SCIENTIFIC JOURNAL

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

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EDITORIAL 19 March 2014

Dr. Diederik Aerts joins us this issue with a serious challenge to Quantum Physics as understood by the mainstream, as we call them.   Also Jim Marsen, MSME, with his TRON theory as developed with his dad.

The Institute has formally accepted a proposed alliance with the NPA, the Natural Philosophy Alliance.   NPA, in turn is working toward an alliance with The Electric Universe organization.   The ramifications of this would be huge. See www.k1man.com/Springer130319A.pdf

From: Barry Springer [mailto:bspringer@skybeam.com]
Sent: Friday, March 14, 2014 3:43 PM
To: 'bill.lucas001@gmail.com'; 'Dr. Cynthia Whitney (NPA)'; 'the.volks@comcast.net'; 'glennbaxterpe@aol.com'
Cc: 'Dave Talbott'; Jim Newburn (NPA); David Harrison (NPA)
Subject: Alliance proposal
Importance: High

Bill, Cynthia, Greg, Glenn -

Greg and David have announced their intent to form a Natural Philosophy Exchange (NPX) enterprise. As they have described it, NPX would appear to be in direct competition with NPA, which could further fractionate the dissident physics community.

To avoid continued conflict and potential further fractionation, I have developed a proposal to refocus the structure and assets of the NPA toward the more constructive purpose of pulling the dissident physics community closer together through an integrating alliance.

My proposal is outlined in the attachment. This is not a finished plan, but rather a high level concept.

The NPA board has not formally accepted this concept, but has agreed to explore it further by opening discussions with those of you might be involved as founding enterprises in such an alliance. The objective of the discussion phase would be to identify and resolve implementation issues that would enable us to move forward with a formal proposal to the NPA board.

I have already reviewed and discussed this proposal with Dave Talbott, who has found merit in it.

I request your review and comment. For those of you who will also be in Albuquerque next week, we can continue discussions there.

Regards,

Barry

SUBMITTED PAPERS

QUANTUM THEORY AND HUMAN PERCEPTION OF THE MACRO WORLD – Dr. Diederik Aerts
www.k1man.com/Aerts140319A.pdf

TRON Theory – Jim Marsen, www.k1man.com/Marsen140309.mp3

OTHER PAPERS

CORRECT SOLUTION OF THE RIGT ANGLE LEVEL PAPADOX OF SPECIAL RELATIVITY – Harry
Ricker, MSEE www.k1man.com/Ricker140314A.pdf

We submit this Scientific Journal each month to www.viXra.org.

LETTERS

From: Al McDowell <almcd999@earthlink.net>
Sent: Mon, Mar 17, 2014 6:34 pm
Subject: March 24 Teleconference

Glenn,

Topics for March 24:

1. I have a new and brief argument that the GR claims that **mass curves spacetime** and **curved spacetime causes gravity** are both false.

2. We know that the Doppler effect on sound and light are related to velocity. Yet we believe that the velocity of a light source does not affect light velocity, which raises the question of how galaxy motion away from us could cause Doppler redshift. This needs clarification.

3. The term "inertial frames" needs clarification. An inertial or "free-float" frame is one in which objects at rest remain at rest and objects in motion remains in motion at the same speed and in the same direction. The objects being used for this test of being at rest or in motion must not be connected to other objects that apply force to them. An elevator falling in vacuum is an example. A coasting spacecraft is an example. A satellite in a stable orbit is an example. A planet is an example, when taken as a whole in a solar system, even though it has gravity and objects in or on the planet that are not in an inertial frame.

As far as I know, Newton's Laws apply in any inertial frame, (allowing for my slight increase in the factor 2 in his Law of Gravity to accommodate my mechanism for resetting the gravity mechanism in my gravity theory). More importantly, I believe Newton's Laws apply equally well in non-inertial frames.

Consider laboratories on Earth. Objects sitting on the floor are prevented from accelerating downward by gravity, and therefore they can not be used as a test for what happens to objects at rest. An object released from ones hand accelerates downward, proving that the Earth surface is not an inertial plane, and indicating that the external force called gravity is at work in the frame of the Earth surface. Newton's Laws work just fine in this Earth laboratory frame by simply accounting for the force of gravity in the mechanical analysis of objects in the laboratory frame. How else could engineers design a building or a bridge?

In the case of Newton's Bucket, the geocentrists point out that in the frame of a fly sitting on the interior wall of the spinning bucket, there is no rotation, yet the fly sees the water move toward and pile up at the bucket wall. But unlike the geocentrists who are mystified by the water movement, the fly knows that force is being applied to his legs, and the fly is intelligent enough to recognize that the force that he feels on his legs is the cause of water moving outward in the pail. The fly, like Newton, has no problem understanding the mechanics of the water movement.

My point is that Newton's Laws apply perfectly well in any non-inertial frame as long as the forces causing the frame to be non-inertial are included in the mechanical analysis. Newton's Laws are universal in all frames, inertial or non-inertial. SR is false in all frames, inertial or non-inertial. Nothing in the MM interferometers has anything to do with any external linear or centrifugal forces. Inertial frames are a red herring that the mainstream often chooses to misunderstand to support their false arguments. I am taking the misunderstood non-inertial frames to the landfill. Or would you beg to correct this prejudice?

Al

From: David Tombe <sirius184@hotmail.com>
To: glennbaxterpe <glennbaxterpe@aol.com>
Sent: Wed, Mar 19, 2014 5:14 am
Subject: The Mach Hypothesis

Hi Glenn,

I haven't forgotten about doing that paper on the Mach Principle. I'll probably get it done in April. I'll try and combine it with a review of Galileo's Principle of Relativity.

Meanwhile, you might want to take a look at this paper, and particularly section **2**. Section **2** combines the Simhony calculation with the Maxwell calculation in Part III of Maxwell's 1861 paper.

http://gsjournal.net/Science-Journals/Research%20Papers-Mechanics%20/%20Electrodynamics/Download/5373

Best Regards

David

From: "Prof. André Koch T
orres Assis" <assis@ifi.unicamp.br>
To: Prof. Andre Koch Torres Assis <assis@ifi.unicamp.br>
Sent: Mon, Mar 17, 2014 4:11 pm
Subject: new book, in English, about Relational Mechanics

Dear Colleagues,

I am writing to inform about the publication, in English, of a new book:

A. K. T. Assis, Relational Mechanics and Implementation of Mach's
Principle with Weber's Gravitational Force
(Apeiron, Montreal, 2014), ISBN: 978-0-9920456-3-0.

This book is freely available in PDF format (6 Mb) at:

http://www.ifi.unicamp.br/~assis/Relational-Mechanics-Mach-Weber.pdf

It has 542 pages, 26 Chapters, 3 Appendices, 340 figures and 595 references.

The book presents a comparison between newtonian mechanics, Eintein's
theories of relativity, and relational mechanics.

The book discusses the differences between relative and absolute motion,
inertial frames of reference, the distinction between the kinematic and
dynamic rotations of the Earth, the principle of equivalence, the
proportionality between inertial and gravitational masses, etc.
Several crucial experiments are deeply discussed: Galileo's free fall,
simple pendulum, Newton's bucket experiment,the flattening of the Earth at
the poles, Foucault's pendulum etc.

Relational mechanics is a quantitative implementation of the ideas
of Leibniz, Berkeley and Mach. It utilizes Weber's force law for
gravitation and the principle of dynamic equilibrium.

According to relational mechanics the inertial forces are due to a
gravitational interaction between the test body and the distant galaxies. The
centrifugal force and the Coriolis's force are deduced and interpreted as
real forces of gravitational origin, being exerted by the galaxies on the
test body, whenever there is a relative rotation between the body and the set
of galaxies. Relational mechanics explains Newton's bucket experiment with
the curvature of the water being due to a gravitational interaction between
the water and the set of distant galaxies, when there is a relative rotation
between the water and the set of galaxies.

Weber's electrodynamics and Ampère's force between current elements are
presented and compared with classical electromagnetism
(Maxwell's equations and Lorentz's force law). It is discussed the
origins of the magnetic force and the different meanings of the velocity
which appears in this law. The "field" concept is deeply
discussed.

Other topics presented in this work: the gravitational paradox, the
universe with and without expansion, the finite and infinite universe,
problems with the big bang theory, the history of the temperature of the
cosmic microwave radiation, the cosmological points of view of Edwin Hubble,

Schrödinger's work on Mach's principle, etc.

