolute frame of reference." But how can he believe in relativity if he believes there is an absolute frame? Relativity doesn't have any absolute frames.

Be that as it may, notice how Humphreys tries to make it sound as if the Geocentrists make their conclusion about Michelson-Morley simply from a dislike of Relativity rather than from an honest application of the principles of science. There is an old axiom your mother probably taught you: "Be careful when you point your finger at someone else, since there are three fingers pointing back at you." Humphreys fits this to a tee. In other words, the very thing of which Humphreys is accusing the Geocentrists is the very thing of which Humphreys himself is guilty. For someone who claims that he believes length contraction occurred in the Michelson-Morley experiment only because it is "simply a logical consequence of the axioms of relativity" shows us that he is the one who does not like alternatives (e.g., Geocentrism) and thus has chosen to accept an *ad hoc* theory that he can't prove instead of accepting biblical Geocentrism as a viable answer. There is one thing we can say about Albert Michelson. Even though he didn't want to believe the Earth was fixed, he had the courage to admit that a fixed Earth could have easily provided a solution to his 1881 and 1887 interferometer experiments. He said: "This conclusion directly contradicts the explanation…which presupposes that the Earth moves."[1]

Many other scientists, though remaining heliocentrists due to their philosophical preferences, admitted the same. Here is just a partial list of them:

> "There was just one alternative; the earth's true velocity through space might happen to have been nil."

[1] Albert A. Michelson, "The Relative Motion of the Earth and the Luminiferous Ether," *American Journal of Science*, Vol. 22, August 1881, p. 125.

Physicist, Arthur Eddington[2]

"The data [of Michelson-Morley] were almost unbelievable… There was only one other possible conclusion to draw — that the Earth was at rest."
Physicist, Bernard Jaffe[3]

"Thus, failure [of Michelson-Morley] to observe different speeds of light at different times of the year suggested that the Earth must be 'at rest'…It was therefore the 'preferred' frame for measuring absolute motion in space. Yet we have known since Galileo that the Earth is not the center of the universe. Why should it be at rest in space?"
Physicist, Adolph Baker[4]

"….The easiest explanation was that the earth was fixed in the ether and that everything else in the universe moved with respect to the earth and the ether….Such an idea was not considered seriously, since it would mean in effect that our earth occupied the omnipotent position in the universe, with all the other heavenly bodies paying homage by moving around it."
Physicist, James Coleman[5]

"The Michelson-Morley experiment confronted scientists with an embarrassing alternative. On the one hand they could scrap the ether theory which had explained so many things about electricity, magnetism, and light. Or if they insisted on retaining the ether they had to abandon the still more venerable Copernican theory that the earth is in motion. To many physicists it seemed almost easier to believe that the earth stood still than that waves – light waves, electromagnetic waves – could exist without a medium to sustain them. It was a serious dilemma and one that split scientific thought for a quarter century. Many new hypotheses were advanced and rejected. The experiment was tried again by Morley and by others, with the same conclusion; the apparent velocity of the earth through the ether was zero."
Historian, Lincoln Barnett, foreword by Albert Einstein[6]

"What happened when the experiment was done in 1887? There was never, never, in any orientation at any time of year, any shift in the interference pattern; none; no shift; no fringe shift; nothing. What's the implication? Here was an experiment that was done to measure the speed of the earth's motion through the ether. This was an experiment

[2] Arthur Eddington, *The Nature of the Physical World*, 1929, pp. 11, 8.
[3] Bernard Jaffe, *Michelson and the Speed of Light*, 1960, p. 76.
[4] Adolf Baker, *Modern Physics & Antiphysics*, pp. 53-54.
[5] James A. Coleman, *Relativity for the Layman*, p. 37.
[6] Lincoln Barnett, *The Universe and Dr. Einstein*, p. 44.

> that was ten times more sensitive than it needed to be. It could have detected speeds as low as two miles a second instead of the known 20mps that the earth as in its orbital motion around the sun. It didn't detect it. What's the conclusion from the Michelson-Morley experiment? The implication is that the earth is not moving…"
> Physicist, Richard Wolfson[7]
>
> "Michelson and Morley found shifts in the interference fringes, but they were very much smaller than the size of the effect expected from the known orbital motion of the Earth"
> Physicist, John D. Norton[8]
>
> "This 'null' result was one of the great puzzles of physics at the end of the nineteenth century. One possibility was that...v would be zero and no fringe shift would be expected. But this implies that the earth is somehow a preferred object; only with respect to the earth would the speed of light be c as predicted by Maxwell's equations. This is tantamount to assuming that the earth is the central body of the universe."
> Physicist, Douglas C. Giancoli[9]

The take away is this: Humphreys is desperately trying to make it appear as if a fixed Earth solution to Michelson-Morley is something that just dropped off the turnip truck, but that is not so, by any stretch of the imagination. Every scientist worth his salt admits it is viable. The only ones who don't are those who are not being honest with the audience. Humphreys just doesn't like the fixed Earth answer, and that is due to reasons entirely other than science.

Humphreys: They try to explain away the many experimental proofs for relativity, including the laboratory observations (apart from interferometers) of length contraction (Anonymous, 2016), which Mr. Sungenis doesn't seem to be aware of.

R. Sungenis: For diehard Relativists, like Russell Humphreys, it is wrong to even "try" to show that Relativity is false. They have made Einstein their 'be-all and end-all' and anyone who tries to challenge him is automatically thrown off the bus. If you don't accept Relativity, "well, brother, that's your problem; the whole world has accepted him so you're the odd man out."

Be that as it may, if you are interested in seeing the shame of the so-called "proofs for relativity" please read the latter part of my critique of the Cater/Sarfati paper cited above. On Youtube there is another good critique of Einstein done by Malcolm Bowden (https://www.youtube.com/watch?v=PolFadm-lgU), but my critique goes far deeper than Bowden's. The only reason Einstein survived the acute contradictions in his theory is because

[7] *The Teaching Company*, episode taught by Professor Richard Wolfson of Middlebury College.
[8] The Origins of Special Relativity, www.pitt.edu/~jdnorton/teaching/HPS_ 0410/chapters/origins/index.html, p. 14.
[9] Douglas C. Giancoli, *Physics: Principles with Applications*, 1985, pp. 613-614 and 1980, p. 625.

the press puffed him up, similar to the way Billy Graham was puffed up when Hurst told all his editors one simple phrase—"puff Graham." Einstein was puffed in the press like no one before or since.

