### BELGRADE LAKES INSTITUTE FOR ADVANCED RESEARCH - SCIENTIFIC JOURNAL\*\*\*

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Glenn A. Baxter, P.E., Editor



Glenn A. Baxter, P.E., Physicist, Licensed Professional Engineer

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# **EDITORIAL**

Dr. Roger A. Rydin joins us in this issue writing about Special Relativity and other topics, as well as your Editor, Glenn A. Baxter, P.E., both authors in disagreement with Dr. Albert Einstein's Relativity theories, the foundations of 21<sup>st</sup> century physics. Dr. Rydin's doctorate from MIT places him on our ever growing list of highest level "credentialed" physicists who openly and convincingly disagree with Dr. Einstein. Physcist Roger Anderton also joins us with his just published book, THE FIRST UNIFIED FIELD THEORY WAS BY BOSCOVICH IN THE 18th CENTURY.

The Belgrade Lakes Institute For Advanced Research Foundation is greatly expanding its Physics Colloquium program to invite and fund all travel expenses for leading world-wide scientists to visit and present their newest papers/lectures at selected universities in the United States. If you or your university are interested, e-mail Institute@k1man.com.

# PAPERS

<u>CRITIQUE OF: SCIENTIFIC DISCOVERIES THAT CHANGED THE WORLD</u> by Dr. Roger a. Rydin <u>www.k1man.com/Rydin130315B.pdf</u> Ed. Note: Dr. Rydin has a BSEE from Northwestern University's Technological Institute, plus a Master's and a Doctorate in Nuclear Engineering from MIT. He TOTALLY disagrees with Dr. Einstein's Special and General Relativity theories, among other things. All his papers are found at: <u>www.k1man.com/k12</u>

DR. EINSTEIN WRONG Copyright 4 March 2013 by Glenn A. Baxter, P.E.

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(draft updated 13 March 2013 7:58 A.M.)

### ABSRACT

A brief, simple, and solid disproof, by contradiction, of Dr. Einstein's Special Relativity is presented.

### POSTULATE

Simultaneous and absolute time, such as used in GPS, is a scientific and experimental reality.

### ARGUMENT

Light travels equal scalar distances in equal times, whether or not two light sources are in motion relative to each other. In this limited sense, light does not "take on" the velocity of its source. This is a truly remarkable and intriguing property of light.

However, when observed from a frame different from the source's frame, which has motion v relative to the source's frame, the RELATIVE velocity of light is quite different; namely c + v or c - v, depending on the direction of v. Dr. Einstein did not distinguish between these two completely separate situations, and he thus incorrectly stated in his famous 1905 paper[1] that "The speed of light, RELATIVE TO ANY OBSERVER, is constant. This postulate is simply wrong.

The "speed of light" as is referred to in Dr. Einstein's 1905 paper[1] {the author discusses the unrelated slowing of light through glass, water, etc., in other papers:

(see <u>www.k1man.com/v</u>)}, is actually two things; namely the linear velocity of light relative to the source's original location in a defined frame in space, and the RELATIVE linear velocity of that exact same light pulse, as measured in the second frame which has a linear velocity relative to the above defined frame in space.

The above defined light pulse starting location in space at any time t, where t is the elapsed time since the light was pulsed, is distance vt in the exactly reverse linear direction of v.

## PRACTICAL EXAMPLE

Consider a rail car moving forward (from left to right) at velocity v relative to a train platform. A light is pulsed sideways across the railcar from point A on the far side or the car to point B on the side of the car nearest the train platform, AB being one side (perpendicular to car motion) of a right triangle ABC. The light flash moves along AB, a distance ct in the rail car frame. Point C is defined as the point where the light arrives (infinitely close to the near side of the rail car) at time t.

Point C is infinitely close to the side of the rail car but actually located on the train platform such that BC, the base of triangle ABC, has length vt'.

So, in the railcar frame, the light goes along line AB, a distance ct, and in the platform frame, the car moves along line BC, a distance vt'. In the platform frame, the light appears to have traveled further, along triangle ABC hypotenuse AC, an apparent distance ct'.

## DR. EINSTEIN'S INCORRECT (LORENTZ) TRANSFORMATION

Using the Pythagorean Theorem, Dr. Einstein incorrectly transformed between these two different frames and calculated:

 $(ct)^{2} + (vt')^{2} = (ct')^{2}$  thus  $(c^{2})(t^{2}) + (v^{2})(t'^{2}) = (c^{2})(t'^{2})$  or  $(c^{2})(t^{2}) = (c^{2})(t'^{2}) - (v^{2})(t'^{2})$  or  $(t^{2}) = (t'^{2}) - (v^{2})(t'^{2}) = (t'^{2}) = (t'^{2}) + (v'^{2})(c'^{2})$  or t = [t'] [square root of  $1 - (v^{2})/(c'^{2})$ ] or Dr. Einstein's famous time slowing down formula:

$$t = t'\sqrt{1 - v^2/c^2}$$

followed by all of the directly related incorrect Special Relativity formulas, including  $E = Mc^2$ . See <u>www.k1man.com/b</u>

If, instead, the light pulse is flashed forward from point A on the rail car to point D, infinitely close to the front of the railcar, but outside of the rail car, and thus in the platform frame, the similar Dr. Einstein style transformation would be:

ct + vt' = ct' or ct = ct' - vt' or t = t'(1 - v/c), or time slows down even more on the exact same clock on the exact same rail car; a contradiction; thus Dr. Einstein was wrong. QED Light pulsed toward the back of the rail car actually leads to time speeding up! (See <u>www.k1man.com/b</u>) Time cannot both slow down and speed up on the same clock! Dr. Einstein wrong! QED

Note: This disproof of Special Relativity holds whether or not there is such a thing as a light conducting aether, since the geometry of the argument is not changed by a light conducting aether.

## A CORRECT TRANSFORMATION

As correctly pointed out to this writer by Physicist Nick Percival (BS Physics, Harvard), you can transform between frames with motion relative to each other, but not how Dr. Einstein did it. The forward motion (left to right) of the rail car above and the forward pulse of light (both in the same direction) can be conveniently observed on the train platform, and since Dr. Einstein's purely philosophical concept of time flowing at different rates cannot be observed at all, let's transform for velocity:

ct + vt' = c't' Using the postulate that t = t', then c' = c + v, and therefore, the speed of light, relative to any observer, is not constant. QED c' is the relative speed of light and is quite different from c, the actual speed of light. Dr. Einstein incorrectly lumped the two together, and as with gasoline and water, the two should not be mixed.

## CONCLUSIONS

Special Relativity and all of its many incorrect formulas must be removed from all of 21<sup>st</sup> century physics, textbooks, and papers, in order for scientifically valid progress to be made by modern day physicists. Dr. Einstein's statement that "The speed of light, relative to any observer, is constant" is incomplete, wrong, and, worse yet, used incorrectly by him throughout much of his physics work which underpins much or most of current day mainstream and even dissident physics.

# "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

\*\* Mr. Baxter has a degree in Industrial Engineering from the University of Rhode Island and is a Licensed Professional Engineer in Illinois and Maine. He is a graduate of Vermont Academy, which honored him in 1993 as a Distinguished Alumnus with the Dr. Florence R. Sabin Award. It was at Vermont Academy as a student where Mr. Baxter attended a talk and met the very popular relativity author James A. Coleman[2]. Mr. Baxter has been doing research in relativity and physics ever since and is currently Executive Director of the Belgrade Lakes Institute for Advanced Research. His current interests include physics, philosophy, and theology.

