OSP Journal of Physics and Astronomy

Editorial

The Complete Disproof of the General Theory of Relativity

Lee J*

Center for Reality Physics, USA.

Corresponding Author: Jeffrey Lee, Center for Reality Physics USA. E-mail: jlee1548@outlook.com

Received: January 13, 2025; **Accepted:** January 27, 2025; **Published:** February 05, 2025

Abstract

It is the purpose of Physics to interconnect mathematical definition to observed physical relation so that we can understand and explain how and why the fundamental nature of the universe works. What this means is that mathematical descriptions of the universe, as provided by calculation and experiment, must conform to some real observation of physical reality itself. In this communication we now reveal, for the very first time in human history, the actual physical relation of motion to space and time directly responsible for the complete disproof of the General Theory of Relativity.

Keywords: *Gravity; Special Relativity; General Relativity; Now Point in Time; Action Geometry; Time Dilation; Fitzgerald Formula; Universe Frame; Time Dilation Frame; Velocity Frame*

Introduction

It is well known throughout the world that Einstein's General Theory of Relativity is the best attempt we have of understanding the fundamental nature of gravity. According to Einstein, gravity is the result of curved space, where mass tells space how to curve, and space tells mass how to move. However, as we also know, the General Theory has never been proven to be true, or untrue, until now. In this paper it is revealed that the equation Einstein attempted to use to mathematically correlate the gravitational time dilation of an object to its mass and radius, is wrong. It is also revealed that by using a completely new mathematical approach called: "Action Gravity," we can find the correct answer that, not only completely agrees with Classical Newtonian Physics, but also with known physical reality.

Discussion

Einstein once made the proposition that: "gravity slows time," meaning that the greater the strength of the gravitational field, the slower, or more dilated, time will pass. The equation Einstein proposed to describe this mathematically relating the mass and radius of a given object like a planet, or star, to its gravitational time dilation is: $Dt_G = (1 - 2Gm/rc^2)^{1/2}$, where: Dt_G is the time dilation due to gravity, G is Newton's Gravitational Constant: 6.67 x 10^{-11} m^3/kg.-sec.^{2}, m is the mass of the object, r is the radius of the object, and c is the speed of light: 299,792,458 meters per second.

Obviously, we see from this equation that the greater the mass of the object, and the smaller its radius, the greater the strength of the gravitational field, and with enough mass, we would stop the flow of time altogether, and get a "Blackhole." We also find that we can actually test this equation by using observed situations existing within objective physical reality itself. One of the easiest ways we can do this is to show how we can attempt to calculate the centrifugal acceleration of the Earth in its orbit around the Sun, using this gravitational time dilation equation of General Relativity.

We do this by, first of all, using Newton's equation for centrifugal acceleration which is: $Ca = Vo^2 / r$, where: Ca is centrifugal acceleration, Vo is the orbital velocity of the Earth, and r is the radius of the Earth's orbit around the Sun. Since: Vo = 30,000 meters per second, and: $r = 1.496x10^{11}$ meters, we calculate a centrifugal acceleration of: Ca = .006 m/sec.^{2}. This, of course, not only agrees with Newton's equation, but it also totally agrees with our observations of the physical universe.

Since Einstein directly interconnected gravitational acceleration to time dilation, then we can see how we should be able to calculate the cor-

rect gravitational acceleration of the Earth in its orbit around the Sun, which should exactly match the centrifugal acceleration, using the equation of General Relativity describing time dilation that we introduced earlier. We find, however, that if we substitute in both the mass of the Sun which is: $m_{(SUN)} = 1.9891x10^{30}$ kg., and the radius of the Earth's orbit, we obtain the time dilation due to gravity at this distance from the Sun to be: Dt = .999,999,990,132,147.

However, what we find is that there is no way we can use this equation of General Relativity to calculate this gravitational acceleration of: g = .006 m/sec.^{2}, that matches the centrifugal acceleration we calculated using Newtonian Classical Dynamics, which is also observed in physical reality. Obviously, what this reveal to us here, is that there is no physical interrelationship of motion to space and time in this universe that confirms the validity of this gravitational time dilation equation of General Relativity.