Now, let's get to Mr. Humphreys' alleged proof of length contraction, which he cites from an "Anonymous, 2016" entry on Wikipedia.

First, notice that, even if this was a proof (which it is not, and I will explain below), Humphreys is admitting that 111 years had passed (2016 minus 1905 = 111 years) before there was an attempt to prove length contraction, which means he is inadvertently admitting that there was no proof when Lorentz and Einstein proposed length contraction in 1892 and 1905, respectively, and there hasn't been any proof for the whole 'age of Einstein' in the 20th century when students were being taught in universities that length contraction was true.

Second, notice that Humphreys is using an "Anonymous" person as an authority on the subject. That means the person has no verifiable identity or credentials, but Humphreys accepts it as if it is Gospel. Obviously, Humphreys did not do his own investigation into the claims of "Anonymous," in addition to the fact that Humphreys is citing "Wikipedia" as his additional authority, yet it is well known that Wikipedia is not an authority, so much so that high school and college students aren't allowed to use Wikipedia as an authority in their term papers. They can only use it for comment. But since Humphreys has no other source to give sanction to a proof for length contraction, he has to dig to the bottom of his well to come up with at least something to counter the Geocentrist interpretation.

Third, let's examine the so-called "proof" of length contraction that Humphreys uses as his sole authority. In my Appendix, I go through the "Anonymous" Wikipedia article line-by-line. You will see the author of the Wikipedia article admits there is NO DIRECT PROOF for length contraction. There is merely an assortment of assertions all based on the a-priori foundation that length contraction is true and therefore you should accept it.

Humphreys: Unfortunately, Geocentrists (if Mr. Sungenis is a good example) do not understand the theory they are criticizing.

R. Sungenis: Once again, we see the scientific hubris of the Relativists. They dominate the public discourse and anyone who criticizes Einstein will lose his university position in a heartbeat. The age-old defense mechanism you can count on from a Relativist is that his opponents "don't understand Relativity."

My co-author for the *Galileo Was Wrong* series of books, Dr. Robert Bennett, has a Ph.D. in General Relativity. It took him several years, but once Dr. Bennett saw the bogus enterprise of Relativity, he dropped it like a hot potato. The same thing happened to one of Einstein's greatest admirers, Herbert Dingle, in the 1920s and 1930s. Once he saw the abracadabra that Einstein was using (and this was quite a move by Dingle, since by this time the whole world was worshiping

Einstein), he mounted a major assault on Relativity, which one can read in his book, *Science At The Crossroads*. Of course, like every other Einstein critic, Dingle was eventually banned from the science establishment. Dingle wasn't the only one. There were scores of Einstein critics, many of them having received their own Nobel Prizes, rejected Einstein's Relativity theories in the early going, and more came on board as time progressed. Respected scientists such as Adler, Appell, Aspden, Assis, Barter, Beckmann, Bergson, Bouasse, Bragg, Brown, Brillouin, Callahan, Cauchy, Champeney, Cullwic, Darboux, Denisov, Dingle, Dingler, Dudley, Duport, Essen, Galeczki, Gehrcke, Graneau, Guillaume, Gut, Hatch, Heaviside, Henderson, Ives, Kantor, Kanarev, Kastler, Kraus, Lallemand, Larmour, LeCornu, Lenard, LeRoux, Levi-Civita, Lodge, Lorentz, Lovejoy, Lynch, Mach, MacMillan, Mackaye, Magie, McCausland, Michelson, Miller, Mohorovičić, Montague, Moon, More, Moulton, Nordenson, O'Rahilly, Painlevé, Phipps, Picard, Planck, Poincaré, Poor, Radakov, Ricci, Rutherford, Sagnac, Seeliger, Selleri, Soddy, Stark, Theimer, Turner, van der Kamp, van der Waals, Weinmann, Weyland, et al., discovered the same anomalies, and many of them wrote major critiques against Einstein between the 1920s and 1960s. Even Leopold Infeld, although authoring a book with Einstein in 1938 titled *The Evolution of Physics*, ten years later, when applying Einstein's formulas to the structure of the universe, writes: "Einstein's original ideas, as viewed from the perspective of our present day, are antiquated if not even wrong."[10]

Humphreys: For example, they don't seem to be aware that Special Relativity (SR) is a mere subset of General Relativity (GR), as Tennessee is a subset of the United States.

R. Sungenis: This is a mere word game. What does "subset" add to the discussion? Nothing. We don't quibble about whether one is the "subset" of the other, since it doesn't make any difference. Each theory is examined on its own merits, and both are found wanting. The total irony of the whole shame is that while Special Relativity was invented to keep the Earth moving when Michelson found it wasn't moving, General Relativity was invented ten years later to help the inadequacies of Special Relativity, but it found that one of the solutions to the Einstein field equations was that the Earth was motionless in the center of the universe and the universe rotated around it on a daily basis. So, as the old saying goes, Einstein was hoist by his own petard.

Humphreys: SR and GR don't contradict each other, as Mr. Sungenis claims.

R. Sungenis: They do contradict one another. Here are a few examples: 1) SRT says light is constant. GRT says it isn't constant; 2) SRT says space has no ether; GRT says it does have ether; 3) SRT says nothing can exceed the speed of light; GRT says that anything can exceed the speed of light; 4) SRT says objects in motion shorten in length and dilate their time; but GRT makes no claim to either; SRT says gravity is limited to the speed of light; GRT says gravity cannot be limited to the speed of light, since anything can exceed the speed of light.

[10] Leopold Infeld, "On the Structure of the Universe," in *Albert Einstein: Philosopher-Scientist*, p. 477.

Humphreys: SR merely restricts itself to reference frames that aren't accelerating with respect to the fabric of space (and no changes in gravity). In such frames the speed of light is constant.

