

Short Paper on Relativity-2011

This short paper will give a few answers to those who had been impressed with the time dilation/universe inflation theories of modern physics relativists or even of young earth/old universe creationists such as Russ Humphreys and John Hartnett. I am in the process of refining a paper on relativity that I wrote almost ten years ago. However, I want to give you a short version of some of the issues.

Briefly, special relativity only has two postulates and applies on to inertial frames of reference (non-accelerating and non-gravitational frames of reference). The second postulate is by far the most significant of the two which states that the speed of light *in vacu* (in a vacuum) is constant regardless of the frame of reference of its origin (the frame in which the light was emitted) or the frame of reference of the observer. However, this postulate of special relativity is contrary to James Clerk Maxwell's derivation of the speed of light more than 40 years before Einstein.

Maxwell's derivation of the speed of light from his famous equations of electromagnetism shows, contrary to Einstein's special relativity, that (1) light has an electromagnetic medium of transport and (2) the speed of light is inversely proportional to the strength of light's electromagnetic transport medium. Both of these not only have been experimentally proven millions of times in the last 150 years but also are the heart of such optical laws as Snell's law where light refracts as it changes speed from one electromagnetic transport medium to another electromagnetic medium. The stronger the electromagnetic transport medium that light travels through, the slower light's speed will be and conversely the weaker light's electromagnetic medium is, then the faster light's speed will be.

In fact, all of the laws of optics are based on Maxwell's derivation which also reveals the configuration of a light wave as a transverse electromagnetic wave. Light as a transverse electromagnetic wave has equal strength electric and magnetic fields vibrating in phase together but perpendicular to each other and perpendicular to the direction of the light wave's travel. Maxwell's derivation would have the speed of light approaching nearly infinite speeds in deep space where the electromagnetic fields (light's electromagnetic transport medium in deep space) coming from the subatomic electric charges in the matter of celestial bodies approach zero. In other words, using Maxwell's derivation, the speed of light would approach nearly infinite speeds as its electromagnetic transport medium approaches zero strength in deep space instead of special relativity's constant, slow speed of light.

Therefore, light from the most distant galaxies may only be years old instead of billions of years old. The speed of light is not constant in the vacuum of space as clearly shown by the Pioneer Anomaly effect (a faster speed of light away from the electromagnetic center of our solar system) and the Shapiro Delay Effect (a slower speed of light nearer the electromagnetic center of our solar system).

General relativity applies to accelerating and gravitational frames of reference and has only one postulate: the equivalence principle-gravitational frames of reference and accelerating frames of reference are equivalent. Einstein said that there is no instrument inside a closed frame of reference that can detect whether an outside force acting on a body of matter in that frame was due to a gravitational body outside of the frame or due to the acceleration of the frame itself. Out of this single postulate of general relativity come implications of time dilation, space dimension contraction, gravity-warped space, singularity points in time such as time worm holes, singularity points in space such as black holes, the Big Bang as a reverse black hole event (white hole), etc.

General relativity, based on this single postulate of the equivalence of gravitational and accelerating frames of reference, is obviously not true for two reasons with two corresponding experimental methods of proving it false. The first reason is based on the fact that the lines of force of gravity are non-parallel and converging, the lines of force in straight acceleration are parallel, and the lines of force in centripetal acceleration are non-parallel but diverging. The second reason is based on the fact that the mass of a body of matter increases from a rest mass as the body increases its velocity in its frame of reference.

In the first case of lines of forces, one simple but exact experiment disproving general relativity involves measuring the distance with a laser between the two exactly made pendulums hanging in a closed frame of reference. The measurement of the distance between the tops and bottoms of the two pendulums will reveal whether a outside force pulling on the pendulums in the closed frame is due to gravity or due to acceleration. If the pendulums hanging in the force field are closer together at the bottom than the top, then the converging force is due to gravity and the closed frame is a gravitational frame of reference. If the pendulums are the same distance apart at the top and the bottom, then the force is due to straight acceleration and the closed frame is a straight accelerating frame of reference. If the pendulums are farther apart at the bottom than the top, then the force is due to centripetal acceleration and the closed frame is a centripetal accelerating frame of reference. Contrary to general relativity, a closed frame of reference can be determined if it is gravitational or accelerating-straight or centripetal.

In the second case of mass changing with velocity, a second test of disproving general relativity is based on the fact that a body of matter has a rest mass and that the mass of the body will increase with velocity until its mass will approach infinity as the body approaches the speed of light in its frame of reference. Measuring the weight of a body of matter in a gravitational frame of reference which has no acceleration and consequently no change of velocity will show no change of weight or mass of the body with the passage of time. However, the mass of a body in an accelerating frame will be constantly increasing as its increasing weight will demonstrate. Therefore, measuring the weight of a body of matter in an accelerating frame of reference will show the weight and mass of the body to be constantly increasing. The inverse is also true: measuring the weight of a body of matter in a decelerating frame of reference will show the weight and mass of the body to be constantly decreasing. With an accurate weighing scales and a large body of matter, there will be clear differences between gravitational and accelerating frames contrary to the sole postulate of general relativity, even at very low speeds, far below relativistic changes near the speed of light. Again, contrary to the sole postulate of general relativity, a closed frame of reference can be determined if it is gravitational or accelerating/decelerating.