- (1) ON THE ELECTRODYNAMICS OF MOVING BODIES by A. Einstein, "Zur Elektrodynamik Bewegter Korper," Annalen der Physic, 17, 1905.
- [2] RELATIVITY FOR THE LAYMAN by James A. Coleman, Signet, New York, 1958

2013 PHYSICS COLLOQUIUM IN PORTLAND, MAINE -17 August 2013

We are now calling for papers and inviting speakers for the 17 August 2013 Physics Colloquium, to be held in Portland, Maine. There are two different themes for the 2013 Colloquium: 1) The so called Higgs Boson 2) What happens if you remove Special Relativity from any existing peer reviewed published physics paper or papers. See www.k1man.com/c26 The 2012 Colloquium focused on the effect of Special Relativity on Electromagnetic Theory as described by Maxwell's equations. See www.k1man.com/a17 and <u>www.k1man.com/c17</u> The 13 August 2011 Physics Colloquium scheduled in Portland, Maine focused on the effect of the non constant nature of the speed of light on 21<sup>st</sup> century physics.

Accepted papers for presentation at the 2013 colloquium (deadline is 15 July 2013) will be distributed to all registered attendees before the colloquium so they can be studied and even discussed, which will greatly improve the effectiveness and efficiency of the colloquium itself. Attendees are cordially invited to dinner in Portland on Friday evening, August 16, 2013 at 7:00 p.m. to informally meet and to also discuss physics. Please register for the colloquium (free) and/or the dinner (off the menu) by sending an E-mail to Institute@K1MAN.com www.k1man.com

We submit this Scientific Journal each month to <u>www.viXra.org</u>.

# LETTERS

From: ROGER ANDERTON r.j.anderton@btinternet.com To: (Dr.) Roger Rydin <u>rarydin@earthlink.net</u>Sent: Fri, Mar 15, 2013 5:21 am Subject: Re: [Relativity] FW: a bit of wisdom from an unlikely source concerning mainstream science

#### >>>The nature of the approximate solution depends upon local conditions

That's it the mathematical modeling process.

One way of looking at it is - starting from Newtonian physics then speed addition is c+v but we want to consider the scenario where v is much smaller than c then treating c +v as approximately equal to c in that math model. So the initial math model is to consider c+v = c approx, and when v gets too big to ignore then we have to update to the next math model of c+v = c+v.

And also by Newton v = u+at

v = final velocity, u = initial velocity, a = acceleration, t = time

so want to consider initially scenario of a =0 so the equation we use is v =u

thus we have our initial model of the special case when velocities is constant

and when we want to go to the more general case have accleration a as non-zero.

So Einstein is never ever doing anything other than different mathematical models in the context of Newtonian physics.

moving from special (restricted) math model to a more general model

And the unified theory of Newtonian physics is Boscovich's etc etc

I now have my book on internet for sale

blurb is

THE FIRST UNIFIED FIELD THEORY WAS BY BOSCOVICH IN THE 18th CENTURY.

\* To be specific, this book deals with Boscovich's unified field theory, which is an attempt to unify the known forces of physics into a single universal law.--Harry Ricker

\* Our history of physics needs to be rewritten thanks to Boscovich's contribution. - - Eri Yagi

\* Boscovich first single-handedly combined the macro world (Newton's world machine) with the micro world (of atoms) by inventing a single consistent law – Otto E. Rossler

\* Boscovich was far ahead of his time. Perhaps too far.-- Greg Volk

\* The great inventor and scientist, Tesla, was also much influenced by Boscovich. --- Carl R Littmann

me - let the Physics Revolution begin - there was no change from Newtonian Physics.

**Best wishes** 

**Roger A** 

From: (Dr.) Roger Rydin <u>rarydin@earthlink.net</u>
To:<u>rlkemp@aol.com</u>
Sent: Tuesday, 12 March 2013, 1:56
Subject: Re: [Relativity] FW: a bit of wisdom from an unlikely source concerning mainstream science

Robert;

I don't appreciate being accused of having empty arguments. What I mean is obvious to anyone who has <u>actually</u> tried to solve a real problem, as engineers are required to do. We can't include the kitchen sink in our formulations because that would make the problem impossible to solve. In a neutron balance in a reactor, we do not include gravity as affecting neutron movement or balance. Within the sun, we probably would have to include gravity. Likewise, we ignore chemical bonding. But if the problem is done near absolute zero, we may have to keep that term.

The nature of the approximate solution depends upon local conditions, and has a range of validity. We are limited in how many such things we can include and still get a solution. My basic tenet is that life is inherently nonlinear, and such solutions are difficult to obtain. Chaos is more the rule than the exception. Fractals occur.

Finally, all experiments are subject to uncertainties, and experiments are difficult to analyze unless you fully understand what is going on. Even analytical solutions are subject to the uncertainties in the physical data we use to get numerical answers. The best we can do is try to get the experimental and analytical solutions to agree within their error bars over a range of interest. I've spent years comparing experiments to computational solutions, and I speak from experience. That is why we can't rely on pure mathematics to solve all our problems.

Roger

From: <u>rlkemp@aol.com</u> Sent: Monday, March 11, 2013 3:34 PM To:<u>rarydin@earthlink.net</u>

**Subject:** Re: [Relativity] FW: a bit of wisdom from an unlikely source concerning mainstream science The <u>real problem</u> is in <u>formulating</u> the problem in the first place! We all leave things out, consciously or unconsciously. We simplify by linearizing some terms. Sometimes we make assumptions that are not proven. What you are saying is that you are able to look at a "House" from standing outside, and are able to determine how the "Plumbing in the House works" without even going inside, or turning on one faucet.

Your arguments are empty!

Bob Heaston analyzed his 1917 paper on GR giving the steps taken over about 10 years. Bob concentrated on the LHS of the equations where the physics was, force, momentum, energy, continuity, and left the tensor stuff on the RHS uncommented upon. The error Einstein made was in setting c = 1, which led to the singularity as an asymptotic solution. There should have not been a singularity, so this gets rid of the Big Bang scenario;.

This is ridiculous, there is no equation that I am aware of that setting c=1 will lead to a singularity. Prove it! Show me an equation, where I can plug in c=1 and get a singularity? This is another empty argument!

2) Stephen Crothers says that Schwarzschild showed in his 1916 paper that there was no singularity, confirming Heaston. Crothers also says that setting the Ricci tensor to 0 means no mass and no conservation. He also says that Einstein invented a fake pseudo tensor to get out of one of his difficulties. These are <u>conceptual errors</u>;

Crother's is misinformed and wrong! And I have proved it and sent you the paper in the past. Find errors in that!

3) Schwarzschild in his 1915 letter to Einstein said that there was an error in the Mercury derivation of a low order correction that left out a term, and that meant the correction was <u>divergent</u>. Hence, the Perihelion correction should not have worked. Besides, the <u>actual orbit is not an ellipse</u> due to the tugs by other planets;

The correction that Schwarzschild made to Einstein's General Relativity (GR) equations are well known; that is why we talk about Schwarzschild!

4) Anatoli Vankov went through the Mercury derivation, adding the missing steps that Einstein had not included, and showed that Einstein was <u>careless</u> by assuming that the correction was independent of the normal elliptical path. In fact, the path became the sum of two terms, and when added, the correction <u>cancelled</u>! Vankov confirmed that

Schwarzschild was right;

I agree that Vankov showed that Schwarzschild was correct. I have informed you many times that I like that paper a lot!

I wish there was a Schwarzschild that would come behind me and correct my mathematics. I think that it is unlikely that my mathematics is incorrect, I am a much better mathematician than Einstein and Schwarzschild! But maybe, someone will come an correct me, I am not perfect! I truly doubt that someone will find a mathematically conceptual error though!

You are holding Einstein to perfection. The correction that Schwarzschild made to GR did not negate the mathematical concept.

My inclination is to say "nonsense". Experiments are difficult to interpret, especially if not everything happening is understood, and if "<u>corrections</u>" have been inserted into the analysis before it is done. An example, according to Vankov, is that a linearized version of GR is built into the numerical solutions used by NASA for multibody effects in the solar system, and it cannot be removed to evaluate the difference! I'm not going to bet on a <u>fixed</u> roulette wheel.

Once again a empty argument!