It is interesting to observe here that, even though this equation of General Relativity gives us totally incorrect, and useless, answers, it is still used by Theoretical Physics Academia today. One of the main purposes of General Relativity was to connect time dilation to gravitational acceleration. Obviously, this is what Einstein intended to do with his equation. However, as we can now observe, it is totally impossible to use this equation to calculate the correct time dilation we can use to duplicate the known gravitational acceleration of the earth, as it falls toward the Sun in its orbit. This also further means that it would be completely impossible for us to use this equation of General Relativity to calculate any gravitational acceleration in the universe. Why? Because the mathematics of this equation do not correctly describe any real physical relationship of motion to space and time in physical reality.

So, what can we do to correct this problem? The only real solution is for us to totally forget General Relativity, and open our eyes to a completely new way of doing things called: "Action Gravity." In this new way of thinking about things, we find that we can now exactly duplicate the: Ca = .006 m/sec.^{2} Centrifugal acceleration of the Earth in its orbit, as travels around the Sun. Rather than use the incorrect equation of General Relativity, we find that we can get the correct answer by using this new equation of Action Gravity that calculates time dilation, which is: $Dt_G = (1 - Gmt^*/r^2c)^{1/2}$.

As we can immediately observe, by substituting both the mass of the Sun, and the radius of the Earth's orbit, into this new equation of Action Gravity, and by letting t* be equal one second, we obtain the correct answer of: Dt_G = .999,999,999,99. We now substitute this time dilation we just calculated into this new equation of Action Gravity which is: $g = c(1 - [Dt_G]^2)/t^*$, to obtain the correct answer of : g = .006 m/sec.^{2} . As we can observe, this answer exactly matches the answer we calculated using Newtonian Classical Dynamics, and it also totally agrees with our observations of the physical universe, now proving that Action Gravity is correct, while proving that General Relativity is wrong.

Now, what we need to do here is to find out why we only get the correct answer with the equation of Action Gravity, and get a totally erroneous answer from the equation of General Relativity. The first thing we immediately notice is that the term on the righthand side beneath the square root radical is different for each equation. The one in the equation of General Relativity is: $2Gm/rc^2$, and the one for the equation of Action Gravity is Gmt^*/r^2c. So, how do we find out what is really going on here?

To do this, we need to go back to the Fitzgerald Formula that Einstein interconnected to the concept of time dilation, and used in his Special Theory of Relativity. The problem arises from the fact that, as we analyze this equation: $Dt_V = (1 - Vo^2/c^2)^{1/2}$, we observe that we are dividing the moving object's velocity squared, by the speed of light squared. However, what Einstein didn't know, is that this c^2 term doesn't just stand for the speed of light, but also for the actual: "Speed of Time Through Space",

since what we are saying here is that: "The speed of light is the speed of time, in that light always travels at the speed of time according to this new way of looking at things called: Action Gravity."

Obviously, when we propose that the speed of light is also the speed of time, we are radically changing the universe so that Einstein's famous equation : E

= mc^2, now means that energy equals mass times the speed of time squared, not just the speed of light, because we are now making the assertion that time always travels at the speed of light, or "c". This is actually quite evident because when we have a clock traveling at the speed of light, it records the passing of no time at all. Obviously, this would further mean that by traveling at the speed of light, the clock has now "caught-up-to," that thing that makes a clock's hands turn, which is the actual, physical motion of time through space, itself, and this is why the Fitzgerald Formula says the clock's hands will stop turning completely when it travels at c.

In order for us to fully understand why this equation of General Relativity is wrong, we now need to examine how we human beings actually think about, and comprehend, the fundamental nature of time. The first thing we need to understand here is that with our new way of thinking, we now find that our universe is constructed from three basic elements: 1. Space, 2. Time and 3. Mass-Energy. It is also true, that when we try to define what matter is, we say that it has weight, and it occupies space. However, as we can notice from this definition, there is no mention of time. So, why is this? Because, even though it may sound somewhat ridiculous to many people, time is as necessary as space and mass-energy for an object to exist in the universe since, if an object does not exist for any defined amount of time, then how can the object exist at any place in space?

So, as we can immediately observe, time is necessary for an object to exist in space, since no one has ever observed an object to exist in space without it existing for a finite amount of time. What this means is that space, itself, must also exist in time, further meaning that time must exist everywhere in space, simultaneously, whether or not matter is present in space. So, why don't we humans realize this and include this fact in the definition of what matter is? Because we are like a fish in water concerning our perception of time. Just like the fish does not observe the existence of water, since it is immersed within it, so too are we immersed in time, and this is why we don't notice or understand its true nature. We even have people suggesting that "time is imaginary," and some that say "it does not even exist at all."