R. Sungenis: First of all, there are no "frames that aren't accelerating in the universe," since Humphrey's believes that everything is revolving around something, whether it is the Earth revolving around the sun, the sun revolving around the Milky Way, or the Milky Way revolving around cluster of galaxies, or those galaxies revolving around another cluster of galaxies. When all the objects are revolving, there is no place where acceleration does not exist or where there is no gravity. If, on the other hand, Humphreys relies on his earlier statement: "I agree with them in believing there is such an absolute frame of reference," then there is no relativity, since relativity has no absolute frames of reference.

Second, Humphreys is engaging in the usual trickery of the Relativists. Notice he says that "SR merely restricts itself to reference frames that aren't accelerating with respect to the fabric of space (and no changes in gravity)." But how does he know a particular frame is not accelerating if he, according to the principle of relativity, cannot tell, of two or more objects, which is not moving, moving at uniform speed, or accelerating? He simply doesn't know.

So what is a poor Relativist to do? He simply creates a frame that isn't accelerating out of thin air (otherwise known as an inertial frame). He does this by employing Lorentz's famous "transform" equation. In other words, since an Earth revolving around the sun is not an inertial frame, the Relativist claims that a moving Earth distorts time, space, and length, but that he can fix this problem by using his magical equation to "transform" it into an inertial frame so that he then can claim that light always goes the same speed in an inertial frame. It is nothing but hocus pocus.

Essentially, in order to escape a fixed Earth as an inertial frame against which to measure the speed of light (which shows him that light does not have a constant speed), the Relativist presumes that light speed is constant so that he can then presume the Earth moves. Basically, he has two choices: (A) either he makes light speed fixed and makes the Earth move, or (B) me makes the Earth fixed and allows light to be unfixed. Which one do you think a diehard Relativist, like Russell Humphreys, will choose?

Here is the key to this whole discussion. If the Earth isn't moving, then it is absolute, and we have an absolute universe. If that is the case, then "Relativity" is put on into the dustbin of history, locked shut so that it never arises again. So we can see why a Relativist, such as Russell Humphreys, is so adamant that the Earth is moving. Otherwise, his whole career would be over in a heartbeat.

For more on this, see my paper "Albert Einstein: The Earth Mover" at http://www.theprinciplemovie.com/albert-einstein-earth-mover-einstein-made-earth-move-experiments-showed-wasnt-moving/

Humphreys: GR doesn't restrict its frames of reference as SR does, and in some frames the speed of light clearly changes (as in regions of different gravitational potential) and spacetime is bent.

R. Sungenis: This only shows that Einstein was hoist by his own petard, and so is Humphreys. Since there is no place in the universe where there is no gravity, then there was no reason to invent SRT, since SRT did not include gravity! What really happened was that in 1905 Einstein was desperate to have at least some answer to the 1887 Michelson-Morley experiment, but the only thing he could think of was to blame the result on the experiment, which he then "fixed by contracting the length of Michelson's apparatus and dilate its time. If he had incorporated gravity into SRT, he would have never been able to claim that light was constant or that length contracted and time dilated!

Yet he knew that because he presumed the Earth was revolving around the sun, then the Earth was in an ACCELERATING frame and therefore was not an inertial frame. He camouflaged this discrepancy by using the "transform" equation he borrowed from Lorentz. This allowed him to create an inertial frame on Earth so he could then claim that light traveled at a constant speed in an inertial frame. But there wasn't really any inertial frame at all. It was merely puffed into existence by his math-magicical equation to give it the appearance of validity. The equation appears on page 7 of his famous 1905 paper, $\beta = 1 \div \sqrt{(1 - v^2/c^2)}$.

Humphreys: Another of their misunderstandings is with how GR says a gravitational wave would affect lengths. Such a wave would not merely change the length of the LIGO tubes, as Mr. Sungenis asserts, but it would also change the lengths in the ground beneath, the locations of the mirrors, and the light beam itself, including the beam's speed, frequency, and wavelength. Sungenis's preconceptions prevent him from seeing the pervasiveness of the stretching and bending of space and time that GR talks about.

R. Sungenis: Hardly. First, we already know that Lorentz and Einstein did not claim that only the arm of Michelson's interferometer contracted, but that everything heading in the same direction as the Earth, including the Earth itself, contracted in length. The only thing said not to be affected was light. It would be stupid to claim that length contraction only affected Michelson's westward leading arm. In fact, the claim was made that the Earth contracted 3 inches and that Michelson's westward arm contracted by a few microns. (Of course, this just begs the question: How can a pervasive contraction discriminate between shortening the Earth by three inches but shortening the interferometer arm by a few microns?).

Second, and most important, notice Humphreys says that the effect of the gravitational wave would "include the beams speed, frequency and wavelength." If so, then he inadvertently admitted that LIGO has no chance of detecting a gravitational wave.

The whole undergirding of the LIGO apparatus was premised on the idea that the chamber facing the gravitational wave would be the only thing that contracted. In fact, this is how the LIGO

scientists claimed that the gravitational-wave could be detected, since if the chamber in the direction of the wave was contracted, then the beam inside of it only needed to travel the length of the contracted chamber, not the length of an uncontracted chamber. With a shorter length to travel than the other beam (and assuming that the two light beams traveled at the same speed), this would create a phase shift in the respective waves of the two light beams. From this phase shift the LIGO scientists claimed it was caused by the one chamber being contracted, and consequently they also claimed that the contraction would be caused by the gravitational wave. There is no mention of them expecting one of the light beams to be changed in "speed, frequency and wavelength" as Humphreys does. Here is how the MIT LIGO paper says it:

> The LIGO sites each operate a single Advanced LITO detector, a modified Michelson interferometer that measures gravitational-wave strain as a difference in length of its orthogonal arms. Each are is formed by two mirrors, acting as test masses, separated by $L_x = L_y = L = 4$km. A passing gravitational wave effectively alters the arm lengths such that the measured difference is $\Delta L(t) = \delta L_x - \delta L_y = h(t)L$, where h is the gravitational-wave strain amplitude projected onto the detector. This differential length variation alters the phase difference between the two light fields returning to the beam splitter, transmitting an optical signal proportional to the gravitational-wave strain to the output photodetector.[11]

Notice there is nothing in the MIT paragraph regarding them expecting the speed of the light beam to be affected by the gravitational-wave. It is only the "difference in length of its orthogonal arms" that is expected, which is the same thing claimed in the original Michelson-Morley experiment, only then it was attributed to "relative motion" through space whereas for LIGO the contraction is being attributed to a "gravitational-wave" that has affected space in some way.