If general relativity is not true as the two above concepts and experiments can show, then all of the other derivations from general relativity such as time dilation, warped space, dimension contraction, time worm holes, black holes in space, etc. are invalid also. All adherents to the modern theories of relativity including creationists are building their own theories on these flawed theories of relativity.

I do not have time to list numerous other fallacies that general relativity has lead to but here are a few:

(1) Black holes (including one of its corollaries-the Big Bang) can not be true because gravity is too weak of a force to crush the electromagnetic fields in matter into a black hole, even if all the particles in the universe were in a single ball. Electromagnetic fields, coming from the small subatomic electric charges which give matter its bulk volume, are 10^{36} (1 with 36 zeros behind it) stronger than gravity of the body of matter composed of the same small subatomic electric charges. The sun is one million times larger than the earth but has a smaller density created by gravity than the earth. All of the matter in the universe could be put into one body of matter and its gravity could not crush all of the matter in the universe into a gravity black hole.

(2) Since neutrons are unstable outside of an atomic nucleus and atomic nuclei larger than uranium become unstable if more neutrons are added to increase the size of the nucleus, then the largest neutron star possible is a single uranium nucleus. Stars composed of neutrons cannot exist nor can neutrons create high density bodies of matter with enormous gravity fields to warp space.

(3) Whole multiverses (alternative universes) in other time-space dimensions are not detectable and are not entering and exiting the time and space of our universe in very short time frames. Otherwise, the matter and energy of these entering and exiting multiverses would collide with the matter and energy in our universe at enormous velocities resulting in horrific energy releases, destroying our universe. Obviously, this is not happening.

(4) Also, the accelerating and decelerating of the subatomic electric charges in the matter of a hypothetical multiverse as it enters and exits our time and space in minuscule fractions of a second would create inestimably enormous electromagnetic impulses (EMPs) which would annihilate our universe in nanoseconds. Again, this obviously is not happening.

(5) In addition, how would all of the matter and energy of a whole multiverse physically squeeze through a worm hole in time and space smaller than the smallest particle in the universe as affirmed by many relativistic cosmologists?

Paradoxes, antinomies, and contradictions (twin paradox, wave-particle duality, etc.) are the warp and woof of both special and general relativity. The electromagnetic relativity of Maxwell along with the electromagnetic theories of Ives, Essen, Barnes, Lucas, Bergmann, and other physicists supplies a much better explanation of our universe as a young universe creation based on classical relativity rather than convoluted theories based on modern special and general relativity. That even includes theories of young earth creationists using general relativity's derivations such as the time dilation and inflationary theory.

For example, young earth/old universe creationists such as Russell Humphreys have time dilation all backwards, even according to Einstein's general relativity. According to Einstein, time dilation or slowing down of time takes place in the fast moving frame of reference such as in the twin paradox (the twin traveling near the speed of light does not age). The rapid expansion of the universe on the creationist fourth day would lead to time dilation or the slowing down of time in the expanding, fast-moving frame of the universe. In contrast, time on the earth would pass at the normal rate since it is traveling slow or not traveling with respect to the

rest of the universe. This would mean that there would be 13-15 billion years of clock time on the earth and less than 7,000 years of clock time in the rapidly expanded universe, the opposite of what Humphreys et al propose.

Possibly, these creationists think that the rapidly expanding universe is preferred frame of reference and that the earth is moving rapidly with respect to this inflationary universe. However, the modern theories of relativity are very dogmatic that there is no preferred frame of reference in the universe. Again, what are the physical laws and forces that would allow the rapid acceleration and deceleration of the massive parts of the universe in very short amounts of time in such inflationary theories-modern or creationist?

The theories of special and general relativity run afoul of the time-proven basic laws of science and must add multi-layers to the cosmogony hypotheses that emanate from these theories in order to explain the real universe. For instance, interplanetary space travel cannot be built on the theories of special and general relativity. The equations for interplanetary probes are based on classical Newtonian-Maxwellian laws of physics and relativity with absolute time and space coordinates and not Einsteinian theories of relativity with time dilation, space dimension contraction, and a gravity warped time-space continuum.

Although it is a subject for another article, modern physics with its theories of relativity (macro physics) and quantum physics (micro physics) have a non-objective basis in the real universe. Modern physics' time-space continuum of the universe changes its shape/configuration as the subjective observer moves about, changing his/hers time-space position in the universe. The very existence of physical matter in Niels Bohr's quantum physics depends on a subjective observer-no observer, no matter. This subjectivity of the universe may make sense to the Hegelian triad philosophy which pervades the relativism of our modern thought where truth and the universe centers on the subjective individual. Unfortunately, the observer's egocentricity has little value in the objective world of science and physics.

Modern society is bedazzled by the nearly unfathomable intricacies of the theories of relativity. Modern man unrealistically would like to have the physical universe conform to his subjective thoughts, pleasures, actions, or philosophy of life. However, the hard objectivity of matter and energy has a heartless disregard for accommodating itself to subjective observers, human or otherwise. Modern special and general relativity along with quantum physics are Hegelian triumphs but unreal cul-de-sacs for science. Humans who want to base their hopes, actions, or life philosophies on the special and general relativities of modern physics are doomed to very objective disappointments. Alternatively, with the average cosmological

theory of the universe based on these theories of relativity having a half-life of 2-7 years, modern society can be entertained with several different cosmological fads during a person's lifetime.