So, what we need to understand here, is that time is as real, and is as necessary, as space, and mass and energy, for an object to exist in this universe. This also further means, that time dilation, whether it is caused by either velocity, or gravity, is real, and can cause real physical change in matter, like the slowing down of the rotation of a clock's hands, for example. This fact has been proven by scientists flying atomic clocks around the Earth, and by the operation of the GPS navigating systems we use every day in our cars when we travel.

We find that clocks slow down, or experience a time dilation, at the rate as described by the Fitzgerald Formula we introduced earlier. But if time actually slows down, then how fast was it passing to begin with? Another question might be: If time stops completely in a Blackhole, then how fast does it pass in "empty" space? For if it doesn't pass at some rate in empty space, then how can it slow down, and any comparison be made at all?

What this actually means here is that time must pass at some given finite rate in space for time to pass at all for an object located in space, and time must also pass in space for an object to experience a time dilation, due to its velocity through space. So, the question we have now is: How fast does time pass in empty space in order for objects to exist at all, and for time to be able to dilate due to an object's velocity through space? This is obviously a question that has not been answered by Theoretical Physics Academia even though it is obvious that time does pass at some rate in the universe because, if it didn't, it would be completely impossible for us to exist here at our place in space, since, as we have observed, time is as necessary as space and mass-energy, for us to exist in our universe.

This definition of time that we have just presented here is completely different from the description of time being "relative," as proposed by General Relativity, which asserts that both space and time are only "relative" concepts. However, we find that it is this relative definition of time that causes us to get an incorrect answer when we try to use the equation of General Relativity to calculate the time dilation of the Sun at the distance of the Earth's orbit that we examined earlier, as we then tried to calculate the acceleration due to gravity of the

Earth as it orbits the Sun. What this means is that, time is not relative, imaginary, or elusive, but, in fact, is real, and this is why time dilation can cause real physical change in matter, like the slowing down of the rate of the rotation of a clock's hand, for example.

What we need to do now is to reexamine our definition of time, so that we can understand it from a more objective perspective, in order to make sense of our observations of this primary element which is such a vital and necessary part of our reality. With General Relativity time is thought to be one-dimensional, and pass linearly in our universe from one moment to the next. This is also the way that most all of Theoretical Physics academia, and most people in general, think about time. With this new Action Gravity concept, we now completely change the universe from the "static configuration" it is miss assumed to be today, to an "active condition," where the still position in which we all exist is no longer the same place from one moment to the next, but is continually being formed, or brought into existence, by this active, two-dimensional, outward motion of time with space.

The best way to describe this new way of looking at the universe, is to imagine a three-dimensional average size room filled with miniature light bulbs, each one being completely transparent to the light from all the others. If we turn-on all of the light bulbs at the same instant, and let the room represent three-dimensional space, and the light emanating from the small light bulbs represent the active, two-dimensional, outward motion of time with space, we have a representation of how time passes outward into the three-dimensional space of this universe. This now completely changes the universe from a "static configuration" simply existing linearly from one moment to the next in time, to an "active condition" continually being formed by this "Active, Two-Dimensional Speed of Time Through Space."

So, how does this affect our understanding of gravity? In order to answer this question, we now need to examine the Fitzgerald Formula, and take note of the "c^2" term in the bottom, right-hand portion of this equation. As we alluded to earlier, Einstein, along with virtually everybody else, thought that this" c" was only the speed of light. However, with this new Action Gravity, we now know that this is not just the speed of light, but is, the Active, Two-Dimensional, Outward Speed of Time Through Space. This now opens-up a completely new way of looking at things as we analyze how, by our recognizing this new concept, we, for the first time in human history, can now reveal the real physical reason as to why the Fitzgerald Formula corresponds a nonlinear, incremental, decrease in time dilation to a linear, incremental increase in velocity, using this new concept of Action Gravity.

