<u>Institute@k1man.com</u> 310 Woodland Camp Road, Belgrade, Maine 04917 USA Telephone 207 242 2143 Original paper at <u>www.k1man.com/b</u> <u>www.k1man.com/v</u> <u>www.k1man.com/physics</u>

ABSTRACT

The author proves that the speed of light, relative to any observer, is not constant in www.k1man.com/c1 and also, by contradiction in this paper. This leads to mathematical disproof of Special Relativity and its derivatives such as Dr. Einstein's famous mass – energy equivalence, $E = MC^2$, which he incorrectly derived. Thus the very foundation of 21st century physics is invalid. This leads to the anti-neutron theory/model of the atom as detailed in www.k1man.com/c2

SPECIAL RELATIVITY MATH DISPROOF ON ONE PAGE

ABSTRACT

We present easy to understand mathematical disproof of Dr. Einstein's Special Relativity on the first page of this paper and discuss why all the so called existing "proofs" of Special Relativity are incorrect. We are in agreement with Dr. D. Sasso that "Special Relativity is obsolete." See www.k1man.com/k

ARGUMENT

Three ticking clocks are synchronized while sitting next to each other.

Consider a thought experiment analogous to Dr. Einstein's 1905 derivation of his famous "time slowing down" formula, t = t' [square root of $(1 - v^2/c^2)$]

You sit on a train platform. Your time (being recorded on a note pad from your previously synchronized clock number3) is "prime" time, t'

I am on the near side of a moving train (from left to right) and record time t on my note pad from clock number 2.

Assume c is constant for us both, as did Dr. Einstein.

A light pulse is flashed at t = 0 on clock 1 across the train toward us both and reaches me on the near side of the train car at t = t on my clock number 2. I measure the distance vector toward me across the train as ct, the first leg of a triangle.

You measure the base vector of the triangle created by the train moving at v relative to you from left to right during the time it took for the light to cross the train in time t for me on clock 2 and time t' for you on clock 3, which is length vt'

You are situated so that when the light reaches me, you are looking straight along the hypotenuse of the triangle (the third leg). You think the light travelled that longer hypotenuse, and I think it went just across the train on leg 1, distance ct for me. Now we use the Pythagorean theorem:

 $(ct)^2 + (vt')^2 = (ct')^2$ Now solve for t.

t = (t') [square root of $(1 - v^2/c^2)$] This Is Dr. Einstein's famous 1905 (and incorrect) "time slowing down" formula. QED As seen, my time "slows down" due to relative uniform motion, according to Dr. Einstein. If v = c, my time slows to zero, and, of course, v can never exceed c, also according to Dr. Einstein.

Now we repeat the experiment with me at the front of the train car and you on the forward overpass. A light pulse is flashed from the middle of the train at t = 0 and reaches the front at a different t = t, and I see it travelling distance ct. You see it travelling ct' + vt'

Now solve ct = ct' + vt' for t

t = ct'/c + vt'/c = t'(1 + v/c) so if v = c then t = 2t' or time has now "speeded up" for me, etc. Time clocks cannot both slow down and speed up on the same train car; a contradiction, and therefore Special Relativity is wrong. QED

Thus, every encyclopedia, every physics text, tens of thousands of physics papers, "experimental proofs," etc., are all wrong. The very foundation of 21st century physics is wrong All of Dr. Einstein's conclusions from the above, including E = MC^2, are wrong. Aristotle was even wrong, remember?

EXPERIMENTAL PROOF

Now, any experiment designed to confirm this analysis by your author needs to be done at 0 degrees with respect to the velocity of the train car. If an experiment measures light at 90 degrees with respect to velocity, it will of course agree with Dr. Einstein's incorrect formula since you are not distinguishing whether time slowed down or whether relative velocity increased. Just look at the clocks later! They will all still be synchronized.

Your author's experiment at www.k1man.com/c1-7, however, is correct, at 0 degrees; DOES distinguish between time slowing down or relative velocity increasing, and is practical as well as accurate enough to confirm the Baxter Doppler formula and disprove the incorrect Dr. Einstein relativistic Doppler formula.

DOES LIGHT "TAKE ON" THE SPEED OF THE SOURCE (TRAIN)?