But Humphreys' scenario is different, since he says the light beam itself is being affected along with the chamber. If the light beam is slowed by the gravitational wave of the merging blackholes, then there will be no difference in travel time between the two chambers, and thus no phase difference, and thus no reason to claim there was a gravitational wave. The whole premise of the LIGO apparatus was that the two light beams would be unaffected by a gravitational wave, but that the chamber which was pointed in the direction of the gravitational wave would contract, thus causing a phase difference between the two beams.

This just shows the utter confusion of Relativity theory. In Special Relativity a light beam is not supposed to be affected, and therefore can move at constant speed and will not contract or have its speed changed. But in General Relativity a light beam is always affected, and therefore its speed will vary either above or below *c*. The typical Relativist will switch back and forth

[11] *Physical Review Letters* 116, 061102-3 (2016).

between these two theories depending on which one he needs, without of course, admitting they contradict one another.

For example, in the Big Bang theory, a problem arose in that one side of the explosion would not know what the other side was doing because their communication was limited to Einstein's Special Relativity speed of 186,000 miles per second. They were scratching their heads for quite a while on this one, at least until Alan Guth in the early 1980s came up with another *ad hoc* fix-it theory called Inflation, which claimed that the explosion happened in 10^{-35} seconds and expanded by 10^{35}cm. They told us that this big and fast explosion eliminated Einstein's light-speed problem. The explosion set an instantaneous mold, as it were, and thus one side of the Big Bang wouldn't be hampered by the light speed problem. Of course, the question never answered was, if light-speed is a constant 186,000 mps only in an inertial frame where there is no gravity and no inertial forces, yet the Big Bang explosion is full of gravity (due to its tremendous mass) and is creating centrifugal and Coriolis forces as it expands out so rapidly, then it is not an inertial frame, so why is light speed held to 186,000 mps?

But when the Big Bang theorists needed to have the speed of light and gravity go way beyond *c*, such as when they believed that the 1998 1A Supernovae showed the universe was expanding beyond *c*, the science community abandoned Special Relativity's speed limit on light and gravity and switched to General Relativity where light and gravity are going at least 4*c* and space is being "created" at 4*c* as the universe expands at 4*c*. The irony is, this is the same space that expanded at the initial stages of the Big Bang but it was said to limit light and gravity to 1*c*, which is why they had to adopt the theory of Inflation.

So how does one side of a creation and expansion of space move at 4*c*, but the other creation and expansion of space moves at 1*c*, especially since the latter is not in an inertial frame? Good luck in trying to find an answer. You will be told the same thing Mr. Humphreys tried to tell me, namely, "You just don't understand Relativity."

Humphreys: If one goes through all of Mr. Sungenis's objections to evidence for relativity, here and elsewhere, it looks to me as if every one of them is based on his misconceptions of relativity and experiments.

R. Sungenis: Again, we see the scientific hubris of the Relativist. Whenever he gets caught in a contradiction, he just waves his hand and says "You don't understand Relativity." The truth is, I understand Relativity better than Humphreys does.

Humphreys: His deep love for Geocentrism has blinded him to the strong evidence for relativity that has emerged from a century of ever-more-rigorous experimental tests. The LIGO gravity wave observations are very powerful evidence for relativity.

R. Sungenis: The blind person is the one who won't even admit the possibility that a fixed Earth can explain Michelson's results. The blind person is the one who, after showing us that fixed

redshift values points to our space being in the center of the universe, won't go the extra mile to accommodate Scripture and say the Earth is motionless in the center. The blind person is the one who engages in meticulous literal interpretation of biblical passages to help him prove creationism against evolution, but who then throws out a literal interpretation when he comes upon biblical passages that say the Earth came first and is the fixed center of the universe. The person who is blind creates the environment he needs by a mathematical equation to contract length, dilate time and increase mass to support Einstein and reject the Bible. The person who is blind is the one who claims that light goes the same speed in an inertial frame, but can't find any inertial frames in the universe; who says that Inflation is needed to compensate for the limited speed of light during the Big Bang, but who then says that the same space at the edge of the universe can create itself and go faster than the speed of light.

Humphreys' biggest problem now is to explain to use why he believes the LIGO experiment incorporated a speed reduction one the light beam when the LIGO paper itself does not include any effect on the light beam. He also needs to explain how there could be a phase shift if the chamber is contracted and the light beam is slowed.

See Appendix 1 immediately following.

Robert Sungenis

September 5, 2016

Humphreys: References

Carter, R. and Sarfati, J. Why the Universe does not revolve around the Earth: Refuting absolute geocentrism, Creation Ministries International website feature article, 12 February 2015, at http://creation.com/refuting-absolute-geocentrism

Anonymous. 2016. Length contraction, Wikipedia article, last modified 6 July 2016, see "Experimental verification" section of article at https://en.wikipedia.org/wiki/Length_contraction

Wikipedia article

Wikipedia: Length contraction is the phenomenon of a decrease in length of an object as measured by an observer who is traveling at any non-zero velocity relative to the object.

R. Sungenis: How can a Relativist claim that the observer is traveling at any non-zero velocity if he cannot determine which is moving, him or the object, of if both are moving?

Wikipedia: This contraction (more formally called **Lorentz contraction** or **Lorentz–FitzGerald contraction** after Hendrik Lorentz and George Francis FitzGerald) is usually only noticeable at a substantial fraction of the speed of light.

R. Sungenis: No, it is not noticeable at all. It is only the THEORY which says that it occurs at a substantial fraction of the speed of light.