What this means, is that any clock located at a still position in space, would record time to pass outward from its position at its greatest rate possible, and as it begins to move, it would begin to physically "catch-up-to" this active, two-dimensional motion of time with space and, of course, experience a Time Dilation. As far as Relativity is concerned, there is no observed physical relationship of motion to space and time that will reveal to us why this clock will experience a Time Dilation, where a nonlinear, incremental decrease in Time Dilation corresponds to a linear, incremental increase in velocity, because in Relativity, time is only "relative," and most all physicists, like Einstein, defined the "c^2" term in the Fitzgerald Formula as being only the speed of light, and not the actual, physical speed of time through space. Consequently, with Relativity, there is absolutely no possible way to find a real physical reason as to why time dilation even occurs at all, or why time dilation mathematically decreases at the nonlinear, incremental rate at which it does with respect to a linear, incremental increase in velocity.

With this new concept of Action Gravity, however, we find that we can now illustrate exactly why a nonlinear, incremental decrease in time dilation does correspond to a linear, incremental, increase in velocity because, as a clock moves at a greater and greater velocity, it is actually, physically catching-up-to a two-dimensional motion of time moving outward into space at the speed of light, or what we should correctly call: "The Two-Dimensional Speed of Time Through Space." This not only furnishes us with the real reason as to why time dilation even occurs at all, but it also, as we are about to demonstrate, reveals the real physical relationship of motion to space and time that corresponds a nonlinear, incremental decrease in

time dilation to a linear, incremental increase in velocity.

We start out by illustrating how the Fitzgerald Formula calculates a time dilation of one for a clock located at a stationary position in three-dimensional space, since it has no physical velocity with respect to this space, causing the clock to experience the full active, two-dimensional, outward displacement of time with space. This now means that the radius of the sphere of time moving outward from this still clock will be one light-second in distance, or: ct = 299,792,458 meters, as one second of time passes.

This now allows us to invent a new type of geometry called "Active Geometry" that compares the rate at which time passes in the: "Universe frame," or Sa1 (surface area one) where its radius is ct, to the sphere of time passing in the: "Time Dilation frame" or Sa2 (surface area two), which would be at the dilated rate: Dt_G x c, due to either the velocity of an object, or due to its gravitational field. We also call the sphere of time displacement that is created by the velocity, or the gravity, of an object the: "Velocity frame," or Sa3, where its radius is equal to the velocity vector of the object: Vo, and its surface area is equal to: Sa1 - Sa2 = Sa3.

We find that we can make these spheres of time displacement concentric by aligning their center points, and comparing their sizes, now enabling us to illustrate why the Fitzgerald Formula corresponds a nonlinear, incremental decrease in time dilation to a linear, incremental increase in velocity. As was just illustrated, a clock at a stationary location in empty space would record time at the same rate space does, and therefore shows time passing as fast as possible. In this case, according to our Active Geometry, Sa2 would be exactly equal to Sa1, and Sa3 would not exist at all, meaning that there is no time dilation since there is no linear velocity of an object, or gravitational field present, in this space.

As the clock begins to experience a velocity with respect to this three-dimensional space it would, obviously, began catching-up to this active, two-dimensional, outward motion of time with space and experience a Time Dilation, because time would now be passing at a slower rate for it than it would be passing in still, absolute space. This is because, the moving clock is now physically catching-up-to this active displacement of time with space, thus causing its hands to now rotate at a slower rate than the clock that remains stationary in space, where time continues to pass at its fastest rate possible.

We can now observe how this Active Geometry works to show how the Fitzgerald Formula corresponds a nonlinear, incremental decrease in time dilation to a linear, incremental increase in velocity, by letting our clock assume a velocity of: Vo = 0.1c. We now use the formula for finding the surface area of a sphere, which is: Sa = 4 p r^2, to find the surface area of this sphere with a radius of: r = 0.1ct, to be: Sa3 = .01 of Sa1. We then subtract Sa3 from Sa1 to obtain a result of: Sa2 = .99 of Sa1.

We now find the radius of Sa2 which is: r2 = .995ct, which is the time dilation as calculated by the Fitzgerald Formula. What this time vector actually represents is the physical distance the "Now Point" in time traveled from its origin point when it expanded two-dimensionally outward into space at "Dt_G x c."