You can always get a point density where distance varies with distance. But this is just a distortion of space in an undistorted space, with a rubber ruler used in one. It is the same as conformal mapping, where you can map a corner into a circle or a line to help solve the problem in simple geometry, but you still have to go backwards to get the actual solution;

This was about whether I was giving a 2D description or a 3D description of nature with my images. How you transitioned and started talking about going backwards to get the actual solution, is bizarre. This is precisely my point. We can't have different times in different places, or everything will get out of sync and never get back in sync. It is <u>silly</u> to think that time can stop at the edge of the event horizon of a black hole, yet that is precisely what Hawking says, and then he goes on to talk about evaporation and miniature black holes. It is all nonsense, brought about by GR.

You are bringing up random "Pop Science" concepts about GR, and saying "The House has Bad Plumbing", but you have yet to step in the house and turn on the faucet. You seem to be hanging out in the "Outhouse"?

Kind regards

Robert Kemp

From: Roger Rydin <<u>rarydin@earthlink.net</u>> To: rlkemp <<u>rlkemp@aol.com</u>> Sent: Mon, Mar 11, 2013 11:37 am Subject: RE: [Relativity] FW: a bit of wisdom from an unlikely source concerning mainstream science

Robert;

Replies in red below.

Roger Rydin

From: <u>rlkemp@aol.com</u> [<u>mailto:rlkemp@aol.com</u>] Sent: Sunday, March 10, 2013 8:55 PM To: <u>rarydin@earthlink.net</u>

Subject: Re: [Relativity] FW: a bit of wisdom from an unlikely source concerning mainstream science

Roger

<u>I seem to have been banished from the Gravity Group</u>, since I no longer get its postings. I thought this was supposed to be a forum of ideas! I guess someone there does not like mine.

Celebrate, it means that you are making an impact! Maybe I am critiquing NPA people as well as the MS, and they don't like it either!

Your math is way beyond me, at least in terms of my willingness to go through it.

It is probably your unwillingness to go through it, because I have explained the mathematics with simplicity. I have simplified the mathematics of General Relativity (GR), so that anyone with the basics of algebra, geometry, and calculus, can do the math. With you being a university professor, the math should be simple, or I would never take your class! I had a lot of analytic math at MIT, 2 semesters of Applied Calc for Engineers, Integral Equations taught by Crout, and 3 semesters of Advanced Methods of Applied Math taught by Howard and Greenspan. I spent years and years, figuring out how to simplify the mathematics to rescue the theory of GR from the abstract mathematicians, who do not really understand the physics, but they really understand the math. Good mathematicians rarely make errors in solving a problem once posed, so the work of going through it will not find errors. That's why I don't spend the time.

The <u>real problem</u> is in <u>formulating</u> the problem in the first place! We all leave things out, consciously or unconsciously. We simplify by linearizing some terms. Sometimes we make assumptions that are not proven. Einstein was a master at doing such things, and being as <u>unintelligible</u> as possible in the process. I have read his 1905 SR paper, and translated and read his 1915 paper on Mercury. These papers are unlike any I have ever read in being hard to follow step by step because so much is left out. He uses strange notation, makes unproven assumptions and assertions such as c being constant in all inertial frames, etc. Einstein not only did these things, but he also made <u>actual errors</u> and was <u>careless</u> in setting up his equations. I'll give a few examples of why I don't believe anything he did:

1) Bob Heaston analyzed his 1917 paper on GR giving the steps taken over about 10 years. Bob concentrated on the LHS of the equations where the physics was, force, momentum, energy, continuity, and left the tensor stuff on the RHS uncommented upon. The error Einstein made was in setting c = 1, which led to the singularity as an asymptotic solution. There should have not been a singularity, so this gets rid of the Big Bang scenario;

2) Stephen Crothers says that Schwarzschild showed in his 1916 paper that there was no singularity, confirming Heaston. Crothers also says that setting the Ricci tensor to 0 means no mass and no conservation. He also says that Einstein invented a fake pseudo tensor to get out of one of his difficulties. These are <u>conceptual errors</u>;

3) Schwarzschild in his 1915 letter to Einstein said that there was an error in the Mercury derivation of a low order correction that left out a term, and that meant the correction was <u>divergent</u>. Hence, the Perihelion correction should not have worked. Besides, the <u>actual orbit is not an ellipse</u> due to the tugs by other planets;
4) Anatoli Vankov went through the Mercury derivation, adding the missing steps that Einstein had not included, and showed that Einstein was <u>careless</u> by assuming that the correction was independent of the normal elliptical path. In fact, the path became the sum of two terms, and when added, the correction <u>cancelled</u>! Vankov confirmed that Schwarzschild was right.

I am considered an outsider for doing this. I have made their abstract math language intelligible; this the mainstream does not want. Making the math language intelligible, then gives the trolls, cranks, crack-pots, and dissidents a way into their complex world; this the mainstream does not want. There is some great advantage to keeping the mathematics complex, then you don't have to worry about those theorizing in a field that they have not prepared themselves properly for the field that they are studying, researching, and writing. Again, the actual problem is the <u>formulation</u> and not the solution!

I am in agreement with Peter Erickson that only Euclidean geometry relates to real things, and the rest is just consistent mathematics for hypothetical objects.

I think that I said this to you in a previous email. Let's make a \$100.00 bet. If we pick an object such as a star or a galaxy, then you use your Euclidean Mathematics, and I will use my Non-Euclidean Mathematics, and we will determine who makes the accurate location for where the object is in space. If you use Euclidean Mathematics, you will be wrong. Euclidean Mathematics only applies to "local" surfaces and volumes; global surfaces and volumes will be different when we take an actual measurement. My inclination is to say "nonsense". Experiments are difficult to interpret, especially if not everything happening is understood, and if "corrections" have been inserted into the analysis before it is done. An example, according to Vankov, is that a linearized version of GR is built into the numerical solutions used by NASA for multibody effects in the solar system, and it cannot be removed to evaluate the difference! I'm not going to bet on a fixed roulette wheel.

I have seen that diagram of a mass ball in distorted 2 space, but it is impossible to draw it in 3D. How does 3D space distort in 3D space?

In my Unified Gravitational Vortex Model, the image that you are describing is shown to be distorted in 3 dimensional space. If you rotate that flat distortion from any direction you will will get a 3D image and space. Once again a distortion or warping in space, space-time, or a gravitational field, due to the presence of a net inertial condensed body, is three dimensional, and not 2D like your imagination is deceiving you with. You can always get a point density where distance varies with distance. But this is just a distortion of space in an undistorted space, with a rubber ruler used in one. It is the same as conformal mapping, where you can map a corner into a circle or a line to help solve the problem in simple geometry, but you still have to go backwards to get the actual solution.

Where does the excess go? What takes its place? When does time begin, at least what time does t = 0 correspond to? Don't you have to have a continuous time line to answer that question?

The answers to these questions are not whimsical. This is precisely my point. We can't have different times in different places, or everything will get out of sync and never get back in sync. It is <u>silly</u> to think that time can stop at the edge of the event horizon of a black hole, yet that is precisely what Hawking says, and then he goes on to talk about evaporation and miniature black holes. It is all nonsense, brought about by GR.

Kind regards

Robert Kemp www.Blog.SuperPrincipia.com

From: HARRY RICKER <kc3mx@yahoo.com> To: Bart Leplae <bartleplae@hotmail.com>; Al McDowell <almcd999@earthlink.net> Sent: Mon, Mar 4, 2013 4:35 pm Subject: RE: Fundamental Laws and Space-Time

Al,

Yes I understand the difference. I think the view given in the first paragraph is the one usually called entrained aether, and arguments are that it should be observable in the stellar aberration effect, but it is not.

At this stage I am trying to get a method of assessing the different ideas, listing pros and cons and relevant experiments.