When light is flashed at t = 0 forward from the middle of a train car moving ahead at velocity v and arriving at the car front at t = t, just as the car front reaches the overpass ahead, the light travels a

distance ct as measured on the train and ct + vt' as measured by you right at the underpass. A light flashed forward from the train platform just adjacent to the light flash on the car at t = t' = 0 will just travel ct' on the ground, as the light on the car has already travelled ct + vt' and reaches the overpass ahead of the light flashed from the train platform. So, yes, the light does "take on" the speed of the source relative to the destination of the light which has the relative velocity with respect to the source. But you can also consider the train as being "fixed" at velocity v = 0, when the light is flashed at t = 0 and the overpass considered as travelling toward the train car at velocity v = 0, when the overpass "meeting the light flash part way." In that sense, the light flash does not "take on" velocity v = 0, when the case of the light flash from the platform, the light travels at velocity v = 0, and the overpass does NOT "meet the flash part way" since there is no relative velocity, and this light flash and the overpass meet LATER than when the light flash from the train and overpass meet.

Suppose A and B are in relative motion v. Light is flashed from A toward B at t=0. You consider B as going to meet the flash from A "part way." Or, you could consider the light as having "taken on" v and moving at c+v. The light travels for millions of light years. But, at t=1 micro second, B slows down to v=0 relative to A and does not "tell" A. What happens to the velocity v "taken on" by A? A does not "care." A does not slow down (shed v "taken on") and does not have to do anything unusual. The relative velocity is suddenly v=0, and A will "know" when it meets B millions of years later. Just look at the clocks and find that the relative speed was c rather than c+v, and no relativistic Doppler shift as Dr. Einstein would have predicted! See www.k1man.com/c1-7.

"The angle of the dangle."

As shown in www.k1man.com/c1, Dr. Einstein's Special Relativity famous "time slowing down" formula was derived, analogous to a train car moving from left to right with an observer sitting on a train platform, and a light beam coming across the train car toward the observer. I define time as that ticked off (starting from T=0) by five clocks, previously synchronized at T=0 while sitting next to each other.

The train car in the analogy is travelling from left to right at velocity v relative to the train platform. When the light arrives at the near side of the train car, the observer, on the train platform, in line with the light path, will be looking along the hypotenuse of a right triangle formed with another side being distance vt, where t is the elapsed time for the light to cross the train car, and the remaining side being the width of the car.

Thus, the observer on the train platform sees the longer hypotenuse path travelledby the light, and an observer on the near side of the train car simply sees the light coming straight across the car along a shorter path. If you assume that light speed is constant, relative to both observers, then, since distance is ct, then a greater distance travelled by the light must be explained by a larger t, as did Dr. Einstein, and his resulting conclusion that time must have actually slowed down on the car.

Or, the relative velocity of the light must have increased, as claimed by your author. The reason for this claim is that for an observer on an overpass to the right will also see the light travel a longer path than an observer on the train at the front of the car. An observer

on an overpass behind the car will see the light travelling a shorter path than an observer on the train car in the rear of the car. Dr. Einstein's incorrect analysis would require the clock in the front of the car to slow down and the one in the rear of the car to speed up. That is a contradiction, and thus Dr. Einstein was wrong. Correct, is relative velocity changing and not absolute time ticked off by the clocks. QED!

Now, any experiment designed to confirm this analysis by your author needs to be done at 0 degrees with respect to the velocity of the train car. If an experiment measures light at 90 degrees, it will of course agree with Dr. Einstein's incorrect formula since you are not distinguishing whether time slowed down or relative velocity increased. Just look at the clocks later! They will all still be synchronized.

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Theory of Electromagnetic Energy Propagation

ABSTRACT

We describe electromagnetic energy as a follow up to the author's THE ANTI-NEUTRON MODEL OF THE ATOM. See www.k1man.com/c2 We identify the exact source and reason for "quantum" in quantum mechanics. A radio wave is continuous emissions, while infrared, light, X, and gamma are discrete because of the sudden deceleration of the electrons (inside the atom) when quickly stopping and thus "generating" electromagnetic emissions when electrons change energy states within the atom or inside the nucleus. That would explain a lot!

Those "bursts" of electromagnetic energy are the "photon" (Planck/Einstein) bundles of energy, quite different from a mostly continuous (but kind of sudden accelerations/decelerations at the positive and negative peaks) of radio waves. But how do the "photons" interfere with one another? And how do the "photons" diffract? Quite important is the general view of $E = MC^2$, which the author has disproved as a general law for ALL matter in www.klman.com/cl $E = MC^2$ is/might be approximate for annihilation, as described in www.klman.com/cl

This new approach will better address the "particle" wave duality quantum mechanics mystery.

