

$E = MC^2$ and $\lambda = h/p$ Are Not Identities

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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 than 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 $E = hf$, 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.

REFERENCES

[1] [λ = h/p is universal?](#) By Dr. Z.Y. Wang www.vixra.org 0912.0029v1.pdf Also www.k1man.com/f24

[2] [Special Relativity is an Obsolete Theory and Time is Not an illusion](#), by Dr. D. Sasso, www.k1man.com/f58

To: Frank Barkley

From: Glenn A. Baxter, P.E.

1 November 2011

Cc: Emile Rodrigue

Frank,

Following our phone conversation on 29 October 2011, I did listen to your phone message. You referred to a super accurate clock experiment discussed on some TV science show where the clock, just 12 inches higher from the surface of the earth ran faster, in accordance with Dr. Einstein's theory. I believe this is the same experiment referred to in one of those Time-Life (I think) books seen at Wal Mart check out counters about the "100 Greatest, etc., In History" or something to that effect where they claim that the experiment "Proves Einstein's theory" or similar wording. I naturally looked up the paper referenced. See www.k1man.com/f57 It does not offer any such proof as alleged in the Time-Life reference. Popular science writers and producers simply don't understand Special and General Relativity theory.

Is Time An Illusion?

Yes, according to my 10 December 2008 paper "Not So Fast, Dr. Einstein." See www.k1man.com/c1 Contrary to Dr. Einstein, time is not something that can slow down or speed up due to uniform relative motion as theorized in his theory of Special Relativity. General Relativity, however, postulates that gravity can affect light because he says that gravity "bends" space and that light follows a "straight line" in "bent" space. He also concludes that gravity can slow down clocks.

General relativity further postulates that gravity and acceleration are identical. For example, if you were standing at the bottom of a space ship, Dr. Einstein postulates that you could not tell the difference between the ship sitting on earth (with objects being subject to downward acceleration due to gravity) and a ship being accelerated forward by a rocket motor. Dr. Einstein is incorrect since gravity at the bottom of the ship is stronger than at the top of the ship sitting on earth where apparent gravity on the rocket motor accelerated ship would be the same at both the back and the front.

My theory says that gravity will slow down a light wave (light speed is NOT constant), and thus the wave will appear at its destination to be lower in frequency (as though time were running slower at its origin).

Thus, a super accurate clock will appear to run faster 12 inches higher off the ground. Same with satellites. A light wave will take more time going up than coming down, and thus the clock on earth will seem to go slower than the one in orbit; nothing to do at all with Dr. Einstein's incorrect theories, although often confused in commonly seen History Channel, etc. pieces.

Now, assume for a minute the super accurate clock described above 12 inches lower really does run slower than the one 12 inches higher from the center of the earth. This would mean that gravity affects the frequency of vibrations inside matter. Think of the moon circling the earth in a certain amount of time. Think of four super accurate clocks. Clock A is on Earth's surface and clock B is 12 inches higher. Clock C is on the moon surface and clock D is 12 inches higher. The moon orbit takes A ticks, B ticks, C ticks and D ticks, all different. So which is correct? None, since time is an illusion. QED.

There is an intriguing similarity between gravity and acceleration, however, and Dr. Einstein was knocking on the door of something quite interesting. I discuss this in my second and third papers. See www.k1man.com/c2 and www.k1man.com/c3

I hope this responds to your calls.

Glenn Baxter