Wikipedia: Length contraction is only in the direction parallel to the direction in which the observed body is travelling. This effect is negligible at everyday speeds, and can be ignored for all regular purposes. Only at greater speeds does it become relevant. At a speed of 13,400,000 m/s (30 million mph, 0.0447*c*) contracted length is 99.9% of the length at rest; at a speed of 42,300,000 m/s (95 million mph, 0.141*c*), the length is still 99%. As the magnitude of the velocity approaches the speed of light, the effect becomes dominant, as can be seen from the

formula:

where

L_0 is the proper length (the length of the object in its rest frame),

L is the length observed by an observer in relative motion with respect to the object,

v is the relative velocity between the observer and the moving object,

c is the speed of light,

and the *Lorentz factor*, $\gamma(v)$, is defined as

In this equation it is assumed that the object is parallel with its line of movement. For the observer in relative movement, the length of the object is measured by subtracting the simultaneously measured distances of both ends of the object. For more general conversions, see the Lorentz transformations. An observer at rest viewing an object travelling very close to the speed of light would observe the length of the object in the direction of motion as very near zero.

R. Sungenis: Again, this is all theory. Prove it to yourself by observing the wide variations among scientists as to length contraction. See footnote below.[12]

Wikipedia: Length contraction was postulated by George FitzGerald (1889) and Hendrik Antoon Lorentz (1892) to explain the negative outcome of the Michelson–Morley experiment and to rescue the hypothesis of the stationary aether (Lorentz–FitzGerald contraction hypothesis).[1][2]

R. Sungenis: Notice how the Wikipedia author avoids any mention of the main concern, namely, that Michelson found the Earth wasn't moving through the ether. Lorentz believed in a stationary ether until his dying day. But to explain why Michelson couldn't detect the Earth moving

[12] So far, there are eight different views of length contraction proposed, none of which have actually proven it exists: **(1)** "The contraction is real." Lorentz stated in 1922 that the "contraction could be photographed" (*Lectures on Theoretical Physics*, Vol. 3, Macmillan, p. 203); C. Møller writes: "Contraction is a real effect observable in principle by experiment…This means the concept of length has lost its absolute meaning" (Møller, *The Theory of Relativity*, 1972, p. 44); Wolfgang Pauli: "It therefore follows that the Lorentz contraction is not a property of a single rod taken by itself, but a reciprocal relation between two such rods moving relatively to each other, and this relation is in principle observable" (*The Theory of Relativity*, Dover Publications, 1958, pp. 12-13); R. C. Tolman: "Entirely real but symmetrical" (*Relativity Thermodynamics and Cosmology*, pp. 23-24); **(2)** "The contraction is not real." E. F. Taylor and John Wheeler write: "Does something about a clock really change when it moves, resulting in the observed change in the tick rate? Absolutely not!" (*Spacetime Physics: Introduction to Special Relativity*, p. 76); **(3)** "The contraction is only apparent." Aharoni writes: "The moving rod appears shorter. The moving clock appears to go slow" (*The Special Theory of Relativity*, p. 21); McCrea writes: "The apparent length is reduced. Time intervals appear to be lengthened; clocks appear to go slow" (*Relativity Physics*, pp. 15-16); Nunn: "A moving rod would appear to be shortened" (*Relativity and Gravitation*, pp. 43-44); Whitrow: "Instead of assuming that there are real, *i.e.*, structural changes in length and duration owing to motion, Einstein's theory involves only apparent changes" (*The Natural Philosophy of Time*, p. 255); **(4)** "The contraction is the result of the relativity of simultaneity." Bohn writes: "When measuring lengths and intervals, observers are not referring to the same events" (*The Special Theory of Relativity*, p. 59). See also William Rosser, *Introductory Relativity*, p. 37; and A. P. French, *Special Relativity*, p. 97; and Stephenson and Kilmister, *Special Relativity for Physicists*, pp. 38-39; **(5)** "The contraction is due to perspective effects." Rindler writes: "Moving lengths are reduced, a kind of perspective effect. But of course nothing has happened to the rod itself. Nevertheless, contraction is no illusion, it is real" (*Introduction to Special Relativity*, p. 25); **(6)** "The contraction is mathematical." Herman Minkowski writes: "This hypothesis sounds extremely fantastical, for the contraction is not to be looked upon as a consequence of resistances in the ether, or anything of that kind, but simply as a gift from above, – as an accompanying circumstance of the circumstance of motion" ("Space and Time," in *The Principle of Relativity*: *A Collection of Original Memoirs on the Special and General Theory of Relativity* by H. A. Lorentz, A. Einstein, H. Minkowski and H. Weyl, translated by W. Perrett and G. B. Jeffery from the original 1923 edition, Dover Publications, 1952, p. 81); **(7)** "The contraction is real but invisible." James Terrell writes: "…the Lorentz contraction will not be visible, although correction for the finite velocity of light will reveal it to be present" ("Invisibility of the Lorentz Contraction," *Physical Review*, Vol. 116, No. 4, Nov. 15, 1959, p. 1041); **(8)** "The contraction is real and not real": Einstein writes: "The author unjustly posited a distinction between Lorenz's conception and my own with regard to the physical facts. The question of whether the Lorenz contraction really exists or not is deceptive. It doesn't 'really' exist insofar as it doesn't exist for a non-moving observer; it does 'really' exist, in that it can be proven principally through physical means for a non-moving observer" ("Zum Ehrenfestschen Paradoxon. Eine Bemerkung zu V. Variĉaks Aufsatz." *Physikalische Zeitschrift* 12: 509-510.; Original German: "Der Verfasser hat mit Unrecht einen Unterschied der Lorentzschen Auffassung von der meinigen mit Bezug auf die physikalischen Tatsachen statuiert. Die Frage, ob die Lorentz-Verkürzung wirklich besteht oder nicht, ist irreführend. Sie besteht nämlich nicht 'wirklich,' insofern sie für einen mitbewegten Beobachter nicht existiert; sie besteht aber 'irklich,' d. h. in solcher Weise, daß sie prinzipiell durch physikalische Mittel nachgewiesen werden könnte, für einen nicht mitbewegten Beobachter.")

through the ether, Lorentz claimed that the arm of Michelson's apparatus was contracted. Of course, neither Lorentz nor Einstein ever gave an answer to why the light beam, since it was composed of physical "photons," would not also contract in length—a contradictory fact brought to Einstein's attention by his colleagues Abraham and Föppl, but with no answer from Einstein.