ARGUMENT

If you suddenly "turn on" an electric, magnetic, or electromagnetic "field", its influence will move away from the source at the speed of light. Nothing fancy. The influence travels at light speed relative to the source with no medium necessary (as with an electric or magnetic "field;") and if the receiving end is moving at a relative velocity, such as moving toward the source at velocity v, then the relative speed of electromagnetic "field" relative to the receiving end is c + v. See www.k1man.com/c9

An electromagnetic field is "generated" by acceleration or deceleration of an electric charge. A sinusoidally amplitude changing electric charge connected to the center of a dipole antenna will "send out" or "radiate" quite noticeable packets of electromagnetic energy each time the electric voltage peaks and changes from increasing to decreasing or the reverse. If you were "riding" on the sine, you would be affected (inertial - an analogy) most at these changes; that is at the positive and negative peaks. So there would be a particularly strong "packet" at each

peak, but there would also be a (probably?) continuous electromagnetic field sent out at the speed of light during the entire sine function. When this expanding electromagnetic field encounters a similar dipole antenna wire some distance away, the undulating electromagnetic field causes electricity to flow on that distant wire identical to the electricity flow on the "transmitting" antenna, although muck weaker, of course, since the "field" is spreading out while its influence "moves". If the transmitting and receiving antennas are just the right length so that the electricity direction reverses just as its influence (voltage flow) on the wire reaches the end of the wire, we say the antennas are in resonance, analogous to pushing a child on a swing at just the right times so that the swing goes higher and higher.

But the electromagnetic energy, somehow, might not be continuous. Dr. D. Sasso refers to this sort of activity as nano radiation. See www.k1man.com/a6 We don't know on a radio antenna wire. It might be in discrete "lumps" that "take off" after a necessary and "critically minimum" amount of acceleration or deceleration of the electron has taken place. It might be absolutely continuous.

However, the sinusoidal nature of this hookup (and possibly large collection of nano radiations) gives the electromagnetic entity a continuous wave like appearance together with a wave length which is determined by the physical frequency of "radio" transmitter oscillation of the original sinusoidal "radio frequency" voltage applied to the transmitting dipole antenna.

Thus the confusion between waves and energy packets (bursts) or "particles."

The "lumps" of electromagnetic energy are stronger in proportion to the suddenness or rather the intensity of the acceleration or deceleration of electrons (or charges).

Radio waves are pretty low in energy, since the frequencies start at zero and extend from 0 to the 300 billion (or so) cycles per second, called Hertz by radiomen/radiowomen. The energy of this electromagnetic entity is thus proportional to the sinusoidal frequency, or we could say E = Kf, where f is frequency and K a constant, probably not Planck's constant. Planck's constant arises because of the so called "orbital" levels that the electrons start from at the atomic level, approximately analogous to a satellite giving off heat as it comes out of orbit. The atom probably has no such orbits, but chemists have been extremely successful in using this very useful approximate model. We say approximate because the model is just that, an analogous model. We will never see the atom "up close" anyway. Just as Dr. Freud models the human brain (with proposed names such as "id" and "ego"), far too complicated for exact mathematical analysis by "pea brained" humans!.

When an electron changes "orbits" in an atom, the electron comes to an abrupt stop or

deceleration, and the resulting bursts of deceleration energy are of different magnitudes, and Planck proposed their discrete values to be E = hf, where frequency incorrectly implies a wave like characteristic similar to a radio wave. But the damn things act like "waves," so it seems. Also emitted would be electromagnetic energy while the electron is accelerating out of orbit, right? Perhaps not. It is not clear to this writer exactly what is going on down there.

Here we come to "weird" quantum mechanics where these visible light (Planck) electromagnetic bursts exhibit the wavelike feature of interference similar to the behavior of lower "frequency" (energy) radio waves. The electromagnetic field does spread out as it travels, thus explaining the double split experiment, but just how these electromagnetic "bundles" interfere with themselves and exhibit phase like behavior is not clear.

Your author maintains that just because it walks like a duck and quacks like a duck does not mean that it is, in fact, a duck as Dr. Maxwell's work implied! Radio waves are simply not exactly the same as heat, light, X, and gamma rays. Dr. Sasso comes to the same conclusion, but she does not offer an explanation why. See www.klman.com/a6

Just because these "photon" bursts of energy can interfere with each other does not mean that they are waves. If boys laugh and giggle it does not mean they are identical to girls who also laugh and giggle. Positive and negative "interfere." North and South magnets "interfere." So do "photons."