We now let our clock attain a velocity of: Vo = 0.2c, meaning its radius of Sa3 now doubles to twice that of Sa3 with a velocity of: Vo = 0.1c, and its surface area increases to four times that of Sa3, which is Sa3 = .04 of Sa1. By subtracting this Sa3, with a velocity of: Vo = 0.2c from Sa1, we obtain a surface area for Sa2 to be: Sa2 = .96 of Sa1. Finding the radius of Sa2 for this Vo = 0.2c, we obtain: r2 = .98ct, which is the physical distance the Now Point in time will move out into space from the center point of Sa2 as one second of time passes in the universe frame, This is also the time dilation as calculated by the Fitzgerald Formula for this velocity of: Vo = 0.2c. We can also observe how a clock with a Vo = 0.3c would have a Sa3 = .09 that of Sa1, and subtracting this from the surface area of Sa1 we obtain a Sa2 = .91 of Sa1, with a radius of: r2 = .945ct, which, again, exactly matches the time dilation as calculated by the Fitzgerald Formula.

So, as we can immediately observe using this new Active Geometry, we can see how the time dilation decreases incrementally at the inverse nonlinear rate as the velocity increases linearly. This is evident as we observe how the clock with a velocity

of Vo = 0.2c has a time dilation of four increments more than that of the clock with a Vo = 0.1c, and the clock with a velocity of Vo = 0.3c has a time dilation of nine increments more that of the clock with a Vo = .1c.

For a clock traveling at Vo = .5c, or one half the speed of light, we simply square the: Vo = 0.5c to equal a surface area of: Sa3 =.25, which we subtract from Sa1 to obtain a: Sa2 = .75. Taking the square root of: .75 we obtain a radius of: r2 = .867 which, again, is both the time dilation, and the omnidirectional distance the Now Point in time will displace our clock traveling at the velocity of one-half the speed of time, or light, as one second of time passes in the Universe Frame. We also notice here that this clock traveling at one-half "c," will have a time dilation with twenty-five increments more than our clock with the Vo = 0.1c velocity. Consequently, what we have to realize is that what the term: "Time Dilation" describes to us here, is the actual physical omnidirectional distance the Now Point in time, originating within the moving frame, will travel out into space at "Dt_G x c."

What this illustrates to us here is that we now have a real physical relationship of motion to space and time existing in our universe that reveals to us, not only why time dilation occurs at all, but also why a nonlinear, incremental decrease in time dilation corresponds to a linear, incremental increase in velocity. This is because time has this active, two-dimensional, outward motion with space that increases in size at the rate at which the surface area of a sphere increases in size with respect to its radius, as this radius increases at the speed of time, or light.

So, what we find is that it is this physical relationship of time passing two-dimensionally, outward into space, from every point in space at the speed of light, that is directly responsible for interconnecting the mathematical configuration of the Fitzgerald Formula to the concept of time dilation. What we really need to understand here is that this discovery, now explaining why this outward, two-dimensional displacement of time with space is the real, physical reason that the Fitzgerald Formula corresponds a nonlinear, incremental decrease in time dilation to a linear, incremental increase in velocity, can only happen with this new Action Gravity. It cannot possibly happen with Relativity because, with Relativity, space and time are defined as only "relative concepts," and can have no absolute physical relationship upon which we could interconnect to any mathematical interaction.

As was revealed earlier, one of the main purposes of General Relativity was to interconnect time to gravity, or time dilation to gravitational acceleration. This is what Einstein was trying to do with the equation that was introduced at the beginning of this communication. However, as was previously illustrated, even though it is still used by Theoretical Physicists today, it simply does not work. So, the obvious question is: Why doesn't it?

The answer can be found as we examine the mathematical configuration of the Fitzgerald Formula, and contrast it with the mathematical interactability of the General Theory of Relativity. As we all know, the General Theory has three space dimensions, and one-time dimension. However, the Fitzgerald Formula has a: "c^2" term in the denominator, meaning that you must square the speed of time, or light, and divide it into the moving object's velocity squared. This means that this: "c^2" term represents two, not one, dimensions, and, as we have already revealed, it is not just the speed of light, but, in fact, refers to: "the Speed of Time Through Space". This, however, was not known to Einstein, and to this date, has not been discovered by anyone else yet in Theoretical Physics Academia.

So, what Einstein was trying to do is to conflate a theory, the General Theory of Relativity, with only one dimension of time, with an equation, the Fitzgerald Formula, which has two dimensions of time, and this is the real reason he never found his: "Theory of Everything." First of all, General Relativity, because it uses only one dimension of time, describes a "static" universe where time passes linearly from one moment to the next. However, with Action Gravity we recognize that the Fitzgerald Formula uses the: "c^2" term as "Time Squared", to describe a much more "active" universe, where we now have a real physical reason as to why time dilation occurs at the rate at which it does, and it also explains the real reason as to why time dilation even occurs at all.