Harry

From: Al McDowell <<u>almcd999@earthlink.net</u>> Subject: RE: Fundamental Laws and Space-Time To: "HARRY RICKER" <<u>kc3mx@yahoo.com</u>>, "Bart Leplae" <<u>bartleplae@hotmail.com</u>> Date: Monday, March 4, 2013, 1:31 PM

Harry,

I have previously thought of entrained ether as being dragged along with a planet or piled up

ahead of a planet moving through the ether. In other words, I have imagined entrained ether to be particles that are carried along with the planet rather permanently. This is not my model of the ether, but my model could be considered "entrainment."

My model for a planet stationary in a gaseous particulate ether has ether compressed and concentrated like an atmosphere around the planet. If the planet is in motion through the ether, then a snapshot of the planet and its ether from any direction would look exactly the same, but a video would show the ether particles slowing as they approach the planet, blowing straight through, and accelerating as they leave. Each particle is slowed as it passes through the planet, but it is not captured by the planet. This gravity-induced concentration of higher ether density could be called "entrainment."

Al

Glenn A. Baxter, P.E. glennbaxterpe@aol.com -----Original Message-----From: HARRY RICKER <kc3mx@yahoo.com> To: Bart Leplae <bartleplae@hotmail.com> Sent: Mon, Mar 4, 2013 10:04 am Subject: Physics Without Special Relativity Mind Map

Bart,

I added your approach to our mind map diagram Physics Without Special Relativity. The mind map file is attached. To view the map, you will have to download the mind map software from XMind. If you have an existing mind mapping software you should be able to import into that program.

We are attempting to identify the alternatives to special relativity and then later General Relativity. Because there are so many different theories and approaches, many of which are completely unknown, we are doing this to organize the assessment of different alternatives. You should use this link to download the XMind software so you can view the mind map. I would like for you to make changes and additions so that we can have as many people working on this as poosible so as to make sure we get as much knowledge into our data base as we can. here is XMind download link. It is free for the basic software: <a href="http://www.xmind.net/">http://www.xmind.net/</a>

Harry

From: HARRY RICKER Sent: Mar 4, 2013 8:31 AM To: Bart Leplae Cc: <u>almcd999@earthlink.net</u>, <u>glennbaxterpe@aol.com</u>, <u>palasija@gmail.com</u>, <u>npercival@snet.net</u> Subject: RE: Fundamental Laws and Space-Time Bart,

Do you believe that your model is the only one of this type deserving to be called the Leplae Aether Model?

Harry

From: Bart Leplae <<u>bartleplae@hotmail.com</u>> Subject: RE: Fundamental Laws and Space-Time To: <u>kc3mx@yahoo.com</u> Cc: <u>almcd999@earthlink.net</u>, <u>glennbaxterpe@aol.com</u>, <u>palasija@gmail.com</u>, <u>npercival@snet.net</u> Date: Monday, March 4, 2013, 7:49 AM

Harry,

The way I look at this is an aether that gradually changes velocity and rotating around the center of the Solar System.

The velocity is largest nearby the Sun and gradually decreases towards to boundary of the Solar System.

The velocity of the aether at any point in the Solar System the same as the speed a planet would have at that position.

I wouldn't state that the Earth entrains the aether, but that Earth and eather rotate at equal speed. From this perspective, it is logical that the aether nearby the Moon has the same speed and that light from the Moon is not subject to aberration.

Remark: the diagram is not a representation of how I believe aberration is working: there is no abrupt change in velocity...

Regards, Bart

From: HARRY RICKER <kc3mx@yahoo.com> To: Bart Leplae <bartleplae@hotmail.com> Sent: Mon, Mar 4, 2013 7:17 am Subject: RE: Fundamental Laws and Space-Time

Bart,

From this I understand you to mean that you believe that the Airy experiment refutes or contradicts the standard textbook discussion of the aberration effect that says the aberration occurs in the telescope. That is what I understand to be the case.

Have you examined the argument in which the aberration is discussed by Einstein and what do

you think of that argument?

Harry

Date: Mon, 4 Mar 2013 04:24:40 -0800 From: <u>kc3mx@yahoo.com</u> Subject: RE: Fundamental Laws and Space-Time To: <u>bartleplae@hotmail.com</u>

Bart,

OK. I am aware that there is no aberration of the moon as you discuss here. That certainly presents a problem for the Zapffe model which asserts the entrained aether is equivalent to the magnetosphere of the earth. It looks as if the entrained aether extends out past the moon, if that theory is correct. This is a bit astonishing.

From: Bart Leplae <bartleplae@hotmail.com> To: 'Bart Leplae' <bartleplae@hotmail.com>; 'HARRY RICKER' <kc3mx@yahoo.com> Sent: Sun, Mar 3, 2013 5:16 am Subject: RE: Fundamental Laws and Space-Time

Harry,

To add upon the Airy experiment ...

The following page (in Dutch ... Google Translate to English should work out) is about grazing occultations of stars by the Moon:

http://members.ziggo.nl/adri.gerritsen/rakende%20sterbedekkingen.htm

At the moment of such an event the **apparent** image of the star is touching the apparent image of the Moon.

The apparent image of the star is subject to stellar aberration.

The apparent image of the Moon is NOT subject to stellar aberration.

In other words: starlight is passing in the **apparent direction** in between the mountains of the Moon.

If we would identify a the **true direction** of the star at the moment of the event, we may be pointing at a position on the surface if the Moon (so a position actually behind the Moon).

On the following picture, the lines representing the telescope don't have a physical function,

the lines only provide visual guidance to show the positions that move along with the Earth:

So when observing stars that graze the Moon, we may as well extend the above lines to the Moon (since the Moon is moving along with the Earth).

From the above, we may conclude that stellar aberration doesn't occur nearby the Earth.

The only exception is diurnal aberration which affects light coming from both the star and the Moon.

There is another page covering the occultations through planetoids:

http://members.ziggo.nl/adri.gerritsen/sterbedekkingen%20door%20planetoiden.htm

The following page includes the predictions for 2013: <u>http://mpocc.astro.cz/2013/</u>

Here too, the predictions are based on the **apparent** positions of the stars and the planetoids.

(both subject to a different level of aberration)

Regards,

Bart

From: Bart Leplae Subject: RE: Fundamental Laws and Space-Time To: "'HARRY RICKER''' <<u>kc3mx@yahoo.com</u>> Date: Saturday, March 2, 2013, 5:35 AM

Harry,

You are bringing up an interesting perspective with respect to the Airy experiment for which I went through the original document:

http://archive.org/download/philtrans09370183/09370183.pdf

There is the following significant conceptual problem with the Airy experiment.

The annual aberration is determined by the ratio v versus c (v:speed of the Earth; c: speed of light).

For annual aberration, the objective is to calculate the difference between the observed position and the average position over the course of a calendar year.

The average position itself is subject to an aberration term that is determined by the speed of the Solar System (and of which the value far exceeds 30 km/s).

I we expect the aberration to take place nearby the observer (telescope), the outcome of the Airy experiment should have taken into account:

Speed of the Earth + Speed of the Solar System

As a consequence, one should have expected a significant larger effect when filling the telescope with water.

The Airy experiment shows that stellar aberration does not occurring in or nearby the telescope (with the exception of Diurnal or Orbital aberration).

The following page from a website covering relativity (Google translated from Dutch)

http://translate.google.be/translate?sl=nl&tl=en&js=n&prev=\_t&hl=en&ie=UTF-8&eotf=1&u=http%3A%2F%2Fwww.einsteingenootschap.nl%2Fuitleg%25207.htm

The section on aberration (including a few words on Airy) concludes with:

"The classic formula was assumed that the light from the star perpendicular to the motion of the earth stood, while Einstein and Lorentz showed that the position of the star as seen from Earth, actually was changed so the light falls slightly askew. Dan maakt het niet meer uit welke snelheid het licht in de sterrenkijker heeft. Then it does not matter what speed the light in the telescope has."

But the section doesn't explain where, as per the theory of relativity, the aberration would take place ...