The book is intended for physicists, engineers, mathematicians,
historians, philosophers of science and students.

Two chapters of this book present the reasons why I am totally against
Einstein's special and general theories of relativity.

Relational Mechanics is a new formulation of mechanics intended to
replace not only Newton's classical mechanics,
but also Einstein's special and general theories of relativity.

The printed version of the book can be ordered through Amazon:

http://www.amazon.com/Relational-Mechanics-Implementation-Principle-Gravitational/dp/0992045630

I would appreciate if you might forward this email or this information
to your interested colleagues, students and discussion groups.

Sincerely yours,

Andre Assis
--
Andre Koch Torres Assis
Institute of Physics
University of Campinas
13083-859 Campinas, SP, Brazil
Email: assis@ifi.unicamp.br
Telephone: (++55) (19) 35215515
Homepage: http://www.ifi.unicamp.br/~assis

From: Osvaldo Domann <odomann@yahoo.com>
Sent: Mon, Mar 17, 2014 4:38 am
Subject: Re: Simhony aether - how can it be invisible?

Dear Peter Kohut.

If you have a look at my approach „Emission & Regeneration" Field Theory at www.odomann.com you
will find a complete mathematical description of the constant interactions over the whole space
between electrons and positrons via Fundamental Particles with longitudinal and transversal angular
momenta published in 2003. Copyright.

You will also find papers at NPA (profile) and video conferences from 2012 and 2013 about my model at
NPA.

Kind regards

Osvaldo Domann.

Ing. Peter Kohút <PeterKohut@seznam.cz> schrieb am 10:18 Montag, 17.März 2014:

Franklin,

your mechanical model of reality is made of two mutually opposite components - electrons and positrons, my dialectical model is made of opposite poles "+" and "-", where every "+" creates connections to all "-", so everything is made of bipolar relations of opposites. If you can accept that every electron creates connections to all positrons in the Universe and reciprocally, your model will become close to mine. For me the non-local instantaneous comunnication of everything with everything else is the basic feature of reality creating its Unity, while your model in your contemporary presentation do not accept non-locality. I have prepared a short paper regarding my dialectical model that I tried to explain it shortly and clearly. I will send it in next email.

Regards
Peter

---------- Původní zpráva ----------
Od: Franklin Hu <franklinhu@yahoo.com>
Komu: Ing. Peter Kohút <PeterKohut@seznam.cz>
Datum: 16. 3. 2014 22:05:04
Předmět: Re: Simhony aether - how can it be invisible?

Yes, everything is fundamentally composed of only positrons and electrons - simple huh? This is why we have experimentally observed that every particle we have ever seen, can eventually be broken down into only positrons and electrons. All those exotic particles with alphabet soup names that only last for an instant - all break down into only positrons and electrons.

The specific combination of 1 electron and 1 positron which I call a "poselectron" is the elementary quanta of space and they form an unbroken sea of particles.

Their spatial volume is as described by the EPOLA theory as 4.4 x 10-15 m

http://www.epola.co.uk/dwnlds/epola%20in%20brief.pdf

I don't fully agree with the structure of the EPOLA in that I require the poselectrons to be able to freely rotate in space, rather than being a FCC cubic crystal structure, but for purposes of calculation and prediction, the models are similar enough.

I don't understand your final question. The spatial volume is as described by the EPOLA theory.

-thanks for your questions

-Franklin

From: Ing. Peter Kohút <PeterKohut@seznam.cz>
To: Franklin Hu <franklinhu@yahoo.com>
Sent: Sunday, March 16, 2014 7:15 AM
Subject: Re: Simhony aether - how can it be invisible?

Franklin,

Is the whole reality in your mechanical model made of electrons and positrons and their combinations like electron/positron dipoles?
Are they at the same time the elementary quanta of space meaning - is the whole space made of them ? If yes, what is their spatial volume?
Is the spatial volume given by the number of electrons and positrons creating the space?

Regards
PeterI

---------- Původní zpráva ----------
Od: Franklin Hu <franklinhu@yahoo.com>
Komu: Roger Rydin <rarydin@earthlink.net>
Datum: 16. 3. 2014 5:55:15
Předmět: Simhony aether - how can it be invisible?

I would say that the positron/electron lattice is invisible in experiments only in the sense that we deliberately choose to ignore and deny it's existence. This is like fish scientists refusing to accept the presence of water. They so completely take it for granted, that anything that points out it's existence is systematically ignored. So when they apply electricity to their space, they see the pair production of Oxygen and Hydrogen. Ah, they say, conversion of energy to matter. Then when they see Oxygen and Hydrogen going "poof" in to puff of energy, they say conversion of mass into energy. They completely deny that the Oxygen and Hydrogen are combining to form H2O and completely ignore the fact that they swim around and push against it and can measure specific properties such as density, but they ascribe it to be the "void" since they cannot "see" it.

Similarly, we deliberately ignore experimental evidence of an aether. During pair production, just where do you think the positron and electron are coming from??? No one can explain how energy is turned in to mass. Experimentally, this must show that what we consider a vacuum contains the particles we see expelled in pair production.

We also ignore the fact that the vacuum has specific properties of solids like permittivity and permeability and if we calculate them, we get the measured values for these properties.

We also ignore the fact that in order to move anything, the vacuum "resists" or provides drag as if trying to move a spoon through molasses. We also see and ignore the even more mysterious action that once something is moving, its kinetic energy is somehow "stored" in the space around the object which is released when it hits another object.

I have also heard that we have seen in accelerator experiments examples of seeing a positron and electron come together, then disappear, only to re-appear along the same path as a positron/electron. If this were any another reaction, science would have declared the existence of an entirely new neutral poselectron particle since such disappearances and reappearances is how we detect neutral particles. But this particular reaction is systematically ignored and is considered a "garbage" reaction by people who study accelerator data. Those same people also completely ignore the fact that the vast majority of the products of accelerator collisions are positrons and electrons in vast numbers.

As for the aether being invisible and hard to detect. Any neutral particle like a neutron is fiendishly difficult to detect experimentally. The neutrality of the charge makes it interact with practically nothing. So it is not surprising that a nearly neutral positron/electron dipole particle would be virtually invisible. Simhony makes it sound as if these were separate electrons and positrons, but in practice it is much more logical to think of them grouped into tight dipole pairs which are almost completely neutrally charged (like a neutron).

If you want an experiment to show the existence of a positron/electron lattice, you would have to first make that assumption and then design an experiment that can show it's existence. Perhaps one can show you can tear the positrons and electrons apart using nothing but electrostatic force. Maybe you can show that if you react positrons and electrons which have kinetic energy, the kinetic energy of the resulting neutral particle can be tracked through the aether and detected. Maybe you can figure out a way to bottle up or cause the aether to flow in one direction and show anomalous acceleration effects.

I would bet that if you could design an experiment that specifically looked for the positron/electron aether, you would find it and I guarantee you a Nobel prize for it. It would also be the end of all the phoney physics we've had for the last 100 years and will lead us to the ultimate understanding of nature and the universe.

Look for it, and you shall find it ...

-Franklin

From: Roger Rydin <rarydin@earthlink.net>
Sent: Saturday, March 15, 2014 7:06 PM
Subject: RE: Speed of Light & Its Source

Robert;

Simple yes, but why would such a lattice of positrons and electrons be invisible to experiment? Positrons annihilate when they hit electrons. Electrons scatter and do other things. Yet, for Epola to be valid, they have to be invisible and unreacting! As an experimentalist, this does not make sense.

Roger Rydin

From: Sungenis@aol.com [mailto:Sungenis@aol.com]
Sent: Saturday, March 15, 2014 3:30 PM
Subject: Re: Speed of Light & Its Source

Glenn,

It's a book, written in 1994, published by World Scientific. Title is Invitation to the Natural Physics of Matter, Space, Radiation.

It's all based on his electron-positron lattice (named EPOLA).

One of the best I've ever read. Very simple derivations, and all based on physically provable processes.

Robert S.

In a message dated 3/15/2014 6:23:41 A.M. Eastern Daylight Time, glennbaxterpe@aol.comwrites:

From: Glenn A. Baxter, P.E.

Date: 15 March 2014

I would appreciate seeing a copy of that paper.

