

(draft updated 20 February 2014 12:25 P.M., 9:47 P.M., 140221 7:59 A.M., 9:53 P.M)

ABSTRACT

The center of the universe and an absolute reference frame can be both defined and found by measuring linear accelerations along three mutually perpendicular directions as well radial accelerations with respect to similar directions, whether the physical universe is finite or infinite.

ARGUMENT

Let us construct a presently theoretical device that can measure accelerations as small as $0 + da$ or smaller. The device contains three mutually perpendicular axes. First cause the device to rotate around each axis until no remaining centrifugal forces are measured. This counters the combined rotations of the earth, the orbit of the earth around the sun, the orbit of the sun around the galaxy, and the rotation of the universe itself. Spin is therefore postulated here to be absolute.

Now cause the device to move such that zero linear acceleration is measured along each axis. Linear acceleration is therefore postulated to be absolute. Now cause the device to be located where gravitational "tug" is symmetrical and therefore net zero. This is the same as all three linear accelerations equaling zero.

Readjust, as necessary, such that spin = 0 and linear acceleration along each axis = 0. Now move the device again if necessary to assure that the gravitational "tug" is net zero. Repeat these steps as necessary. The device is now at the center of the universe, if the material universe is finite. Such location is an excellent absolute and unique reference frame. If the material universe is infinite, the

device is still a good absolute reference frame but not unique. Tough bananas! We will never know, since we probably can't go out there and observe the finite edge of a finite universe in infinite space if space can be infinite. No problem, since we still have the desired absolute reference frame to use in all of our physics research and discussions.

Now look out from the device. Dr. Roger Rydin says we will see no movement of galaxies or stars because he calculates [1] the universe as having no net angular momentum. Where would such angular momentum come from?

NEWTON'S BUCKET

With the super sensitive "centrifugal force meter," not available yet, of course, we can measure the earth spin, centrifugal force here on earth around the sun, the sun around the galaxy, and the galaxy around the universe center. With Newton's bucket, there is a much larger centrifugal force measured, of course. Great little measuring device, isn't it? And we do not need Mach's principle!

PHYSICS AND ENGINEERING

Physicist to boss. "It does not conform to my theory." Boss to physicist. "Use this dark fudge (get it?) and we will approve your PhD. thesis and nominate you for a Nobel Prize." Engineer to boss. "It does not conform to my theory." Boss to engineer. "Go out there and make it work, and don't come back into my office until it does." Dr. Robert Bennett of New York City is a physicist and Dr. Al McDowell is an engineer. [2] QED Oh wait! Dr. McDowell is also a physicist! The likes of Dr. Bennett now have a problem, don't they?

With Newton's Bucket, Dr. Bennett is all confused with "his" theory. Typical physicist. Dr. Bennett is obsessed with "his" frames when he clearly doesn't understand them. He does not understand Dr. Einstein's frame confusion either, since he does understand the author's basic frame paper: www.k1man.com/c29.pdf

So, spinning is absolute. Either there is some spin or there is zero spin. We do not need Dr. Mach at all. Linear acceleration is absolute. Either there is linear acceleration or there is not.

POST MODERN SCIENTIFIC METHODS

Now to Dr. Charles William Lucas. His new book, THE UNIVERSAL FORCE, Volume 1 is a great book with great ideas, but I disagree with several things which we can discuss.

It will be fun and educational.

Suppose we start with postulates A, B, and C. Say postulate A is wrong. We have a theory, make an error in our analysis somewhere, which just happens to counter wrong postulate A. We come up with conclusion D. We perform an experiment consistent with conclusion D. We declare the theory correct. Dr. Lucas declares it wrong because of wrong postulate A. Oooops!

Or, a theory produces a contradiction or even several. But a conclusion happens to be correct. Glenn Baxter has already declared the theory and all its conclusions wrong. Oooops! Out went the baby with the bath water!

CONCLUSIONS

Spin is absolute. Linear acceleration is absolute. There is an absolute reference frame after all. Aether is not essential in order to have an absolute reference frame. For an aether to have zero velocity with respect to an absolute reference would also be one heck of a coincidence. Where would an aether stop and a further beyond space void begin? It makes more sense that there is no aether. Adopting Electrical Engineer Ivor Catt's definition, (empty) space is that through which radiation travels at the speed of light. "Catt space" has the properties of permittivity and permeability. Just how this works is not yet clear.

[1] From: Roger Rydin rarydin@earthlink.net
To: 'Glenn A. Baxter, P.E.' glennbaxterpe@aol.com; bill.lucas001 bill.lucas001@gmail.com

Sent: Thu, Feb 20, 2014 2:24 pm
Subject: RE: New Glenn Baxter physics paper

Glenn;

The universe does have an absolute center. I believe it has zero net angular momentum, so we do not need to use centrifugal force.

I fit the NS deep redshift pencil plot, covering about 8 BLY, with a slightly offset j_0^2 Bessel function times a decaying exponential representing matter deposition. The fit shows that the data is well represented by a damped sinusoid with about a 400 MLY period (not quantized re Tiff). See www.k1man.com/Rydin140221A.png , www.k1man.com/Rydin140221B.png , and www.k1man.com/Rydin140221C.png

The data from the 45 degree traverse are offset from the NS traverse, showing the origin is also offset. My estimate of the origin is about 70 MLY in the direction of Virgo, supported by the apparent origin of the CMB, the Dipole and Great Attractor anomalies, and by the presence of 6 major blueshift galaxies near Virgo mentioned by Arp plus others near us and on the other side (Arcturus?). All (~1000) are on our side and going in the same general direction but not all along the same line (vector component).

But all the sets of data are highly correlated, showing that the distribution is truly spherically symmetric, even if we are not at the center. See www.k1man.com/Rydin140221D.png

Drs. Bennett and Sungenis, to the contrary, this data does not support a geocentric position for the Earth.

(Dr.) Roger A. Rydin

[2] Author of the popular book UNCOMMON KNOWLEDGE, Author House, 2010

“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[3]. 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.



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

See www.k1man.com/g



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