Citation: Lee J (2025) The Complete Disproof of the General Theory of Relativity. *OSP Journal of Physics and Astronomy* 6: JPA-6-161.

What this means is that, since General Relativity uses only one-time dimension (and calls it the fourth dimension), time simply passes linearly from one moment to the next in the Relativistic universe. Consequently, this further means that the time dilation a moving clock will experience within this universe must be mathematically described as being a one-dimensional line of numbers going down from one to zero. Accordingly, the equation describing time dilation in General Relativity, or in any four-dimensional universe using only one dimension of time, would be: $Dt_v = 1 - Vo/c$.

We find we can now demonstrate this as we let our moving clock have a velocity of: Vo = 0.1c in this Relativistic universe where $Dt_v = 1 - 0.1c/c = .9$. For a clock having a Vo = 0.2c, we would have: $Dt_v = 1 - 0.2c/c = .8$, and for a clock having a velocity of Vo = 0.5c (or one-half the speed of time, or light) we have: $Dt_v = 1 - 0.5c/c = .5$. So, we can now observe that because with General Relativity time is one-dimensional, then so too would also be the time dilation of a moving clock where a velocity of: Vo = 0.1 c equals a: $Dt_v = .9$, a velocity of: Vo = 0.9c equals a: $Dt_v = .1$, and this would continue up to where a velocity of: Vo = c equals a: $Dt_v = 0$. So, now we can understand why it would be completely impossible for Einstein, or anyone, to combine General Relativity, since it uses only one-dimensional time dilation, with the Fitzgerald Formula, since it uses two-dimensional time dilation.

Conclusion

This now gives us the real physical reason explaining why the Time Dilation equation of Action Gravity we used to give us the correct answer to calculate the gravitational acceleration of the Earth as it orbits the Sun exactly matches the observed centrifugal acceleration, we calculated using Newtonian Classical Dynamics. This also shows us why the incorrect equation of General Relativity gives us completely erroneous answers, since it is not based upon any observed physical interrelationship of motion to space and time, where, as has just been demonstrated here, the equation from Action Gravity is. So, the question we now have is: When will Theoretical Physics academia accept the truth of Action Gravity, and get rid of General Relativity, since it has been proved to be completely wrong as far as its ability to describe the observed physics of the universe is concerned, and Action Gravity has been proved to be completely correct?

References

1. Sir Isaac Newton (1923) Mathematical Principles of Natural Philosophy. *University of Chicago Press*.
2. Albert Einstein (1961) Relativity: The Special and The General Theory. *Crown Publishers*.
3. Jeffrey Lee (2015) Action Gravity. *Mindsight Publications*.
4. L. Swenson., The Ethereal Aether (1972) Univ. of Texas Press, Austin.
5. Cantor and Hodge (1981) Conceptions of the Aether. *Cambridge Press*.
6. O. Lodge (1909) The Aether of Space. *Harper and Brothers Publishing Company*.
7. O. Lodge (1925) Aether and Reality. *George H. Doren Company*.
8. E. Whittaker (1954) A History of the Theories of Aether and Electricity. *The Philosophical Library*.
9. F. Durham., R. D. Purrington (1983) Frame of the Universe. *Columbia of Univ. Press*.
10. B. Clotfelter (1970) Reference Systems and Inertia. *Univ. of Iowa Press*.
11. A. J. Snow (1926) Matter and Gravity in Newton's Physical Philosophy. *Oxford Univ. Press*.
12. G. Gamov (1974) One, Two, Three…Infinity. *Bantum Books*.
13. M. Born (1924) Einstein's Theory of Relativity. *Dover Publications*.
14. C. Will (1986) Was Einstein Right? *Basic Books*.
15. M. Kanarev (1995) On the Way to The Physics of the XXI Century. *Soviet Kuban, Krasnodar*.
16. H. Minkowski (1923) Space and Time the Principle of Relativity. *Dover Publications* 75-91.
17. J. Lee (1978) Aether: The Speed of Time Through Space. *Mindsight Publications*.
18. J. Lee (1990) What Is Gravity? Spheric. *Hunter College*.
19. J. Lee (1991) What Is the Speed of Time? *Spheric*, *Hunter College*.
20. J. Lee (1995) The Reality of Physics. *Mindsight Publications.*