Best regards,

Bart

Van: HARRY RICKER [mailto:kc3mx@yahoo.com] Verzonden: zaterdag 2 march 2013 0:57 Aan: Bart Leplae Onderwerp: RE: Fundamental Laws and Space-Time

Bart,

There a number of complicated issues. Experiments that need to be interpreted and such. So I think this is something that needs a lot more work. For example the Airy experiment. What does it show? Also you might look into the work by Carl Zapffe.

Harry

From: Bart Leplae <<u>bartleplae@hotmail.com</u>> Subject: RE: Fundamental Laws and Space-Time To: <u>kc3mx@yahoo.com</u> Date: Friday, March 1, 2013, 8:58 AM

Hi Harry,

Is there a specific 'claim' that you are referring to or a specific aspect you would propose to be studied in more detail ?

Regards,

Bart

From: HARRY RICKER To: Bart Leplae

Sent: Fri, Mar 1, 2013 6:57 pm Subject: RE: Fundamental Laws and Space-Time

Bart,

There a number of complicated issues. Experiments that need to be interpreted and such. So I think this is something that needs a lot more work. For example the Airy experiment. What does it show? Also you might look into the work by Carl Zapffe.

Harry

From: Bart Leplae To: 'HARRY RICKER' <<u>kc3mx@yahoo.com</u>> Sent: Wednesday, February 27, 2013 3:04 PM Subject: RE: RE: Fundamental Laws and Space-Time

Harry,

The following animation was added last week to Wikipedia:

http://en.wikipedia.org/wiki/File:Stellar aberration versus the dragged aether.gif

**Description**: "Complete aether dragging can explain the negative outcome of all aether drift experiments such as the Michelson-Morley experiment). However, this theory is considered to be wrong for many reasons. One reason, is that complete aether dragging is inconsistent with the phenomenon of stellar aberration. Aberration occurs when the observer's velocity has a component that is perpendicular to the line traveled by the light incoming from the star. In this animation, imagine the stars to be infinitely far away. As seen in the animation on the left, the telescope must be tilted before the star will appear in the center of the eyepiece. If the aether drag hypothesis were true, then stellar aberration would not occur because the light would be travelling in the aether which would be moving along with the telescope. As seen in the animation on the right, if the aether is dragged in the vicinity of the earth, then the telescope must be pointed directly at the star for the star to appear in the center of the eyepiece."

There are several aspects that can be considered when analyzing this animation .

1. The animation on the left suggests that the telescope needs to be tilted with 20.5 arcseconds, taking into consideration the speed of light and the speed of the Earth (30km/s). The question is why to take 30km/s as the speed taking into account that the Solar System has a much more significant velocity. The reason is because the aberration caused by the Solar System doesn't change the apparent position of a star in the course of a year. In other words: the 20.5 arcsec is the annual deviation from an apparent position that is much larger (but largely constant). So the telescope would need to be tilted in more significant way and the tilt would need to depend on the motion of the Solar System.

2. If the red dot would originate from an object on Earth or from the Moon, then we know that the telescope does not need to be tilted. The animation doesn't explain why there would be a difference in behavior ...

3. The animation on the right shows two aethers that move relative to each other. The red dot moves with 'c' through the aether at the top and with a velocity exceeding 'c' at the bottom (vector addition of 'c' and 'v'). This violates the principle that the speed of light is a constant. So in my opinion, the animation at the right should work in a way that the red dot changes direction at the moment it enters the aether at the bottom. The change in direction would need to be to the left and not to the right as shown in the animation: this looks counter-intuitive but light simply does not behave like a regular object and is not dragged by the eather. So the right telescope would need to be pointed in exactly the same direction as the telescope on the left.

In reality, I don't believe we have a dragged aether surrounding the planets.

4. The animation on the left applies to diurnal aberration (due to the rotation of the Earth around its axis). The red dot moves at the speed of light from the top to the bottom of the image. From the perspective of the moving telescope, it looks as if the red dot is moving at a velocity exceeding the speed of light (vector addition of 'c' and 'v'). But since the telescope is moving relative to the aether, it becomes subject to clock retardation. As a consequence, the red dot appears to be moving with velocity 'c' from the perspective of the telescope.

Date: Fri, 1 Mar 2013 04:31:41 -0800 From: <u>kc3mx@yahoo.com</u> Subject: Re: RE: Fundamental Laws and Space-Time To: <u>bartleplae@hotmail.com</u>

I don't think you have proved your claim. I think that you need more study.

Van: Bart Leplae [mailto:bartleplae@hotmail.com]
Verzonden: dinsdag 26 februari 2013 21:41
Aan: 'HARRY RICKER'
Onderwerp: RE: RE: Fundamental Laws and Space-Time

Harry,

I have read the article a second time . The article speaks to an absolute reference frame which I find difficult to imagine.

One could challenge the article by stating that the speed of light is not an absolute constant.

As per the Shapiro delay <u>http://en.wikipedia.org/wiki/Shapiro\_delay</u>, the absolute speed of light depends of the gravitational field.

From the perspective of the Earth, a radar signal that is sent to Venus or Mercury is delayed when passing close to the Sun.

Still from the perspective of an observer nearby the Sun, the same radar signal will appear to pass at the speed 'c'.

The reason why the radar signal is measured to pass by with velocity 'c' is because the delay is exactly compensated by the same amount of gravitational clock retardation.

So 'c' is only a constant for a local observer who measures a local EM wave passing by.

For an observer nearby the Sun, the radar wave will have surpassed 'c' when passing the Earth.

So from my perspective, the light-carrying medium consist of particles that move with a velocity such that an EM wave moves with 'c'.

In a strong gravitational field, the particles are slower and closer together resulting in a slower speed of light.

Gravity is the force that tends to move objects in the direction of the slower particles surrounding the object.

In other words: an apple falls from a tree because the speed of light above the apple exceeds the speed

of light below the apple.

Objects consists of the same constituting particles.

The constituting particles move at a speed corresponding with the local speed of light.

From this perspective it is logical that objects can't be faster than their constituting particles and as such cannot exceed the speed of light.

So just comparing 2 objects and transforming their respective reference frames is not good enough .

Referring back to stellar/planetary aberration "The effect of planetary aberration on Venus transit observations": <u>http://www.gsjournal.net/Science-Journals/Essays/View/4044</u>

Although it is possible to calculate the exact apparent position of Venus and the exact apparent position of the Sun,

it is not possible to explain with regular theory why Venus is able to block the light coming from the Sun at a moment Venus is no longer between the Sun and the Earth.

Only a curved path can explain such an effect. And a curved path is only possible if there is a gradual aberration process.

The following unresolved problem also is an indication that the Solar System is more than the observable objects:

http://en.wikipedia.org/wiki/Copernican\_principle#Ecliptic\_alignment\_of\_cosmic\_microwave\_backgrou nd\_anisotropy

The measured cosmic microwave background must somehow be influenced by the rotating lightcarrying medium.

More to follow .

Regards,

Bart

Van: HARRY RICKER [mailto:kc3mx@yahoo.com]
Verzonden: dinsdag 26 february 2013 1:25
Aan: Bart Leplae
Onderwerp: RE: RE: Fundamental Laws and Space-Time

Bart,

Thanks for this explanation. It is certainly interesting. Reminds me of Leibniz gravity model.

Harry

From: Bart Leplae <<u>bartleplae@hotmail.com</u>> Subject: RE: RE: Fundamental Laws and Space-Time To: "'HARRY RICKER''' <<u>kc3mx@yahoo.com</u>> Date: Monday, February 25, 2013, 4:22 PM

Harry,

Imagine 2 floating objects at different distances from the center:

Although both objects move relative to each other, it looks like the surrounding water is static from the perspective of both objects.

Both floating objects are sitting in a 'rest frame'.

This is how the air flows around a hurricane:

The wind speed for this hurricane depicted graphically:

I envision the solar system to be similar to this depiction.