Wikipedia: Although both FitzGerald and Lorentz alluded to the fact that electrostatic fields in motion were deformed ("Heaviside-Ellipsoid" after Oliver Heaviside, who derived this deformation from electromagnetic theory in 1888), it was considered an ad hoc hypothesis, because at this time there was no sufficient reason to assume that intermolecular forces behave the same way as electromagnetic ones.

R. Sungenis: Yes, it was an *ad hoc* hypothesis.

Wikipedia: In 1897 Joseph Larmor developed a model in which all forces are considered to be of electromagnetic origin, and length contraction appeared to be a direct consequence of this model. Yet it was shown by Henri Poincaré (1905) that electromagnetic forces alone cannot explain the electron's stability. So he had to introduce another ad hoc hypothesis: non-electric binding forces (Poincaré stresses) that ensure the electron's stability, give a dynamical explanation for length contraction, and thus hide the motion of the stationary aether.[3]

R. Sungenis: Yes, Larmour's theory was *ad hoc* also.

Wikipedia: Eventually, Albert Einstein (1905) was the first[3] to completely remove the ad hoc character from the contraction hypothesis, by demonstrating that this contraction did not require motion through a supposed aether, but could be explained using special relativity, which changed our notions of space, time, and simultaneity.[4]

R. Sungenis: This paragraph is a complete distortion of the truth, designed to cover over what really happened. Einstein did not remove the "*ad hoc* character." He merely shifted to what he was going to attribute the *ad hoc* theory, namely, SRT. But at least Lorentz suggested a physical cause to the contraction, namely, ether. Einstein had no physical cause, since relative motion is not a physical cause. Einstein rejected ether because he thought Michelson didn't find any ether in his 1887 experiment (but Michelson did find at least some ether, and it would have served as an absolute reference frame, against relativity). Basically, Einstein had two choices: A) accept a non-moving Earth or B) turn science upside down in trying to make it appear the Earth was moving. He chose B.

Wikipedia: Einstein's view was further elaborated by Hermann Minkowski, who demonstrated the geometrical interpretation of all relativistic effects by introducing his concept of four-dimensional spacetime.[5]

R. Sungenis: All Minkowsi did was further distort what Einstein had already distorted by proposing that time was a "dimension" (it is not) and then combining time with the dimensions of length, width and height and calling it "spacetime."

In reality, Minkowski was simply trying to take Einstein's contorted new physics look respectable by putting it in a math equation.

Wikipedia: Experimental verifications

See also: Tests of special relativity

Wikipedia: Any observer co-moving with the observed object cannot measure the object's contraction, because he can judge himself and the object as at rest in the same inertial frame in accordance with the principle of relativity (as it was demonstrated by the Trouton-Rankine experiment). So length contraction cannot be measured in the object's rest frame, but only in a frame in which the observed object is in motion.

R. Sungenis: Notice how the author just assumes length contraction is true, which is similar to what Humphreys did when he said that length contraction is "simply a logical consequence of the axioms of relativity." Hence, if one assumes it is correct, his theory then tells him that he can only measure length contraction if the object is in motion and the observer is at rest. But his theory has no way of verifying that the object is moving and the observer is at rest, so it's nothing but a specious argument designed to look intellectual.

Wikipedia: In addition, even in such a non-co-moving frame, *direct* experimental confirmations of length contraction are hard to achieve, because at the current state of technology, objects of considerable extension cannot be accelerated to relativistic speeds. And the only objects traveling with the speed required are atomic particles, yet whose spatial extensions are too small to allow a direct measurement of contraction.

R. Sungenis: So essentially the author is admitting that modern science HAS NO PROOF for length contraction, but they will continue to believe it happens because, as Humphreys said, it is "simply a logical consequence of the axioms of relativity."

Wikipedia: However, there are *indirect* confirmations of this effect in a non-co-moving frame: It was the negative result of a famous experiment, that required the introduction of length contraction: the Michelson-Morley experiment (and later also the Kennedy–Thorndike experiment).

R. Sungenis: Notice the author admits again that length contraction wasn't proven; rather it was "required" so that they could have some *ad hoc* explanation for why Michelson-Morley found that the Earth wasn't moving. Some science.

Wikipedia: In special relativity its explanation is as follows: In its rest frame the interferometer can be regarded as at rest in accordance with the relativity principle, so the propagation time of light is the same in all directions.

R. Sungenis: Only if they could prove that the interferometer is at rest, which they can't. In fact, they presume that the interferometer is moving since they believe it is moving with the Earth around the sun. So, all the talk about the "rest frame of the interferometer" is putting the cart before the horse. According to Relativity, there can be no rest frame for the interferometer, as there is no rest frame for anything in the universe since they believe everything is moving. In essence, the author is admitting that he needs at least one object to be considered "at rest" for him to even advance the discussion. In other words, he needs geocentrism in order to begin his analysis. But he isn't allowed to use geocentrism, since he believes the Earth and the interferometer are moving.

Wikipedia: Although in a frame in which the interferometer is in motion, the transverse beam must traverse a longer, diagonal path with respect to the non-moving frame thus making its travel time longer, the factor by which the longitudinal beam would be delayed by taking times L/(c-v) & L/(c+v) for the forward and reverse trips respectively is even longer. Therefore, in the longitudinal direction the interferometer is supposed to be contracted, in order to restore the equality of both travel times in accordance with the negative experimental result(s). Thus the two-way speed of light remains constant and the round trip propagation time along perpendicular arms of the interferometer is independent of its motion & orientation.