Electrons and positrons can cancel their charges as well as their masses. See www.k1man.com/c2 How they "cancel" their masses is certainly not clear. But the simplistic and incorrect Dr. Einstein idea that E = MC^2 for

all mass would be just too good to be true. The mass - energy conversion process is a special case for only certain kinds of masses such as electrons and positrons.

The Anti-Neutron Theory/Model of the atom (See www.k1man.com/c2) holds that all matter except anti-neutons, which do not exist by themselves, contain charges, and thus all atom particles can therefore exhibit E = hf wavelike properties when accelerating and decelerating, per Dr. Louis DeBroglie. Dr. DeBroglie just went too far with his brilliant idea by suggesting that all mass has a wafelength.

When electric charges move around and stop abruptly inside the nucleus, where distances are small and forces therefore very high, the "bursts" of electromagnetic energy coming out are correspondingly very high bundles of energy called gamma rays. Dr. Sasso postulates rays even higher energy than gamma. See www.k1man.com/k

If you shoot electrons toward a metal plate, their sudden deceleration produces X electromagnetic radiation called X rays, which also show wavelike properties such as X ray diffraction.

When electrons and positrons "crash" together (and decelerate quickly), the ending speeds just before "contact" are quite high; either less than, equal to, or greater than the speed of light. If a sudden stop is from the speed of light, then by conservation of the kinetic energy of ½ MC^2 for each "particle," the resulting gamma burst of electromagnetic energy would be a total of E = MC^2 (totally unrelated to Dr. Einstein – See www.k1man.com/c1. In fact, the actual energy levels are all over the lot. Organization of energy amounts only happens when definite energy "levels" in the atom occur such as in classical chemistry but is not the case, probably, in the nucleus. See THE ANTI-NEUTRON MODEL OF THE ATOM at www.k1man.com/c2

If you scratch a nail along a screen, you can hear radio "white" noise across the entire dial from a high frequency (short wave) receiver because nano radiation is generated containing many different energy levels and having nothing whatsoever with the different resonant frequencies that the short wave radio happens to be tuning to.

So, if you could measure photon (gamma ray) energy, somehow, you could calculate the electron – photon speed at time of contact. The energies associated with radio frequency electromagnetic energy is quite difficult to calculate because there are likely an infinite number of acceleration/deceleration values during the sine. But, again, the electromagnetic energy might burst out at only critically energetic points.

This non quantitative paper offers a broad frame work for better understanding all electromagnetic energy as simple acceleration and deceleration of electric charges. Why and how electric charge acceleration does this cute trick is unclear, as is the relation between acceleration and gravity which is "generated" by (all kinds?) of mass.

ABSTRACT

We have shown that Dr. Einstein's famous formula $E = MC^2$ is incorrectly derived. See www.k1man.com/c1 We have further suggested that $E = MC^2$ is not an identity, with implications for Dr. DeBroglie's famous equation, $\lambda = h/p$, and Planck's famous equation, E = hf, where f is the frequency in hertz and $E = kMC^2$. See www.k1man.com/c4 We now propose that there exists a k, such that $E = kMC^2$, as a special case for electron – positron annihilation.

ARGUEMENT

J.C. Valks has recently shown calculations to suggest that, assuming Dr. Einstein's famous mass changing due to uniform relative motion relativistic equation, $\mathbf{m} = Mo/\sqrt{(1-v^2/c^2)}$, is valid, then $\mathbf{k} = 40$. See www.k1man.com/z We have demonstrated that $\mathbf{m} = Mo/\sqrt{(1-v^2/c^2)}$ is not valid. See www.k1man.com/c1.