The center of this hurricane (from where the velocity decreases again) is the Sun Corona.

The rotational speed at the outer edges of the Corona is so high that it heats the Corona to extreme temperatures.

In summary: a rest frame is a position within the rotating medium that has the same speed as the surrounding medium.

If a body moves relative to the rest frame, then it will become subject clock retardation.

The inertial frame used in SR is a close approximation to the true static frame.

If we keep the orientation of a floating object constant relative to a remote object,

then the surrounding medium will flow once around the object per rotation of the object around the center of the hurricane.

If light travels from one 'static' position to a different 'static' position, then it will pass media with different relative velocities.

It is the difference in velocities of the rotating medium (through which light travels) that is at the basis of stellar aberration.

There is nothing wrong with the formula's of Stellar Aberration . we only need to apply them with small

increments.

The fact that it looks like the speed of the observer is the only variable that plays a role in Stellar Aberration is because the observer has the exact same speed as the surrounding medium.

I will read the document you have shared in more detail and provide you with a response .

Regards,

Bart

Van: HARRY RICKER [mailto:kc3mx@yahoo.com]
Verzonden: maandag 25 february 2013 2:11
Aan: Bart Leplae
Onderwerp: Fw: RE: Fundamental Laws and Space-Time

Bart,

I would like to hear what you think about the attached paper.

I read your paper but I confess that it confuses me. I have trouble keeping track of multiple rest frames. This paper may help resolve that problem.

Harry

From: HARRY RICKER <<u>kc3mx@yahoo.com</u>> Subject: Fw: RE: Fundamental Laws and Space-Time To: <u>glennbaxterpe@aol.com</u>, <u>NPercival@SNET.net</u>, <u>palasija@gmail.com</u>, "Al McDowell" <<u>almcd999@earthlink.net</u>> Date: Sunday, February 24, 2013, 11:09 AM

I suggest that we discuss this paper and the response by Bob Bennett On Monday

From: R J Bennett <<u>robert.bennett@rcn.com</u>> Subject: RE: Fundamental Laws and Space-Time To: "'Pharis''' <<u>willres@sdc.org</u>> "'HARRY RICKER'''

Date: Saturday, February 23, 2013, 10:02 PM

Pharis,

#### A few comments on your paper on Absolutes.. - see attached

#### **Absolutes and Confusion or Absolute Confusion**

Pharis E. Williams 15247 W Domingo Ln, Sun City West, AZ 85375

#### e-mail: willres@sdc.org

If absolutes are defined as quantities that remain constant independent of the dynamics due to the laws of nature then space and time may not be absolutes.

This defines invariants, not absolutes.

absolute space - physical space independent of what occupies it

absolute speed - motion relative to the absolute space

absolute rest - absence of motion in absolute space.

Absolute time is time that is everywhere the same for everybody.

The laws of nature, such as the thermodynamic laws, are dif-ferential equations that relate changes in space with changes in other variables. However, these laws require a limiting velocity that is independent of the force and prevents any force from accelerating something to veloci-ties greater than this limiting velocity.

Why is this limiting velocity needed? Give an example of a thermo- law that requires a limiting velocity.

..... The thermodynamic laws require that everyone see the same laws and the same absolute velocity thereby specify-ing the transformations between all coordinate systems regardless of any motion between the coordinate systems.

The TD variables are integrals of the statistical mechanic (SM) variables ; the TD equations relate the TS variables in this integrated equation.

Integration involves a constant of integration that depends on the boundary or environmental conditions. How is this reconciled with the above claim?

..... On the other hand the laws of classical thermodynamics have been shown [1] to require an absolute velocity for pure mechani-cal systems just as it requires an absolute temperature for pure thermodynamic systems.

There's an absolute minimum temperature ... 0 degrees Kelvin... but no max thermodynamic temp....

There's an absolute minimum velocity ... 0 m/sec... where all motion stops , but no max TD velocity

Where's the experimental evidence for a max temp and velocity?

This requires that everyone, even those moving with a variable velocity with respect to each other, see the same absolute velocity. This requirement determines a trans-formation between different observers. The First Law of thermodynamics has been shown to be a generalization of Newtonian mechanics [1]. The First law is a differential equation in which time is not explicitly included. Time has been introduced into the differential equation in order to

#### obtain Newton's equations of motion.

The laws of (statistical) mechanics for an ensemble of particles in motion are integrated to derive the First Law of TD. Apparently we have different TD paradigms ... what is your reference for the paragraph above?

It is important to notice how time is introduced with relation to the absolute velocity. This is because the laws require the absolute velocity so time and space must adapt to this requirement.

Just the reverse... TD laws must conform to the basic SM laws, which use an absolute space and time.

.....

#### 2. Derivation of Equations of Motion

There are numerous books and texts which develop the relativistic equations of motion so there is no need to develop them here. Details of the development of the equations of motion, me-chanical entropy and the absolute velocity may be found in [1].

Relativistic SM?? Relativity is denied as a self-conflicted system of axioms.

#### 4. Application (Sagnac Effect)

The Sagnac effect has been analyzed for decades with the result that for the stationary frame the time difference between the counter rotating light beams is given by (12) where *R* is the radius of the circular loop,  $\omega$  is the angular rate of rotation and *c* is the speed of light [2]. There seems to be a considerable amount of disagreement with regards to any time dilation due to relativistic theory where the special theory of relativity is valid only in inertial frames of reference.

How many times have we heard this error.... Sagnac X was done on a rotating platform.. the optical bench and the test data were ALL TAKEN IN THIS ONE FRAME - THE ROTOR FRAME.

Relativity describes the properties OF 2 OR MORE FRAMES IN RELATIVE MOTION.

Relativity does not apply in a single measurement frame!

The Sagnac equation is derived in one frame, the rotor fame.

#### 5. Moving Coordinate Systems (delayed data collection)

Stellar aberration is a phenomenon that depends upon the transverse velocity of the observer to the direction of the ob-served object.

That's conventional MS wisdom...

Stellar aberration could also depend on the transverse aether velocity between a star and a stationary Earth. The starlight is already bent entering the telescope, so a water telescope would not change its speed or aberration angle... as Airy observed.

.....

All the best,

Robert B.

From: Pharis [mailto:willres@sdc.org]
Sent: Wednesday, February 20, 2013 9:24 AM
To: 'MainframeII'; 'R J Bennett'
Subject: Fundamental Laws and Space-Time

#### Robert D.,

It is difficult in a single email to address more than one or two topics. Let me only speak to your response to Robert B. concerning space and time with respect to motion or space-time and motion.

In the 40+ years I have been reading about and listening to others about concepts that involve space, time and motion together with the observation of motion, there appears to be a disconnect between the kinematics and the physics. I am here reserving the word physics to describe motion induced by forces. In other words, physics must include forces.

For over 30 years I also was involved in studying shock physics, mostly produced by explosives. In this field there is continual discussion concerning the description of phenomena, such as shocks, that are passing a stationary observer or an observer that is riding upon the moving shock wave and observing the stationary stuff. Most of the discussion concerns how the observations are made. By this I mean that there exists different means of collecting the data. For example, a lot of the data is collected using electrical signals where one must keep track of the time the signal needs to travel form the point of collection to the point of observation. The same care must be taken when collecting data optically, but an additional time delay is introduced that must be accounted for when one uses light sent from the observer and reflected off the target. All of this means one must think carefully about the motions and times involved.

In addition to the time delay of the data collection method there is the need to keep two very different velocities separated in the analysis. One velocity is the shock velocity which may nothing to do with the physics of what is being observed. The second velocity is the velocity of the target of the observation that may be caused by some force. There appears to me to be much confusion about which of these velocities is to be discussed when one talks of space, time and motion. The attached article discusses the potential for confusing what motion one is referring to in any discussion. I do this by having to cowboys observe a force moving something with a velocity, v. One of the cowboys is setting beside the trail watching while the other cowboy is riding by on a stagecoach that is moving with a variable velocity w. The supposition is that both of the cowboys should get the physics being observed correct even though one is moving with a variable velocity with respect to the other. This, to me, would seem to be the essence of the concept that the laws of physics are the same for all observers.