From: David Tombe <sirius184@hotmail.com>
Sent: Fri, Mar 14, 2014 11:07 pm
Subject: RE: Speed of Light & Its Source

Robert,

Anybody who has closely examined Simhony's linkage of E = mc^2 to the Newton equation should realize that he is correct in principle, and that he is supplying us with a major clue. (In fact it's the same equation that appears as equation (132) in Maxwell's 1861 paper)

So long as the vast majority on these threads ignore this kind of thing, these debates will go nowhere.

Best Regards

David

From: Sungenis@aol.com
Date: Fri, 14 Mar 2014 10:15:52 -0400
Subject: Re: Speed of Light & Its Source

Nick,

Menahem Simhony (1994) had compared c to the speed of sound. In fact, he even derived E =mc^2 from the same mechanical principles found in sound waves.

It is my understanding that just as sound is limited to the speed allowed by its medium, so is light.

In other words, if the source is going half the speed of sound, and a sound is emitted from that source, the sound cannot go faster than 1100 ft/sec in air and 5000ft/sec in water, as just two examples.

The same would be true of light. The only exception would be if the medium the light is traveling through is moving in the same direction as the light. In that frame, the light would be observed to be exceeding c to the observer outside of the medium.

Do we agree?

Robert S.

In a message dated 3/14/2014 9:14:10 A.M. Eastern Daylight Time, npercival@snet.net writes:

Bill

Below you wrote, "*The speed of light is affected by the velocity of the source.*" This is a most important topic. So I changed the Subject which originally referred to a very different topic so

that readers could follow this new thread. While important, I don't spend a lot of time on this topic, so I'd like help in getting it clarified.

The general consensus today, of course, is that the speed of light (SoL) is independent of the speed of the source. Frequently, binary stars are said to support this view. Since binary stars orbit their barycenter, for some binary pairs, for much of their orbit, one star is going away from the earth while the other is going towards the earth. Hence, any variation in their light speed due to their velocity, would show up dramatically in observations from the earth as the light's journey is a very long one. One could try to counter that conclusion with the extinction effect whereby light is absorbed by the atoms in all media including the near vacuum of outer space and then re-emitted. However, even assuming the validity of the extinction effect, there is a question about its relevance regarding binary star telescope observations. For example, what is the mechanism whereby the re-emission would send the light on <u>exactly</u> the same course as the incoming light??? What distance is traveled before the first absorption?

In addition, the MMX of 1886 seems to be focused on the SoL in a medium. Yes, the SoL is affected by the medium that it travels in. As such, the results of the experiment seems to be consistent with the interpretation of binary stars showing that the SoL is independent of the source.

Again, since this is an important topic, others, who are most likely to be more knowledgable on this topic than I, are welcome to join the discussion.

Nick

From: Bill Lucas <bill.lucas001@gmail.com>
To: "Glenn A. Baxter, P.E." <glennbaxterpe@aol.com>
Cc:
Sent: Thursday, March 13, 2014 5:37 PM
Subject: Re: Olber's paradox - typo fixed

Glenn and everyone,

The speed of light is affected by the velocity of the source. The Michelson-Morley experiment of 1886 proves this. Please note that his is not the Michelson-Morley experiment of 1887 to detect the aether. Attached is a section from my book on this subject.

Bill

On Thu, Mar 13, 2014 at 1:02 PM, Glenn A. Baxter, P.E. <glennbaxterpe@aol.com> wrote:

To: Lou Ellen LaFollette

From: Glenn A. Baxter, P.E.

Date: 13 March 2014

Lou,

You are the first human being to find the planted "sore thumb" typo in my paper, unassisted. Franklin Hu found it when Dr. Stephen Baunes and I spent almost five hours after a Saturday FUZE meeting going through the paper, line by line. Good going Franklin!

My paper is 100 % correct. It will gain traction and will take off like a rocket. Dr. Roger Rydin seems to like my attached. Good start. How do you spell V I R A L? I will be happy to discuss your comments questions with you. What is your phone number?

Glenn

From: RMLAF <rmlaf@comcast.net>
Sent: Wed, Mar 12, 2014 4:50 pm
Subject: Re: Olber's paradox

Dear Glenn,

Thanks. I am reading your paper and I like the fact that you discuss the "storage" of energy. Relative to those who see energy as a "concept" or a property/behavior of matter, the fact that energy can be stored speaks to its physicality. Energy can be stored in fossil fuels. Energy can be stored in plant fiber. Energy can be stored in animal fat. In fact, our current emphasis on BMI - Body Mass Index - is a measure of how much excess energy we are storing. (In a society subject to famine, a high BMI would be a good thing.)

I do not think that Einstein's failure to deal with the the "relative" velocity of light was an oversight. I think that it was deliberate and it is the reason why one would think that his theory would be utterly rejected. However, as Dr. Lucas points out, academicians were looking for a way to justify their intent to "control" knowledge and hence guarantee their status and Einstein's Relativity was the perfect vehicle. "Everything is relative to the observer" Hence we can "deconstruct" all prior knowledge based upon the worldview/environment of the observer. Second, we can isolate knowledge into various "cones" which will give us the control which we desire. Therefore, your paper which points out the ridiculousness of Einstein's theory is not going to gain traction. Truth is not the object here. Nonetheless, your paper is very well done. It's time may yet come.

You and Harry frequently discuss the terms permittivity and permeability. I imagine these are engineering terms and wonder if you could explain them to me since I am unfamiliar with them. Thank you.

You mentioned a typo in your paper. There is a very minor typo under the section "A Practical Illustration" "A light is pulsed sideways across the railcar from point A on the far side <u>or</u> - should be of.

Lou

From: Glenn A. Baxter, P.E.

Sent: Wednesday, March 12, 2014 7:26 AM

Subject: Re: Olber's paradox

Lou,

I like that.

Glenn

Glenn A. Baxter, P.E.
glennbaxterpe@aol.com

From: RMLAF <rmlaf@comcast.net>
To: Al McDowell <almcd999@earthlink.net>; bill.lucas001 <bill.lucas001@gmail.com>;
franklinhu <franklinhu@yahoo.com>; glennbaxterpe <glennbaxterpe@aol.com>; kc3mx
<kc3mx@yahoo.com>; NPercival <NPercival@SNET.net>
Sent: Tue, Mar 11, 2014 7:46 pm
Subject: Re: Olber's paradox

Dear Al,

If the space occupied by galaxies is finite, I cannot imagine the aether extending beyond that
space. Losing energy to the far beyond is what I would fear in an infinite universe. What I
propose, as an alternative, is that space is infinite, but the aether is finite and that as space
extends beyond the galaxies, the conditions supporting the existence of the aether change so
that the aether gradually comes to an end due to environmental conditions. This appears to me
to be consistent with your theory that the force of gravity eventually drops to zero. This is just a
thought as we explore alternatives here.

Lou

From: Al McDowell

To: RMLAF ; bill.lucas001@gmail.com ; franklinhu@yahoo.com ; glennbaxterpe@aol.com ;
kc3mx@yahoo.com ; NPercival@SNET.net

Sent: Tuesday, March 11, 2014 7:07 PM

Subject: Re: Olber's paradox

Lou,

I am sure you are correct that if we could detect a universe center, then it is finite.

Even if one assumes the Big Bang to be true, Hubble's Law stating that galaxy velocity and
distance are directly proportional means that we could not detect a center from redshift data
even if a center existed.

Regarding the edge limits for stuff of the universe, I believe that gravity and light are transmitted
by physical stuff with mass. If the space occupied by galaxies is finite, we would face the

question whether the aether that conducts light and gravity extends beyond the galaxy boundary, and how far, infinitely? If the aether extended beyond the galaxies, we would continually lose energy to the far beyond. If the aether ended where the galaxies end, light and gravity would abruptly stop at the edge. This seems stranger to me than a universe without an edge.

Al

From: RMLAF
Sent: Mar 11, 2014 1:20 PM
To: Al McDowell , bill.lucas001@gmail.com, franklinhu@yahoo.com, glennbaxterpe@aol.com,kc3mx@yahoo.com, NPercival@SNET.net
Subject: Re: Olber's paradox

Dear Al,

Interesting point. That is why Einstein "corrupted" time to serve as the 4th dimension into which space could curve. Infinity means no edges, no beginnings and no ends in any direction. It also means no center. If we are capable of measuring space and determining its shape, then we are reducing/limiting its infinite nature. I am going to think about this and get back to you.