R. Sungenis: In other words, after the Relativist assumes an "at rest" condition in which both beams will travel the same length (which he cannot do because he has already said in Relativity theory that nothing is at rest), he then admits he has to use an *ad hoc* theory and an *ad hoc* equation to make what he knows is motion appear as if it is at rest so that the light beams will travel the same length. In other words, since Relativity needs an absolute—an "at rest" object—in order to offset Relativity's dilemma that everything is moving and not at rest, he will simply create, out of thin air, the "at rest" state.

Wikipedia: Muon-atmosphere-scenario: The range of action of muons at high velocities is much higher than that of slower ones. The atmosphere has its proper length in the Earth frame, while the increased muon range is explained by their longer lifetimes due to time dilation (see Time dilation of moving particles). However, in the muon frame their lifetime is unchanged but the atmosphere is contracted so that even their small range is sufficient to reach the surface of earth.[10]

R. Sungenis: This is just another example of *petitio principii*—using as proof (time dilation and length contraction) the very thing one is trying to prove (time dilation and length contraction). The Relativist doesn't know if time dilation and length contraction are occurring. He just

assumes them to be occurring and then he does what he must do to fit them into the situation at hand, but he has no proof they are actually occurring.

Even then, his explanation is absurd. Notice that he is requiring the whole atmosphere to contract in length for the muon. Isn't it interesting how tiny muons can contract a whole atmosphere! But that's not all. While the Relativist claims that the atmosphere is contracting for the muon, the atmosphere is not contracting for the observer of the muon on Earth! So we have the atmosphere both contracting and not contracting, which is a rank contradiction to reality.

The "contracting and not-contracting" atmosphere is similar to the "A or B" paradox Dingle demonstrated against Einstein, that is, the principle of *role reversal* in Special Relativity will not allow its attempt to secure a preferred frame of reference, namely, the ground-based observer or the muon-based observer. Relativity purports that time is slowed for the ground-based observer but not the muon-based observer, but this would only be the case if it could somehow be proven that the ground or Earth was immobile, and thus the privileged frame, but it certainly cannot.

Again, Relativity, by what appears to be a sort of shell game with the audience, is appealing to a fixed Earth in order to support a relative universe. This paradox demonstrates the hopeless quagmire into which Relativity theory is forced. To speak of "moving clocks slowing down" really means nothing of significance since Relativity neither has a means to prove the object against which the clock is supposedly moving, nor does it have a standard clock from which to judge the time of the moving clock.

Interestingly enough, in the article "The 'Time Dilation' of Mesons Re-Examined," D. T. MacRoberts turns the tables and shows the geocentric results of the meson experiments:

> The high-velocity experiments on mesons such as those at CERN, are definite evidence of the mesons' lifetimes functional relationship to their velocity with respect to the Earth, but have nothing whatsoever to do with the "time dilation" of Special Relativity. The experiments also are yet another "ether-drift" investigation with the usual answer: *the velocity of the Earth with respect to a fundamental frame is zero*.[13]

The simpler explanation to why the muons hit the Earth is that there is a difference between the rate a muon decay at rest in the laboratory and the rate muons decay when traveling very fast through the Earth's atmosphere. The rate of decay through the atmosphere is slower. This has been proven with Cesium clocks. They tick at a faster rate at higher altitudes.

Wikipedia: Heavy ions that are spherical when at rest should assume the form of "pancakes" or flat disks when traveling nearly at the speed of light. And in fact, the results obtained from

[13] D. T. MacRoberts, *Galilean Electrodynamics*, Sept/Oct 1992, p. 83, emphasis added.

particle collisions can only be explained when the increased nucleon density due to length contraction is considered.[11][12][13]

R. Sungenis: First, notice how the Relativist is forced to appeal to obscure micro-level experiments about collisions between sub-atomic particles, not exactly an exact science by any stretch of the imagination. But the more obscure the better, since few people will be able to check on his results or verify his conclusions. But the Michelson-Morley experiment was not an experiment in sub-atomic collisions. It was a macro-level experiment of which they claimed length contraction from speeds that were only 1/10,000 of the speed of light, namely, the Earth going around the sun at 18.5 mps.

Second, also notice that the author doesn't know if length contraction is really occurring. He first assumes that heavy ions "should assume" a pancake shape near light speed, but he doesn't know this for certain. He then assumes that the increase in nucleon density in particle collisions "can only be explained by…when length contraction is considered." What he is saying is that if the length of an object is contracted, it will have a greater mass per unit volume. Of course it will. But the $64,000 question is: is length contraction causing the increase? The author doesn't commit himself to answer the question definitively. Rather he merely says that if one "considers" length contraction as the reason, it will give an explanation to the mass increase. Sure, and if I consider that I can jump to the moon, then that will be an explanation for how I can get to the moon as opposed to boarding a rocket. But can I prove that jumping to the moon is the real solution? No, and neither can the Wikipedia author prove that length contraction is causing the increase in density.

Another more credible solution is that the ether the atomic particle is traveling through increases its pressure on the particle the faster that the particle moves through the ether, thus appearing to add more density to the particle. But, of course, the Relativist has already dispensed with ether (even though it has been found in hundreds of experiments) and thus he has to depend on an unproven length contraction to answer the problem.

Wikipedia: The ionization ability of electrically charged particles with large relative velocities is higher than expected. In pre-relativistic physics the ability should decrease at high velocities, because the time in which ionizing particles in motion can interact with the electrons of other atoms or molecules is diminished. Though in relativity, the higher-than-expected ionization ability can be explained by length contraction of the Coulomb field in frames in which the ionizing particles are moving, which increases their electrical field strength normal to the line of motion.[10][14]

R. Sungenis: Again, this is nothing but conjecture, not proof. Even the conjecture is dubious. The author is trying to say that when the electric field is contracted, then the charged particle should be able to ionize more quickly because the electric field is more concentrated when it is

contracted, and thus has a greater ability to ionize the charged particle. Notice what he is doing. Similar to when he said that the atmosphere is contracting for the muon, he is now claiming that the "Coulomb field" is contracting for the moving charged particle. How convenient. What he doesn't tell you is that from the Coulomb field's perspective of the charged particle, the charged particle is contracting and the Coulomb field is neutral. If the charged particle contracted, then there is less of it to interact with the Coulomb field, and thus there should be less ability to ionize—the exact opposite scenario when the Coulomb field contracts. But leave it to the Relativist to pick the frame that supports his theory rather than denies it. This is nothing but a shell game. It's not science.