The article presents the discussion as if both cowboys can obtain their data without an delay in data collection. Still you will see the need for a "relativistic" looking description of the two motions. Most discussions about space-time motion seem to confuse the two motions and by so doing may use the motion of the physics being watched, v, instead of the motion of the moving observer, w. One may see here that kinematics is the situation when there is no physics to observe and v = 0. In this case there is no need to discuss physics because there is no force involved. Still you can see in

Equation 11 in the article that there is a relativistic-like expression involving the motion of the passing

cowboy.

In such a situation I can see no way in which any discussion of space and time alone can define motion. Nor is there any need to discuss covariance. Still both cowboys are using the same fundamental laws of physics.

Have fun,

Pharis

From: MainframeII [mailto:mainframeii@gmail.com]
Sent: Wednesday, February 20, 2013 1:15 AM
To: R J Bennett
Subject: Re: [Relativity] Fundamental Laws are invariant

Hi Robert B.

"If space and time didn't change , there would be no motion.... so their change must define motion."

Not necessarily, assuming I know what your meaning. I meant space-time medium vs. things moving through the medium. The covariance in space-time is do to what? Specifically, is there a mechanistic reason why?

### SOURCES

NPA, the Natural Philosophy Alliance, is a world wide forum for the critical analysis of mainstreamscience and the open exchange of related ideas.See <a href="http://www.k1man.com/vr">www.k1man.com/vr</a>Coming NPA videoconferences:www.k1man.com/vcNPA members:www.k1man.com/members

 World Scientists:
 www.k1man.com/ws
 World Science Database:
 www.k1man.com/wsd

Scientific Papers: <u>www.vixra.org</u> <u>www.arxiv.org</u> <u>www.k1man.com/v</u> <u>www.k1man.com/k</u>

UNH Research: <u>http://www.physics.unh.edu/research</u> <u>http://www.library.unh.edu/branches/physlib.html</u> General Science Journal <u>http://www.gsjournal.net/</u>

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# PHYSICS - MATHEMATICS SHORT WAVE RADIO PROGRAM

World Wide Short Wave Talk Show, 12 March 2013, and being aired 24/7 for the entire week on 14.275 MHz. USB, 7.2425 MHz., LSB, and 3.890 MHz. LSB, (plus or minus QRM).

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One hour thirty nine minute conference call discussion regarding space and time, mass, energy, light, Dr. Einstein replacing Newton and Boscovitch, Special Relativity vs General Relativity metrics, intense reaction from CERN <a href="http://www.k1man.com/Conf130311.mp3">www.k1man.com/Conf130311.mp3</a>

#### PARTICIPANTS WERE:

Harry H. Ricker, BSEE, Virginia Tech, MSEE, UNH; Glenn A. Baxter, P.E., BSIE URI; Nick Percival, **BS Physics, Harvard; Dr. Al McDowell, BSEE, Syracuse, PhD., Cornell; Dr. Satya Pal Asija, P.E.,** B.Sc., S.D.College/Punjab University, Graduate Institute of Electronic & Radio Engineers. (London), MBA University of Dayton, Post Graduate Diploma, University of Wales, Cardiff, UK,, Doctor of Jurisprudence NKU/Salmon P. Chase; Don E. Mitchell, Software engineer, diverse mechanical and <u>electronics</u>, **Supervision, Management, Production-engineering.** Non-degreed (some EE prerequisites) and non vocationally engaged in structured-field prototype as a retired software engineer/architect/logician/troubleshooter.

Three hour thirteen minute conversation between Glenn A. Baxter, P.E. and Don E. Mitchell regarding magnetic resonance toroids, UFO technology and landings, and information mind maps. www.k1man.com/Mitchell130310.mp3

#### PARTICIPANTS WERE:

Glenn A. Baxter, P.E., BSIE URI; Don E. Mitchell, Software engineer, diverse mechanical and electronics, Supervision, Management, Production-engineering. Non-degreed (some EE prerequisites) and non vocationally engaged in structured-field prototype as a retired software engineer/architect/logician/troubleshooter.

Nineteen minute conversation with Dr. Ian Cowan regarding how he and Alf Kelly came to disagree with Dr. Einstein's Special Relativity. <u>www.k1man.com/Cowan130210.mp3</u> See Dr. Cowan's 26 Jan 13 NPA presentation at: <u>https://www.fuzemeeting.com/replay\_meeting/fccff073/3342175</u>

#### PARTICIPANTS WERE:

Glenn A. Baxter, P.E., BSIE URI; Dr. Ian J. Cowan, Electrical Engineer, PhD. In mathematical modeling and computer simulation of thermal energy systems.

Dr. Bill Lucas joins our physics conference call this week. We discuss Dr. Lucas' NPA video conference presentation on 10 February 2013: <u>https://wlww.fuzemeeting.com/replay\_meeting/fccff073/3450307</u> www.k1man.com/Conf130211.mp3

#### PARTICIPANTS WERE:

Harry H. Ricker, BSEE, Virginia Tech, MSEE, UNH; Glenn A. Baxter, P.E., BSIE URI; Nick Percival, **BS Physics, Harvard; Dr. Al McDowell, BSEE, Syracuse, PhD., Cornell; Dr. Satya Pal Asija, P.E.,** B.Sc., S.D.College/Punjab University, Graduate Institute of Electronic & Radio Engineers. (London), MBA University of Dayton, Post Graduate Diploma, University of Wales, Cardiff, UK,, Doctor of Jurisprudence NKU/Salmon P. Chase; Dr. Charles William Lucas, Doctorate in Intermediate Energy Physics from The College of William and Mary, post - doctotate research on pions at Catholic University.

# Dr. Rodney Bartlett's Interesting Paper:

<u>www.k1man.com/f300</u> - The non-Higgs, revised electroweak unification, revised gravitation, and explained dark energy/dark mater – By Dr. Rodney Bartlett

www.k1man.com/c1 - Not So Fast, Dr. Einstein – Glenn A. Baxter, P.E

also <a href="http://www.k1man.com/b">www.k1man.com/b</a> (original submission with letters, etc.)

www.k1man.com/c2 - ANTI-NEUTRON THEORY/MODEL OF THE ATOM – By Glenn A. Baxter, P.E.

www.k1man.com/c3 EFFECT OF NON CONSTANT SPEED OF LIGHT ON 21<sup>st</sup> CENTURY PHYSICS By Glenn A. Baxter, P.E.\*

<u>www.k1man.com/c4</u>  $E = MC^2$  and  $\lambda = h/p$  Are Not Identities,

<u>www.k1man.com/c7</u>  $E = kMC^2$  As A Special Case For Electron – Positron Annihilation by Glenn A. Baxter, P.E.\*

www.k1man.com/c10 Theory of Electromagnetic Energy Propagation by Glenn A. Baxter, P.E.

www.k1man.com/c11 EXPERIMENTAL EVIDENCE TO DATE REGARDING SPECIAL RELATIVITY IS WRONG by Glenn A. Baxter, P.E.

www.k1man.com/c12 SPECIAL RELATIVITY MATH DISPROOF ON ONE PAGE – by Glenn A. Baxter, P.E.

<u>www.k1man.com/c17</u> THE SPEED OF ELECTROMAGNETIC RADIATION Copyright 25 July 2012 By Glenn A. Baxter, P.E. – <u>www.k1man.com/physics</u> (Updated 26 July 2012 8:3 A.M.)