Lou

----- Original Message -----

From: Al McDowell

To: RMLAF ; bill.lucas001@gmail.com ; franklinhu@yahoo.com ; glennbaxterpe@aol.com ; kc3mx@yahoo.com ; NPercival@SNET.net

Sent: Tuesday, March 11, 2014 7:24 AM

Subject: Re: Olber's paradox

Lou,

I agree that the idea of space circling back on itself like the 2-D surface of a sphere is a very appealing way to solve the seemingly impossible conundrum of a universe without edges. There are two problems with this idea:

First, scientists have determined experimentally that our 3-D space is "flat," as opposed to positively curved like the 2-D surface of a sphere. If one measures the angles of a triangle and finds they total more than 180 degrees, then space is positively curved. If they total exactly 180 degrees, space is flat.

Second, the 2-D surface of a sphere can curve because there is a third dimension into which the curving can occur. We are aware of no fourth dimension of space into which our 3-D universe can curve.

Al

-----Original Message-----
From: RMLAF
Sent: Mar 10, 2014 9:06 PM
To: Al McDowell , bill.lucas001@gmail.com, franklinhu@yahoo.com, glennbaxterpe@aol.com, kc3mx@yahoo.com, NPercival@SNET.net
Subject: Re: Olber's paradox

Dear Al and All,

Not to brag upon myself, which I am obviously doing, and I apologise, but at the age of 8, I reflected upon the meaning of infinity. I realized that we are used to things having a beginning and an end and that infinity means no beginning and no end. We then have the problem of density. If there is no beginning nor end to the universe then that means there should be no limitations upon the "stuff" that fills the universe. If this is so, why do we keep recycling matter and energy? Unless the infinite universe is always filled with a "relative" finite amount of stuff. That does not make a lot of sense or maybe it does. The universe is infinite, but the stuff within the universe is always limited. With respect to edges, Einstein's concept of space circling back upon itself, like the surface of a balloon makes some sense. Just as we can walk around the earth, we can, theoretically, walk around space and end up back where we started according to my understanding of Einstein. The universe would be finite and there would be no edges.

Lou

All,

It is difficult to imagine a universe without an edge (infinite) and a universe with an edge (finite). I can more easily imagine a universe without an edge.

Olber's Paradox poses a potential problem for universes without edges. Imagine dividing the universe into concentric shells around Earth with equal thickness. With the inverse distance squared rules, a shell with twice the radius will have 4 times as many galaxies and send 1 / 4 as much light and 1 / 4 as much gravity force to Earth. Thus one would expect the same amount of light and gravity from each of an infinite number of shells in a universe without edges, adding up to an infinite amount of light and gravity arriving at Earth.

However, it has been shown mathematically that the total amount of light is finite if the light attenuates at least a small amount on its way toward Earth. Light from distant galaxies does attenuate on its way to us as some of it strikes suns, planets, space rocks, dust and gas in space along the way. Therefore, the total amount of light arriving from galaxies is finite and the night sky is thus dark, contrary to Olber's paradox.

Regarding gravity, the gravity force on Earth from the Moon is greater than from the Sun, the amount of gravity from the galaxy is far less than from the Sun, and the amount of gravity from the nearest other galaxies is miniscule relative to the gravity from our own galaxy. Beyond our closest galaxies, there are roughly the same density of galaxies in all directions, and the galaxies from these distances pull on Earth in all directions equally with no net gravity force. At large distances, gravity force declines to zero in my gravity model, in which the gravity-conducting aether particles lose the gravity they carry when they collide with another gravity aether particle.

I agree that "infinite" is a mathematical term. I prefer to think that the universe has no end or boundary.

Al

From: Osvaldo Domann <odomann@yahoo.com>
Sent: Mon, Mar 17, 2014 4:38 am
Subject: Re: Simhony aether - how can it be invisible?

Dear Peter Kohut.
If you have a look at my approach „Emission & Regeneration" Field Theory at www.odomann.com you will find a complete mathematical description of the constant interactions over the whole space between electrons and positrons via Fundamental Particles with longitudinal and transversal angular momenta published in 2003. Copyright.

You will also find papers at NPA (profile) and video conferences from 2012 and 2013 about my model at NPA.

Kind regards

Osvaldo Domann.

Ing. Peter Kohút <PeterKohut@seznam.cz> schrieb am 10:18 Montag, 17.März 2014:
Franklin,

your mechanical model of reality is made of two mutually opposite components - electrons and positrons, my dialectical model is made of opposite poles "+" and "-", where every "+" creates connections to all "-", so everything is made of bipolar relations of opposites. If you can accept that every electron creates connections to all positrons in the Universe and reciprocally, your model will become close to mine. For me the non-local instantaneous comunication of everything with everything else is the basic feature of reality creating its Unity, while your model in your contemporary presentation do not accept non-locality. I have prepared a short paper regarding my dialectical model that I tried to explain it shortly and clearly. I will send it in next email.

Regards

Peter

Yes, everything is fundamentally composed of only positrons and electrons - simple huh? This is why we have experimentally observed that every particle we have ever seen, can eventually be broken down into only positrons and electrons. All those exotic particles with alphabet soup names that only last for an instant - all break down into only positrons and electrons.

The specific combination of 1 electron and 1 positron which I call a "poselectron" is the elementary quanta of space and they form an unbroken sea of particles.

Their spatial volume is as described by the EPOLA theory as 4.4 x 10-15 m

http://www.epola.co.uk/dwnlds/epola%20in%20brief.pdf

I don't fully agree with the structure of the EPOLA in that I require the poselectrons to be able to freely rotate in space, rather than being a FCC cubic crystal structure, but for purposes of calculation and prediction, the models are similar enough.

I don't understand your final question. The spatial volume is as described by the EPOLA theory.

-thanks for your questions

-Franklin

Franklin,

Is the whole reality in your mechanical model made of electrons and positrons and their combinations like electron/positron dipoles?
Are they at the same time the elementary quanta of space meaning - is the whole space made of them ? If yes, what is their spatial volume?
Is the spatial volume given by the number of electrons and positrons creating the space?

Regards
PeterI

---------- Původní zpráva ----------
Od: Franklin Hu <franklinhu@yahoo.com>
Komu: Roger Rydin <rarydin@earthlink.net>
Datum: 16. 3. 2014 5:55:15
Předmět: Simhony aether - how can it be invisible?

I would say that the positron/electron lattice is invisible in experiments only in the sense that we deliberately choose to ignore and deny it's existence. This is like fish scientists refusing to accept the presence of water. They so completely take it for granted, that anything that points out it's existence is systematically ignored. So when they apply electricity to their space, they see the pair production of Oxygen and Hydrogen. Ah, they say, conversion of energy to matter. Then when they see Oxygen and Hydrogen going "poof" in to puff of energy, they say conversion of mass into energy. They completely deny that the Oxygen and Hydrogen are combining to form H2O and completely ignore the fact that they swim around and push against it and can measure specific properties such as density, but they ascribe it to be the "void" since they cannot "see" it.

Similarly, we deliberately ignore experimental evidence of an aether. During pair production, just where do you think the positron and electron are coming from??? No one can explain how energy is turned in to mass. Experimentally, this must show that what we consider a vacuum contains the particles we see expelled in pair production.

We also ignore the fact that the vacuum has specific properties of solids like permittivity and permeability and if we calculate them, we get the measured values for these properties.

We also ignore the fact that in order to move anything, the vacuum "resists" or provides drag as if trying to move a spoon through molasses. We also see and ignore the even more mysterious action that once something is moving, its kinetic energy is somehow "stored" in the space around the object which is released when it hits another object.

I have also heard that we have seen in accelerator experiments examples of seeing a positron and electron come together, then disappear, only to re-appear along the same path as a positron/electron. If this were any another reaction, science would have declared the existence of an entirely new neutral poselectron particle since such disappearances and reappearances is how we detect neutral particles. But this particular reaction is systematically ignored and is considered a "garbage" reaction by people who study accelerator data. Those same people also completely ignore the fact that the vast majority of the products of accelerator collisions are positrons and electrons in vast numbers.