Now, assuming that $m = Mo/\sqrt{(1-v^2/c^2)}$ is not valid, we propose to calculate a new value for k. Actually, k = 40 is not too bad as it is, because the important thing here is that we have suggested that $E = MC^2$ is far too simplistic and not generally true for all mass but only true, or nearly true, within the writer's anti-neutron theory/model of the atom. See www.k1man.com/c2

We show in the paper, Not So Fast, Dr. Einstein (see www.k1man.com/c1), that the speed of light is not constant, and that therefore special relativity is not correct as well as a host of conclusions flowing from special relativity by Dr. Einstein, including the derivation of $E = MC^2$. $E = MC^2$ CAN be derived from theoretical analysis of the annihilation of an electron and a positron, as done in Not So Fast, Dr. Einstein, by temporarily neglecting spin. Then, by including spin, energy is actually greater that shown by $E = MC^2$. Thus, photon energy is "created," or rather transferred, from electron and positron mutual electrostatic energy, while their charges and masses both cancel out to zero. The fact is that photon energy can also be "created" and radiated from a radio antenna by accelerating electrons in the radio antenna wire without electrostatic charges cancelling and without masses cancelling. In the case of electron and positron annihilation, electromagnetic energy comes DIRECTLY from the electrostatic energy stored in the electric field between the electron and positron before they accelerate as they are mutually attracted, while electromagnetic energy from a radio antenna comes from the fuel driving the electric generator which powers the radio transmitter which is attached to the radio antenna thus accelerating electrons and generating electromagnetic energy which is radiated from the radio antenna. The energy in the fuel, of course, came from fusion on the sun which was the original electron and positron annihilation.

In 1924, Dr. Louis de Broglie assumed the identity $E = MC^2$ to be correct for all matter, and then he directly derived his equation and idea that $\lambda = h/p$ for any particle with mass or even theoretical photon particles without mass. The collection of radical ideas was now that all mass was identical to energy and that all particles, with or without mass, had a characteristic wave length. This neatly linked together the concepts of both waves (photons) and particles, as well as mass and energy. If only physics and nature were that simple!

In Not So Fast, Dr. Einstein, we assumed that Dr. de Broglie's equation was correct and then derived $E=MC^2$. Dr. de Broglie did the reverse; he assumed $E=MC^2$ to be correct and then derived his famous equation, $\lambda=h/p$ Starting with $E=MC^2$ and Planck's relationship $E=\hbar f$, where $f=c/\lambda$ and momentum is p=mc, then hf=pc and $hc/\lambda=pc$, thus $h/\lambda=p$ or $\lambda=h/p$, which is Dr. de Broglie's equation.

Suppose $E > MC^2$, as described in the first paragraph above, and E = hf, where $f = c/\lambda$ and momentum is p = mc. Therefore E > pc and hf > pc or $hc/\lambda > pc$ and therefore $h/\lambda > p$ as described by Z.Y. Wang in his paper $\lambda = h/p$ is universal? [1] There, Dr. Wang analyses photons in a wave guide and concludes that $h/\lambda > p$ as well.

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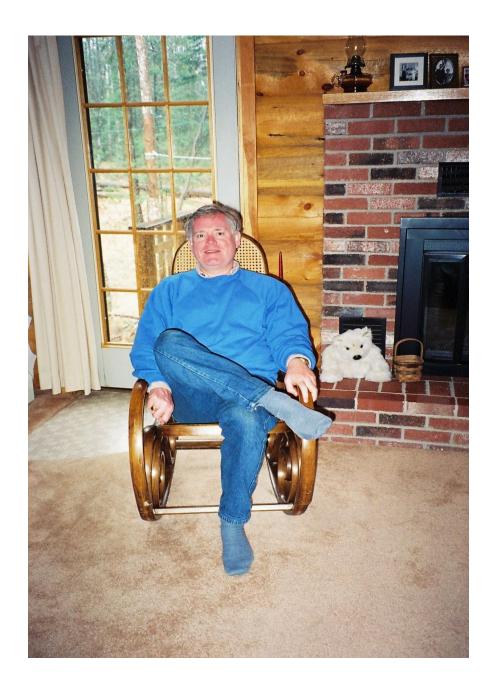
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"To kill an error is as good a service, and sometimes even better than, establishing a new truth or fact."

Charles Darwin

"Great causes are never tried on the merits; but the cause is reduced to particulars to suit the size of the partisans, and the contention is ever hottest on minor matters." - Ralph Waldo Emerson - From his essay "Nature" 1844



Glenn A. Baxter, P.E., at his home in Belgrade Lakes, Maine U.S.A.

See www.k1man.com/g



Glenn A. Baxter, P.E., age 4, with his dad, Frank H. Baxter (Bachelor of Science Degree, Mechanical Engineering, 1914, Rhode Island State College), and President of Frank H. Baxter Associates, 370 Lexington Avenue, New York City. See www.k1man.com/w10 and www.k1man.com/Loons