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www.k1man.com/t Physics in the 21<sup>st</sup> Century by Glenn A. Baxter, P.E.\*

Author Bio: www.k1man.com/AuthorBio

Also: Dr. D. Sasso's complete papers at <u>www.k1man.com/k</u>

International Amateur Radio Network programming is 27/7 daily and is simulcast on the short wave frequencies of 3.890 MHz., Lower Sideband, 7.242.5 MHz, Lower Sideband, and 14.275 MHz. Upper Sideband + - QRM. Live telephone call ins will be taken at 207 242 2143, and/or you can also participate in the live video conferences on Saturdays via computer at the above referenced URL The video conference sponsor, NPA (the Natural Philosophical Alliance), is at <u>www.k1man.com/H</u>

# **OTHER PAPERS**

Papers by Glenn A. Baxter, P.E. www.k1man.com/v

Papers by D. Sasso www.k1man.com/k

Papers by Harry H. Ricker www.k1man.com/h

Papers by Dr. Johannes C. Valks www.k1man.com/k1

Papers by Prof. Daniel Y. Cahill <u>www.k1man.com/k2</u>

Papers by JOSEPH A. RYBCZYK www.k1man.com/k3

Papers by Dr. Daniel Gezari www.k1man.com/k4

Papers by Dr. Sanjay Wagh <a href="http://www.klman.com/k5">www.klman.com/k5</a>

Papers by Cochetklov Victor Nikolayevick <u>www.k1man.com/k6</u>

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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

BELGRADE LAKES INSTITUTE FOR ADVANCED RESEARCH -

SCIENTIFIC JOURNAL - PREVIOUS ISSUES: www.k1man.com/p

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The Belgrade Lakes Institute For Advanced Research was founded in 1999 to study original scientific work of great thinkers going back as far as possible (even thousands of years) to reexamine ideas in search of hints or inspiration which might apply to current scientific progress in physics. The late Dr. Richard Feynman\*\*\*\* is an Honorary Member of the Institute, and his lectures and publications serve as a corner stone for our work and model for our thinking and efforts. Other examples of great thinkers and scientists would include people such as Michael Faraday, Maxwell, Euler, Cantor, Lavoisier, Lise Meitner, Otto Hahn, Bohr, De Broglie, Planck, Avogadro, Boltzmann, Compton, Schrodinger, Dr. xSA Albert Einstein, Newton, Leibnitz, Pythagoras, Descartes, and many others. Membership in the Institute is by application and majority of votes timely cast by the general membership. For more information call the USA number 207 242 2143 or E-mail Institute@K1MAN.com Articles for the Scientific Journal are invited. Our mail address is Belgrade Lakes Institute For Advanced Research, 310 Woodland Camp Road, Box 440, Belgrade Lakes, Maine 04918 USA www.k1man.com/physics

### BELGRADE LAKES INSTITUTE FOR ADVANCED RESEARCH FOUNDATION

BY - LAWS

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- 3. The Institute Board shall have at least 3, and no more that 11 members, elected by a majority of the existing Board. A Board member can only be removed by death, resignation, or unanimous vote of the Board.

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- 5. Board meetings shall be periodic, and any Board member can call a Board meeting at ant time.
- 6. The Board of Directors shall employ an Executive Director, who shall serve at the pleasure of the Board, and who shall carry out the day to day affairs of the Institute.
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### PAST ISSUES OF THE SCIENTIFIC JOURNAL: www.k1man.com/p

# \*\*\*\*Richard Feynman

Richard Feynman (1918–1988), American physicist and Nobel laureate. Feynman shared the 1965 Nobel Prize in physics for his role in the development of the theory of quantum electrodynamics, the study of the interaction of light with atoms and their electrons. He also made important contributions to the theory of quarks (particles that make up elementary particles such as protons and electrons) and superfluidity (a state of matter in which a substance flows with no resistance). He created a method of mapping out interactions between elementary particles that became a standard way of representing particle interactions and is now known as Feynman diagrams. Feynman was a noted teacher, a notorious practical joker, and one of the most colorful characters in physics.

Feynman was born in New York City. As a child he was fascinated by mathematics and electronics and became known in his neighborhood as "the boy who fixes radios by thinking." He graduated with a bachelor's degree in physics from the Massachusetts Institute of Technology (MIT) in 1939 and obtained a Ph.D. degree in physics from Princeton University in 1942. His advisor was John Wheeler, and his thesis, "A Principle of Least Action in Quantum Mechanics," was typical of his use of basic principles to solve fundamental problems.

During World War II (1939-1945) Feynman worked at what would become Los Alamos National Laboratory in central New Mexico, where the first nuclear weapons were being designed and tested. Feynman was in charge of a group responsible for problems involving large-scale computations (carried out by hand or with rudimentary calculators) to predict the behavior of neutrons in atomic explosions.

After the war Feynman moved to Cornell University, where German-born American physicist Hans Bethe was building an impressive school of theoretical physicists. Feynman continued developing his own approach to quantum electrodynamics (QED) at Cornell and then at the California Institute of Technology (Caltech), where he moved in 1950.

Feynman shared the 1965 Nobel Prize in physics with American physicist Julian Schwinger and Japanese physicist Tomonaga Shin'ichirō for his work on QED. Each of the three had independently

developed methods for calculating the interaction between electrons, positrons (particles with the same mass as electrons but opposite in charge) and photons (packets of light energy). The three approaches were fundamentally the same, and QED remains the most accurate physical theory known. In Feynman's *space-time* approach, he represented physical processes with collections of diagrams showing how particles moved from one point in space and time to another. Feynman had rules for calculating the probability associated with each diagram, and he added the probabilities of all the diagrams to give the probability of the physical process itself.

Feynman wrote only 37 research papers in his career (a remarkably small number for such a prolific researcher), but many consider the two discoveries he made at Caltech, superfluidity and the prediction of quarks, were also worthy of the Nobel Prize. Feynman developed the theory of superfluidity (the flow of a liquid without resistance) in liquid helium in the early 1950s. Feynman worked on the *weak interaction*, the *strong force*, and the composition of neutrons and protons later in the 1950s. The weak interaction is the force that causes slow nuclear reactions such as beta decay (the emission of electrons or positrons by radioactive substances). Feynman studied the weak interaction with American physicist Murray Gell-Mann. The strong force is the short-range force that holds the nucleus of an atom together. Feynman's studies of the weak interaction and the strong force led him to believe that the proton and neutron were composed of even smaller particles. Both particles are now known to be composed of quarks.

The written version of a series of undergraduate lectures given by Feynman at Caltech, *The Feynman Lectures on Physics* (three volumes with Robert Leighton and Matthew Sands, 1963), quickly became a standard reference in physics. At the front of the lectures Feynman is shown indulging in one of his favorite pastimes, playing the bongo drum. Painting was another hobby. In 1986 Feynman was appointed to the Rogers Commission, which investigated the Challenger disaster—the explosion aboard the space shuttle Challenger that killed seven astronauts in 1986. In front of television cameras, he demonstrated how the failure of a rubber O-ring seal, caused by the cold, was responsible for the disaster. Feynman wrote several popular collections of anecdotes about his life, including "*Surely You're Joking Mr. Feynman*" (with Ralph Leighton and Edward Hutchings, 1984) and *What do YOU Care What Other People Think?* (with Ralph Leighton, 1988).

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\*\* Mr. Baxter has a degree in Industrial Engineering from the University of Rhode Island and is a Licensed Professional Engineer in Illinois and Maine. He is a graduate of Vermont Academy, which honored him in 1993 as a Distinguished Alumnus with the Dr. Florence R. Sabin Award. It was at Vermont Academy as a student where Mr. Baxter attended a talk and met the very popular relativity author James A. Coleman(7). Mr. Baxter has been doing research in relativity and physics ever since and is currently Executive Director of the Belgrade Lakes Institute for Advanced Research. His current interests include physics, philosophy, and theology.

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



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 <a href="https://www.klman.com/fhb">www.klman.com/fhb</a> and also <a href="https://www.klman.com/fhb">www.klman.com/fhb</a> and <a href="https://www.klman.com/fhb">www.klman.com/fhb</a> and <a href="https://www.klman.com/fhb">https://www.flman.com/fhb</a>