As for the aether being invisible and hard to detect. Any neutral particle like a neutron is fiendishly difficult to detect experimentally. The neutrality of the charge makes it interact with practically nothing. So it is not surprising that a nearly neutral positron/electron dipole particle would be virtually invisible. Simhony makes it sound as if these were separate electrons and positrons, but in practice it is much more logical to think of them grouped into tight dipole pairs which are almost completely neutrally charged (like a neutron).

If you want an experiment to show the existence of a positron/electron lattice, you would have to first make that assumption and then design an experiment that can show it's existence. Perhaps one can show you can tear the positrons and electrons apart using nothing but electrostatic force. Maybe you can show that if you react positrons and electrons which have kinetic energy, the kinetic energy of the resulting neutral particle can be tracked through the aether and detected. Maybe you can figure out a way to bottle up or cause the aether to flow in one direction and show anomalous acceleration effects.

I would bet that if you could design an experiment that specifically looked for the positron/electron aether, you would find it and I guarantee you a Nobel prize for it. It would also be the end of all the phoney physics we've had for the last 100 years and will lead us to the ultimate understanding of nature and the universe.

Look for it, and you shall find it ...

-Franklin

Robert;

Simple yes, but why would such a lattice of positrons and electrons be invisible to experiment? Positrons annihilate when they hit electrons. Electrons scatter and do other things. Yet, for Epola to be valid, they have to be invisible and unreacting! As an experimentalist, this does not make sense.

Roger Rydin

From: Sungenis@aol.com [mailto:Sungenis@aol.com]
Sent: Saturday, March 15, 2014 3:30 PM
To: glennbaxterpe@aol.com; sirius184@hotmail.com; npercival@snet.net; bill.lucas001@gmail.com
Subject: Re: Speed of Light & Its Source

Glenn,

It's a book, written in 1994, published by World Scientific. Title is Invitation to the Natural Physics of Matter, Space, Radiation.

It's all based on his electron-positron lattice (named EPOLA).

One of the best I've ever read. Very simple derivations, and all based on physically provable processes.

Robert S.

In a message dated 3/15/2014 6:23:41 A.M. Eastern Daylight Time, glennbaxterpe@aol.comwrites:

From: Glenn A. Baxter, P.E.

Date: 15 March 2014

I would appreciate seeing a copy of that paper.

    Glenn A. Baxter, P.E.
glennbaxterpe@aol.com

-----Original Message-----
From: David Tombe <sirius184@hotmail.com>
To: Sungenis@aol.com <sungenis@aol.com>; npercival <npercival@snet.net>; bill.lucas001 <bill.lucas001@gmail.com>; glennbaxterpe <glennbaxterpe@aol.com>
Sent: Fri, Mar 14, 2014 11:07 pm
Subject: RE: Speed of Light & Its Source

Robert,

Anybody who has closely examined Simhony's linkage of E = mc^2 to the Newton equation should realize that he is correct in principle, and that he is supplying us with a major clue. (In fact it's the same equation that appears as equation (132) in Maxwell's 1861 paper)

So long as the vast majority on these threads ignore this kind of thing, these debates will go nowhere.

Best Regards

David

From: Sungenis@aol.com
Date: Fri, 14 Mar 2014 10:15:52 -0400
Subject: Re: Speed of Light & Its Source

Nick,
Menahem Simhony (1994) had compared c to the speed of sound. In fact, he even derived E =mc^2 from the same mechanical principles found in sound waves.

It is my understanding that just as sound is limited to the speed allowed by its medium, so is light.

In other words, if the source is going half the speed of sound, and a sound is emitted from that source, the sound cannot go faster than 1100 ft/sec in air and 5000ft/sec in water, as just two examples.

The same would be true of light. The only exception would be if the medium the light is traveling through is moving in the same direction as the light. In that frame, the light would be observed to be exceeding c to the observer outside of the medium.

Do we agree?

Robert S.

In a message dated 3/14/2014 9:14:10 A.M. Eastern Daylight Time, npercival@snet.net writes:

Bill

Below you wrote, "*The speed of light is affected by the velocity of the source.*" This is a most important topic. So I changed the Subject which originally referred to a very different topic so that readers could follow this new thread. While important, I don't spend a lot of time on this topic, so I'd like help in getting it clarified.

The general consensus today, of course, is that the speed of light (SoL) is independent of the speed of the source. Frequently, binary stars are said to support this view. Since binary stars orbit their barycenter, for some binary pairs, for much of their orbit, one star is going away from the earth while the other is going towards the earth. Hence, any variation in their light speed due

to their velocity, would show up dramatically in observations from the earth as the light's journey is a very long one. One could try to counter that conclusion with the extinction effect whereby light is absorbed by the atoms in all media including the near vacuum of outer space and then re-emitted. However, even assuming the validity of the extinction effect, there is a question about its relevance regarding binary star telescope observations. For example, what is the mechanism whereby the re-emission would send the light on <u>exactly</u> the same course as the incoming light??? What distance is traveled before the first absorption?

In addition, the MMX of 1886 seems to be focused on the SoL in a medium. Yes, the SoL is affected by the medium that it travels in. As such, the results of the experiment seems to be consistent with the interpretation of binary stars showing that the SoL is independent of the source.

Again, since this is an important topic, others, who are most likely to be more knowledgable on this topic than I, are welcome to join the discussion.

Nick

From: Bill Lucas <bill.lucas001@gmail.com>
To: "Glenn A. Baxter, P.E." <glennbaxterpe@aol.com>
Cc:
Sent: Thursday, March 13, 2014 5:37 PM
Subject: Re: Olber's paradox - typo fixed

Glenn and everyone,

The speed of light is affected by the velocity of the source. The Michelson-Morley experiment of 1886 proves this. Please note that his is not the Michelson-Morley experiment of 1887 to detect the aether. Attached is a section from my book on this subject.

Bill

On Thu, Mar 13, 2014 at 1:02 PM, Glenn A. Baxter, P.E. <glennbaxterpe@aol.com> wrote:

To: Lou Ellen LaFollette

From: Glenn A. Baxter, P.E.

Date: 13 March 2014

Lou,

You are the first human being to find the planted "sore thumb" typo in my paper, unassisted. Franklin Hu found it when Dr. Stephen Baunes and I spent almost five hours after a Saturday FUZE meeting going through the paper, line by line. Good going Franklin!

My paper is 100 % correct. It will gain traction and will take off like a rocket. Dr. Roger Rydin seems to like my attached. Good start. How do you spell V I R A L? I will be happy to discuss your comments questions with you. What is your phone number?

Glenn

Glenn A. Baxter, P.E.
glennbaxterpe@aol.com

-----Original Message-----
From: RMLAF <rmlaf@comcast.net>
To: almcd999 <almcd999@earthlink.net>; bill.lucas001 <bill.lucas001@gmail.com>; franklinhu
<franklinhu@yahoo.com>; kc3mx <kc3mx@yahoo.com>; NPercival <NPercival@SNET.net>;
Glenn A. Baxter, P.E. <glennbaxterpe@aol.com>
Sent: Wed, Mar 12, 2014 4:50 pm
Subject: Re: Olber's paradox

Dear Glenn,

Thanks. I am reading your paper and I like the fact that you discuss the "storage" of energy.
Relative to those who see energy as a "concept" or a property/behavior of matter, the fact that
energy can be stored speaks to its physicality. Energy can be stored in fossil fuels. Energy can
be stored in plant fiber. Energy can be stored in animal fat. In fact, our current emphasis on BMI
- Body Mass Index - is a measure of how much excess energy we are storing. (In a society
subject to famine, a high BMI would be a good thing.)

I do not think that Einstein's failure to deal with the the "relative" velocity of light was an
oversight. I think that it was deliberate and it is the reason why one would think that his theory
would be utterly rejected. However, as Dr. Lucas points out, academicians were looking for a
way to justify their intent to "control" knowledge and hence guarantee their status and Einstein's
Relativity was the perfect vehicle. "Everything is relative to the observer" Hence we can
"deconstruct" all prior knowledge based upon the worldview/environment of the observer.
Second, we can isolate knowledge into various "cones" which will give us the control which we
desire. Therefore, your paper which points out the ridiculousness of Einstein's theory is not
going to gain traction. Truth is not the object here. Nonetheless, your paper is very well done.
It's time may yet come.

You and Harry frequently discuss the terms permittivity and permeability. I imagine these are
engineering terms and wonder if you could explain them to me since I am unfamiliar with them.
Thank you.