Wikipedia: In free-electron lasers, relativistic electrons were injected into an undulator, so that synchrotron radiation is generated. In the proper frame of the electrons, the undulator is contracted which leads to an increased radiation frequency. Additionally, to find out the frequency as measured in the laboratory frame, one has to apply the relativistic Doppler effect. So, only with the aid of length contraction and the relativistic Doppler effect, the extremely small wavelength of undulator radiation can be explained.[15][16]

R. Sungenis: Again, the same "I will pick the frame that supports my theory and ignore the other frame that denies my theory" is at work. Notice that it is only in the "proper frame of the electron" that the undulator is contracted. But if the undulator is made the proper frame then electron is contracted, and therefore there will be no contraction of the undulator and will not produce an increase in radiation frequency.

But also notice how the Relativist tries to cover up the discrepancy (without, of course, admitting the discrepancy). In the undulator frame (which he calls the "laboratory frame") he knows there will not be a contraction of the undulator, so he conveniently switches tracks on us and says that the undulator's increased frequency must be measured by a "relativistic Doppler effect" instead of a contraction of the undulator. This is the pretentious art of Relativity theory. If one Relativistic theory doesn't work to provide a solution, then one simply injects another theory into the mix to solve the problem, but without ever telling the audience that such is a shell game, not science. The Relativists do the same between Special and General Relativity. When SRT can't answer the problem, they will switch to GRT, and vice-versa.

A good example of this is when Michelson did his 1925 experiment. Unlike his 1887 experiment in which he didn't find the ether for a revolving Earth around the sun, in 1925 he found 98% of the ether for a relative daily rotation between Earth and space. Ludwig Silberstein, a colleague of Einstein, knew that SRT couldn't answer the 1925 results, since SRT assumes there is no ether. So Silberstein claimed that GRT could answer it, presumable since GRT included ether. Notice how Silberstein just skipped right over the fact that Michelson's 1925 experiment completely nullified SRT. But his use of GRT wasn't going to help him either, since Einstein said that the ether of GRT was "non-ponderable," that is, it exists but we can't measure it or detect it. But

measure and detect an ether in 1925 was precisely what Michelson did. As it stands, Relativity theory is completely naked.

As for the undulator experiment, the increase in frequency must come from another cause that is not dependent on “relativistic” effects, since relativistic effects are obviously a wash. In effect, Relativity explains nothing. It only shows how desperate Relativists are since, after 100 years of merely assuming length contraction because, as Humphreys says, it is “simply a logical consequence of the axioms of relativity,” they are finally being forced to show some proof. But the only thing the so-called “proofs” have shown is precisely as the Wikipedia author said it himself, namely, “there is no direct proof of length contraction.” Moreover, obscure micro-level experiments are not going to prove anything for the Relativist, except how good he is at making it appear he has a solution when in reality he doesn’t.

Wikipedia: Reality of length contraction: In 1911 Vladimir Varićak asserted that length contraction is "real" according to Lorentz, while it is "apparent or subjective" according to Einstein.[17] Einstein replied: The author unjustifiably stated a difference of Lorentz's view and that of mine *concerning the physical facts*. The question as to whether length contraction *really* exists or not is misleading. It doesn't "really" exist, in so far as it doesn't exist for a comoving observer; though it "really" exists, *i.e.* in such a way that it could be demonstrated in principle by physical means by a non-comoving observer.[18] — *Albert Einstein, 1911*

R. Sungenis: Every once in a while the curtain is pulled back and we can see that the wizard is just a big fake. This is one of those moments. As I noted earlier in footnote #17, Relativists must assume that length contraction occurs (otherwise they would have to accept the Earth is motionless in the center of the universe), but none of them can really explain how it manifests itself or whether it exists in reality at all.

But let’s look at Einstein’s explanation very closely. Once again, we see the same ironic canard. Einstein must assume the Geocentric perspective of at least one non-moving object (i.e., the “non-co-moving observer”) in order to explain his concept of length contraction. Of course, if there is at least one non-moving object in reality, then there is no relativity, since the non-moving object is an absolute frame from which everything else can be measured, and thus it makes the universe absolute, not relative. So it is quite ironic that Einstein must use an absolute to show how his “relativity” theory works. The minute he tries to do so, he destroys his relativity theory that claims everything is relative.

The whole world has thus had the wool pulled over their eyes by the greatest magician of all time—Albert Einstein.

Wikipedia: Einstein also argued in that paper, that length contraction is not simply the product of *arbitrary* definitions concerning the way clock regulations and length measurements are

performed. He presented the following thought experiment: Let A'B' and A"B" be the endpoints of two rods of the same proper length. Let them move in opposite directions at the same speed with respect to a resting coordinate x-axis. Endpoints A'A" meet at point A*, and B'B" meet at point B*, both points being marked on that axis. Einstein pointed out that length A*B* is shorter than A'B' or A"B", which can also be demonstrated by one of the rods when brought to rest with respect to that axis.[18]

R. Sungenis: Notice once again that Einstein must depend on a "resting coordinate x-axis" but there is no such rest in Relativity theory. To show the absurdity of Einstein's proposal, he could have easily switched characters and said: "Let them move in opposite directions at the same speed with respect to a resting Earth," and it would be the same. But we all know that Einstein did not want a resting Earth, but he surely wanted something he could claim that was at rest to perform his experiment. All Einstein needed to do was assume that people are stupid enough not to be able to distinguish between a "resting Earth" and a "resting coordinate x-axis" that he merely dreamed up in his head. It is nothing but a shell game.

We see the same shell game when Einstein says that the length contraction can be demonstrated when "one of the rods is brought to rest with respect to that axis." Here, Einstein assumes that the rod can come to rest, but there is no way to prove it comes to rest in a relativistic world, just as there is no way to prove the "x-axis" is at rest to begin the experiment.

End