You mentioned a typo in your paper. There is a very minor typo under the section "A Practical
Illustration" "A light is pulsed sideways across the railcar from point A on the far side or - should
be of.

Lou

----- Original Message -----

From: Glenn A. Baxter, P.E.

To: rmlaf@comcast.net ; almcd999@earthlink.net ; bill.lucas001@gmail.com ; franklinhu@yahoo.com ; kc3mx@yahoo.com ; NPercival@SNET.net

Sent: Wednesday, March 12, 2014 7:26 AM

Subject: Re: Olber's paradox

Lou,

I like that.

Glenn

Glenn A. Baxter, P.E.
glennbaxterpe@aol.com

-----Original Message-----
From: RMLAF <rmlaf@comcast.net>
To: Al McDowell <almcd999@earthlink.net>; bill.lucas001 <bill.lucas001@gmail.com>; franklinhu <franklinhu@yahoo.com>; glennbaxterpe <glennbaxterpe@aol.com>; kc3mx <kc3mx@yahoo.com>; NPercival <NPercival@SNET.net>
Sent: Tue, Mar 11, 2014 7:46 pm
Subject: Re: Olber's paradox

Dear Al,

If the space occupied by galaxies is finite, I cannot imagine the aether extending beyond that space. Losing energy to the far beyond is what I would fear in an infinite universe. What I propose, as an alternative, is that space is infinite, but the aether is finite and that as space extends beyond the galaxies, the conditions supporting the existence of the aether change so that the aether gradually comes to an end due to environmental conditions. This appears to me to be consistent with your theory that the force of gravity eventually drops to zero. This is just a thought as we explore alternatives here.

Lou

From: Al McDowell

To: RMLAF ; bill.lucas001@gmail.com ; franklinhu@yahoo.com ; glennbaxterpe@aol.com ; kc3mx@yahoo.com ; NPercival@SNET.net

Sent: Tuesday, March 11, 2014 7:07 PM

Subject: Re: Olber's paradox

Lou,

I am sure you are correct that if we could detect a universe center, then it is finite.

Even if one assumes the Big Bang to be true, Hubble's Law stating that galaxy velocity and distance are directly proportional means that we could not detect a center from redshift data even if a center existed.

Regarding the edge limits for stuff of the universe, I believe that gravity and light are transmitted by physical stuff with mass. If the space occupied by galaxies is finite, we would face the question whether the aether that conducts light and gravity extends beyond the galaxy boundary, and how far, infinitely? If the aether extended beyond the galaxies, we would continually lose energy to the far beyond. If the aether ended where the galaxies end, light and gravity would abruptly stop at the edge. This seems stranger to me than a universe without an edge.

Al

-----Original Message-----
From: RMLAF
Sent: Mar 11, 2014 1:20 PM
To: Al McDowell , bill.lucas001@gmail.com, franklinhu@yahoo.com, glennbaxterpe@aol.com,kc3mx@yahoo.com, NPercival@SNET.net
Subject: Re: Olber's paradox

Dear Al,

Interesting point. That is why Einstein "corrupted" time to serve as the 4th dimension into which space could curve. Infinity means no edges, no beginnings and no ends in any direction. It also means no center. If we are capable of measuring space and determining its shape, then we are reducing/limiting its infinite nature. I am going to think about this and get back to you.

Lou

From: Al McDowell

To: RMLAF ; bill.lucas001@gmail.com ; franklinhu@yahoo.com ; glennbaxterpe@aol.com ; kc3mx@yahoo.com ; NPercival@SNET.net

Sent: Tuesday, March 11, 2014 7:24 AM

Subject: Re: Olber's paradox

Lou,

I agree that the idea of space circling back on itself like the 2-D surface of a sphere is a very appealing way to solve the seemingly impossible conundrum of a universe without edges. There are two problems with this idea:

First, scientists have determined experimentally that our 3-D space is "flat," as opposed to positively curved like the 2-D surface of a sphere. If one measures the angles of a triangle and

finds they total more than 180 degrees, then space is positively curved. If they total exactly 180 degrees, space is flat.

Second, the 2-D surface of a sphere can curve because there is a third dimension into which the curving can occur. We are aware of no fourth dimension of space into which our 3-D universe can curve.

Al

-----Original Message-----
From: RMLAF
Sent: Mar 10, 2014 9:06 PM
To: Al McDowell , bill.lucas001@gmail.com, franklinhu@yahoo.com, glennbaxterpe@aol.com, kc3mx@yahoo.com, NPercival@SNET.net
Subject: Re: Olber's paradox

Dear Al and All,

Not to brag upon myself, which I am obviously doing, and I apologise, but at the age of 8, I reflected upon the meaning of infinity. I realized that we are used to things having a beginning and an end and that infinity means no beginning and no end. We then have the problem of density. If there is no beginning nor end to the universe then that means there should be no limitations upon the "stuff" that fills the universe. If this is so, why do we keep recycling matter and energy? Unless the infinite universe is always filled with a "relative" finite amount of stuff. That does not make a lot of sense or maybe it does. The universe is infinite, but the stuff within the universe is always limited. With respect to edges, Einstein's concept of space circling back upon itself, like the surface of a balloon makes some sense. Just as we can walk around the earth, we can, theoretically, walk around space and end up back where we started according to my understanding of Einstein. The universe would be finite and there would be no edges.

Lou

----- Original Message -----

From: Al McDowell

To: bill.lucas001@gmail.com ; franklinhu@yahoo.com ; glennbaxterpe@aol.com ; kc3mx@yahoo.com ; rmlaf@comcast.net ; NPercival@SNET.net

Sent: Monday, March 10, 2014 7:44 PM

Subject: Olber's paradox

All,

It is difficult to imagine a universe without an edge (infinite) and a universe with an edge (finite). I can more easily imagine a universe without an edge.

Olber's Paradox poses a potential problem for universes without edges. Imagine dividing the universe into concentric shells around Earth with equal thickness. With the inverse distance squared rules, a shell with twice the radius will have 4 times as many galaxies and send 1 / 4 as much light and 1 / 4 as much gravity force to Earth. Thus one would expect the same amount of light and gravity from each of an infinite number of shells in a universe without edges, adding up to an infinite amount of light and gravity arriving at Earth.

However, it has been shown mathematically that the total amount of light is finite if the light attenuates at least a small amount on its way toward Earth. Light from distant galaxies does attenuate on its way to us as some of it strikes suns, planets, space rocks, dust and gas in space along the way. Therefore, the total amount of light arriving from galaxies is finite and the night sky is thus dark, contrary to Olber's paradox.

Regarding gravity, the gravity force on Earth from the Moon is greater than from the Sun, the amount of gravity from the galaxy is far less than from the Sun, and the amount of gravity from the nearest other galaxies is miniscule relative to the gravity from our own galaxy. Beyond our closest galaxies, there are roughly the same density of galaxies in all directions, and the galaxies from these distances pull on Earth in all directions equally with no net gravity force. At large distances, gravity force declines to zero in my gravity model, in which the gravity-conducting aether particles lose the gravity they carry when they collide with another gravity aether particle.

I agree that "infinite" is a mathematical term. I prefer to think that the universe has no end or boundary.

Al

From: rgg <rgg@epola.org>
To: Sungenis <Sungenis@aol.com>; imontgomery52 <imontgomery52@rmgatlas.com>; npercival Sent: Sun, Mar 16, 2014 6:21 pm
Subject: Re: [Relativity] Speed of Light & Its Source

Robert,
1) The epos occupy empty 4 dimensional space, Simhony has called it Newtonian space, but the cell does outline the swept volume of the electron particle as we recognise it in quantum field theory (QFT) for the standard model. The three pions (+,- and neutral) at the cut-off freq are mesons, not the fermion core of the electron, though possibly representing or sharing the two dimensions of its intrinsic spin?

Consider the interlaced fcc lattice of electrons and positrons that combine into the simple cubic structure as the *reciprocal lattice* where a cell occupied by an electron is surrounded on its six faces by six cells containing a positron. The size of those cells is approx. that of a classical electron. The circumference of the classical electron measures $4L_o$ – ie the cross section of a cell. The classical electron is a hypothetical beast however and in Quantum physics it maps the zitterbewegung volume or swept space of the internal fermion mass that 'spins' and provides what we feel as the intrinsic magnetic moment of the electron. In high speed colisons the electron is n bigger that $10^{-18}m$ rad

(some say <<10^-20m) and that is the fermion that rattles about for 4pi radians revolution during the period of the Compton wave of the electron. I have referred to the loop electron of Williamson and van der Mark in one of the 2010 papers. The Heaviside electron with uniform ES charge is 3/2 times the size of the classical electron (and unit cell) so we can think of the cell size as the resulting minimum approach distance for the e- and e+ when the dipole moments on four faces compete with two faces that are happy with the magnetic alignment. This, we proposed, is the cause of the short range repulsion analogous to atomic orbital spin moments.

2) The epola is not dragged, as confirmed experimentally by Olivier Lodge; who also wrote: "The hypothesis ultimately suggested is that excessively minute portions of ether have, by some unknown means, been dissociated here and there into electric charges, and that these numerous mobile specks of electrified ether – through the forces they exert and the disturbances they originate – constitute the substratum of what appeals to our senses as matter". And elsewhere: "The two constituents are called positive and negative electricity respectively; and of these two electricities (sic) we imagine the ether to be composed". He effectively described the epola as the medium of the active vacuum.

The density of the Sun is far less than that of the epola, it is only a quarter of the density of the Earth! The temperature of the Sun is too low to melt the epola – Melting point, calcd from Boltzmann constant, is ~6 billion Kelvin. That is why we still see the Sun, because the epola carries the light waves. But the epola is not at a universal density – it is subject to local presence of matter.

The solar system, including Earth, moves through the epola – its nuclei and electrons etc, like small fish pass through a net. The spin moments of the particles of our usual 'ponderable matter' (an Einstein term) open the cell faces and allow the subatomic particles through. Note that the nucleus of a copper atom is about the size of the classical electron and thus an un-expanded cell. A nucleus contains all the spins of its component fermions, probably acting in resonance to give short range repulsion (SRR). The expansion of the epola cells with that surplus of SRR due to the presence of matter particles reduces the binding energy (BE) and that reduction of BE Density accounts for the gravitational field of the Sun, etc. Beyond the presence of those matter particles the epola recovers its normal mass density and BE by the Gaussian inv sq law BECAUSE a <u>bound</u> medium has increasing numbers of the bound particles to <u>share</u> the tension in the ratio of the increasing surface area of successive spherical layers. The outermost tension imposes gravitation as a push force between centres of mass – not a radiant attraction! A bound medium complies with the Machian concept that everything is connected to everything else (within the Hubble radius of the observer).

The case for 'drag' is limited possibly to the Lense Thirring effect for EM waves, as a relativistic effect brought about by motion of source and observer, rather like the Sagnac effect. The case for Lense Thirring drag of particles is not proven, indeed the modern evidence is negative rather than affirmative.

The Moon goes round the Earth, the Earth goes round the Sun, the Sun goes round the Milky Way Galaxy and the galaxy moves toward the constellation of Crater or Leo.

Best, Guy

From: Sungenis@aol.com

Sent: Sunday, March 16, 2014 2:00 PM

To: rgg@epola.org ; imontgomery52@rmgatlas.com ; npercival@snet.net ; bill.lucas001@gmail.com ; glennbaxterpe@aol.com

Subject: Re: [Relativity] Speed of Light & Its Source

Guy,

Thanks for all the info. Very nice.

Just two questions. If the Simhony lattice is viable but, as you say, the Planck particle is a "figment of the imagination," what then, fits into the open space left by a cubical lattice? It can't be "nothing," since "nothing" doesn't exist.

Second, you say the EPOLA model can account for the Lorentz-Fitz contraction by a non-dragged EPOLA. Are you saying that the EPOLA contracts as it moves with the Earth around the sun (assuming, for the sake of argument, that the Earth does revolve around the sun)?

Robert S.

In a message dated 3/15/2014 7:37:47 P.M. Eastern Daylight Time, rgg@epola.org writes:

Hi Robert

I operate the epola.co.uk and epola.org websites, with an archive of Simhony's original website and offer a highlighted link in the 'Introduction' essay to an archived downloadable onsite copy of the late Alan Rothwarf's original aether paper (Fred's brother). Fred and I discussed comparison of the models about 10 years ago. There is also an earlier muon model of an aether by Harold Aspden, listed at ref 7.5 amongst the many refs in that essay. There is a Planck particle aether model by Volodymyr Krasnoholovets, that may not be listed there but should be available online.

The Planck "Quantum of Action" with units eV.s (energy x time) defines the packet of energy carried by each of the many EM photons carried in each half wave cluster (of greater wavelength than the Compton wave of the electron, below which all energy is carried in one photon) by the elastic wave motion of the bound epo-lattice particles during the characteristic periodicity (1/freq) and thus E = hf. A wave motion, with diminishing wavelength, as frequency increases at constant velocity 'c', implies a hi-freq cut-off when wavelength reaches only one e- and one e+ in the pair of half-wave clusters. The calculated lattice constant (cubic cell size) is 4.43fm (4.43x10^-15m) for the epola by analogy with NaCl. The energy of the photon at this cut-off at 8.8fm wavelength corresponds interestingly to the mass-energy of a 'nuclear' pion (pi-meson) at 141MeV, at a wavelength of 1/2α times the electron's Compton wavelength (where α = f.s.c.), implying that the epola defines the fine structure of the vacuum. Above that limiting freq (~3.4E22 Hz) energy must be carried as kinetic energy plus energy of accompanying epola waves (the rays of the de Broglie phase waves).

You can download and print an unlisted copy of our updated epola spectrum chart, comparing wavelengths to the Compton wave of the electron's mass-energy and referring to the Planck quantum of action from the website at [*Insert www and the dot*] epola.co.uk/papers/epola_EM-

spectrum_planck.pdf that I recently uploaded for a lecture next week. For explanation see pp 63,64 of the paperback book 'The Electron-Positron Lattice Space' by Simhony. (Click grey image of the book, free, on the website).

Regarding discussion below of the MMx on two-way light speed, Ian and I concluded that the Lorentz-FitzGerald contraction would apply as claimed in the un-dragged epola medium transmitting the forces to hold atomic electrons and nuclei together. Simhony shows a chart of limiting speeds of different materials caused by speed affecting ionisation in his paperback book. We reinforced this conclusion by deriving a formula for the CODATA value of alpha for Sommerfeld's original method from the speed of the H atom electron. (Also online, click on the 'Developments' tag). With that reassurance, Joseph Levy produced his 'phase tuning' paper to resolve MMx by classical Doppler plus the Lorentz-FitzGerald contraction. (arXiv:1010.2164v2 [physics.gen-ph]) and has since produced several other relevant papers on the topic.

Planck "particles" are, I fear, like ballistic photons and Higgs bosons, a figment of the imagination derived only for the benefit of the Standard model. All our models are, of course, merely disclosing models for the purpose of communicating understanding at any given level of application. Is the energy of a punch to be considered a particle independent of the fist?

Ian and I currently are continuing an experiment, running for two years now, to investigate other effects of speed through the reference frame of the epola. A relatively old draft paper is available on the website whilst we determine how best to publish and/or further research our findings to date on our newer alpha.epola.org web site. The old epola.co.uk site with 'frames' does not lend itself well to smart phones and modern operating systems and browsers – so please scroll down for all the hyperlinks on the front and daughter pages.

Kind regards,

Guy Grantham

Ian,

I didn't realize so many on this list were familiar, and actually endorsed, Simhony's model.

I read this several years ago and was convinced it was the best model for ether I had come across. I've coined the name "electropons" in my book for it.

It's the same reason I like Franklin's atomic model, since it is using the same electron-positron basis for atomic structure. It's the simplest yet most elegant model I've seen to date.

The only other addition I've put into the ether is the Planck particles, which are 20 orders of magnitude smaller than Simhony's ether.

Also, Fred Rothwarf and Sisir Roy developed a two-ether model. One at the Planck dimensions and the other an electron-positron lattice.

Rothwarf, Frederick R and Sisir Roy "The Time Dependence of Fundamental Constants and Planck Scale Physics," November 14, 2003.
Robert S.

In a message dated 3/14/2014 6:32:24 P.M. Eastern Daylight Time, imontgomery52@rmgatlas.com writes:

Hi Robert,

Yes, Simhony's derivation is based on his epola (ElectronPOsitronLAttice) model utilising the old Newton-Laplace speed of sound equation v = SQRT(K/ñ) the equivalent in a solid being v = SQRT(Bond energy/mass).

By analogy with rocksalt, he models the 'carrier of space' as an electron positron body centred cubic lattice, comparing 'phonons' (bulk compression waves) in NaCl of speed v = SQRT(E/m), E being ion bonding energy and m being ion mass, with 'photons' of 'epola' space of speed c = SQRT(E/m), E being epo bonding energy and m being epo mass, see below;

NaCl

Bond Energy, E = 7.9 eV = 1.26×10^{-18} kg.m^2/s^2 (Empirically confirmed)

Mass, m = 58.45 u = 9.71×10^{-26} kg (Empirically confirmed)

Calculated v = SQRT(E/m) = 3.6×10^{3} m/s (Empirically confirmed)

Epola Space

Bond Energy, E = 1.02×10^{6} eV = 1.63×10^{-13} kg.m^2/s^2 (Empirically confirmed via Anderson Experiment)

Mass m = me+mp = $2 \times 9.11 \times 10^{-31}$ = 1.82×10^{-30} kg (Empirically confirmed)

Calculated c = SQRT(E/m) = **3.0×10^{8} m/s** (Empirically confirmed quite a few times)

When I first saw this quite some years ago now, I reckon I felt like the guy who first noticed that the continental coastlines seemed to pretty well match up. So all the values above are verified, not just some model without hard data. Is this the REAL meaning of E = mc^2 ?

Now I know this looks like a plug (and it is!!), but for those who find the above somewhat compelling and are yet to look at this model, there's some very nice pictures on this site here http://simhonytribute.webs.com/ and for more depth here http://www.epola.co.uk/ and here http://www.alpha.epola.org/ and if you are Chinese have a look here http://www.zhengfudianzijingti.org/ .

Best regards,

Ian Montgomery

From: Relativity [mailto:relativity-bounces@worldsci.org] **On Behalf Of** Sungenis@aol.com
Sent: Saturday, 15 March 2014 1:16 AM
To: npercival@snet.net; bill.lucas001@gmail.com; glennbaxterpe@aol.com
Subject: Re: [Relativity] Speed of Light & Its Source

Nick,

Menahem Simhony (1994) had compared c to the speed of sound. In fact, he even derived E =mc^2 from the same mechanical principles found in sound waves.

It is my understanding that just as sound is limited to the speed allowed by its medium, so is light.

In other words, if the source is going half the speed of sound, and a sound is emitted from that source, the sound cannot go faster than 1100 ft/sec in air and 5000ft/sec in water, as just two examples.

The same would be true of light. The only exception would be if the medium the light is traveling through is moving in the same direction as the light. In that frame, the light would be observed to be exceeding c to the observer outside of the medium.

Do we agree?

Robert S.

In a message dated 3/14/2014 9:14:10 A.M. Eastern Daylight Time, npercival@snet.net writes:

Bill

Below you wrote, "*The speed of light is affected by the velocity of the source.*" This is a most important topic. So I changed the Subject which originally referred to a very different topic so that readers could follow this new thread. While important, I don't spend a lot of time on this topic, so I'd like help in getting it clarified.

The general consensus today, of course, is that the speed of light (SoL) is independent of the speed of the source. Frequently, binary stars are said to support this view. Since binary stars orbit their barycenter, for some binary pairs, for much of their orbit, one star is going away from the earth while the other is going towards the earth. Hence, any variation in their light speed due to their velocity, would show up dramatically in observations from the earth as the light's journey is a very long one. One could try to counter that conclusion with the extinction effect whereby light is absorbed by the atoms in all media including the near vacuum of outer space and then re-emitted. However, even assuming the validity of the extinction effect, there is a question about its relevance regarding binary star telescope observations. For example, what is the mechanism whereby the re-emission would send the light on exactly the same course as the incoming light??? What distance is traveled before the first absorption?

In addition, the MMX of 1886 seems to be focused on the SoL in a medium. Yes, the SoL is affected by the medium that it travels in. As such, the results of the experiment seems to be consistent with the interpretation of binary stars showing that the SoL is independent of the source.

Again, since this is an important topic, others, who are most likely to be more knowledgable on this topic than I, are welcome to join the discussion.

Nick

SATURDAY   MORNING   FUZE   VIDEO   TELECONFERENCES

Dr. Edward Henry Dowdye   Updated 140211 7:41 A.M.

NPA Video Teleconference: https://www.fuzemeeting.com/replay_meeting/fccff073/3795659 THE GRAVITATIONAL DEFLECTION OF ELECTROMAGNETIC WAVES SHOW STRONG IMPACT PAPAMETER DEPENDENCY OF PLASMA LIMB OF SUN AND STARS   March 23, 2013

Similar talk given again on January 11, 2014 www.k1man.com/Dowdye.mp3

FOURTH ANNUAL PHYSICS COLLOQUIUM IN PORTLAND, MAINE - 16 August 2014

The 16 August 2014 Physics Colloquium will be held at a hotel in the immediate Portland, Maine airport area and will feature two speakers in the morning and two in the afternoon.   The Colloquium fee is $75, and the pdf proceedings on CD is $15.   We are now extending invitations for speakers.

The Proceedings CD will be to all those interested before the colloquium so they can be studied ahead of time, which will greatly improve the effectiveness and efficiency of the colloquium itself.   Attendees are cordially invited to dinner in Portland on Friday evening, August 15, 2014 at 7:00 p.m. to informally meet and to also discuss physics.   Please register for the colloquium ($75) by sending an E-mail to Institute@K1MAN.com   All meals (and drinks) are separate at the hotel (off the menu) or wherever else you want.   www.k1man.com

BOOKSTORE

Dr. Bill Lucas' new physics book THE UNIVERSAL FORCE Volume 1 (Highly recommended) is now available from the Institute for $25, post paid, anywhere.

Also available on a small plug-in 500 gig hard`drive are all MP3 recordings and all Scientific Journals to date for $150 postpaid, anywhere.   All major credit cards or Pay Pal accepted.   Or, mail your check to Institute For Advanced Research, 310 Woodland Camp Road, Belgrade, Maine 04917.

www.k1man.com

SOURCES

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Dr. Rodney Bartlett's Interesting Paper:

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

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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

1. The Belgrade Lakes Institute For Advanced Research Foundation, hereafter referred to as the Institute, is an incorporated non profit foundation that shall seek and maintain a 501(c)(3) IRS tax status.

2. The goal of the Institute is to promote scientific advancement by challenging and overturning certain currently and widely accepted scientific

paradigms by facilitating scientific investigation, and also raising money to sponsor scientific research and scientific experiments along these lines.

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.

4. These by-laws can be changed at any time by a majority of the Board.

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.

7. Should the Institute ever be dissolved, all its assets shall be donated to the Smithsonian in Washington, D.C.

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.
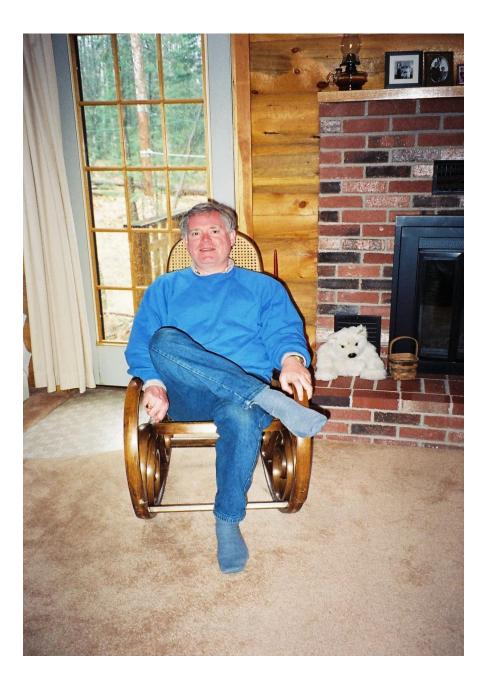
Feynman shared the 1965 Nobel Prize in physics with American physicist Julian Schwinger and Japanese physicist Tomonaga Shin'ichirō for his work on QED. Each of the three had independently developed methods for calculating the interaction between electrons, positrons (particles with the same mass as 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).

Glenn A. Baxter, P.E., Executive Director,   Autobiography www.k1man.com/g
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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 www.k1man.com/fhb and also www.k1man.com/w10   and www.k1man.com/Loons