A CORRECT DEFINITION OF MASS Copyright 8 July 2015 By Glenn A. Baxter, P.E. www.k1man.com Institute@k1man.com 207 242 2143 (Draft 150708 12:20 P.M., 150709 10:21 A.M.)

ABSTRACT

Newton introduced the relation F = ma. He never defined m or mass. Dr. Einstein incorrectly used $E = mc^2$ or $m = E/c^2$ to define mass. See <u>www.k1man.com.c1</u> This paper correctly defines mass using Gravitrons.

ARGUMENT

Gravitrons are a fundamental quanta in nature. See www.k1man.com/c55.pdf

ASSUME FOR THE MOMENT THAT GRAVITRON THEORY IS CORRECT

- 1. Motion of molecules becomes random per the second law of thermodynamics.
- 2. Heat radiation flows to the outside and away from a metal ball per the Second Law.

o Thus the ball itself has a negative temperature gradient from its center.

- 3. Analogous is gravity radiation flowing toward the ball surface and then away from the ball.
 - o Outside mass does "encourage" this, per Mach.
- 4. To "null" inertia in the ball you need to uniformly orient some of the gravity radiation in 180 degree opposite directions.
- 5. For propulsion you need orient and aim gravity radiation reception toward another mass in the direction of where you want to go.
- 6. Why does lazer light radiation go in a single direction and so straight? You need a similar thing for gravity radiation.
- Consider defining the standard aaa battery as a unit of mass. Use voltage as a secondary measure of mass. Thus 1.5 volts measured by a voltmeter measures a mass of 1. Connect 10 batteries in series, measure 15 volts, and thus measure a mass of 10. Now reverse odd polarities and now measure 0 volts and a measured mass of 0.
- 8. Now define F = ma "inertia" or m = F/a as a measure of mass.
- 9. Now, as suggested in (4) above, "null" out inertia mass to near zero.
- 10. Now F = ma or a = F/0 or near infinite acceleration.

- 11. With the battery definition of mass or the inertia definition of mass, have you really reduced mass to zero. Of course not.
- 12. What is the kinetic energy of almost infinitely accelerated mass having almost zero nulled out inertia? K.E. = ½ mv^2 or ½ (0) v^2 = very low. Thus you cannot totally null out inertia since conservation of energy requires there to always be some kinetic energy
- 13. Therefore F = ma and Dr. Einstein's E = mc^2 or m = E/c^2 are bad or incorrect ways to define mass.

THE PROPER DEFINITION OF MASS

The author defines mass as the scalar number of Gravitrons present in a sample.

ANALYSIS OF FORCES

All mass in the universe radiates Gravitron radiation toward you from all directions, and when received by a Gravitron inside you there is a force on that Gravitron and therefore an acceleration of that Gravitron in the direction of the radiation source.

A metal ball receives these forces equally from all directions. If you push the ball in a specified direction it will accelerate and therefore generate Gravitron radiation in the direction of the push. This radiation will cause a force on all Gravitrons receiving the radiation in the opposite direction of the radiation.

The force on the receiving Gravitrons (from the ball) must already be connected to the source by a field that was previously causes by Gravitron radiation in the opposite direction.

This is the Mach idea that all mass in the universe is influenced by all other mass in the universe.

A metal ball at non zero temperature will always radiate gravity from its constituent Gravitrons making up the ball.

SIMPLE ACCELERATION

An airplane seat back exerting a force on my back feels exactly like gravity pulling me back into my seat. That is inertia which is closely related to ordinary gravity That force on my back causes me to accelerate in the forward direction. That forward acceleration will generate Gravitron gravity radiation in the forward direction. That radiation eventually received by all the mass in the universe will experience a force toward the plane, etc.

INERTIA

Inertia is possible when two or more Gravitrons are radiating net gravity or receiving net gravity equally in all directions. Trying to accelerate a Gravitron will generate gravity radiation which will try to "disturb" all other mass in the universe, and nature naturally resists this and inertia is experienced. Inertia is reduced when gravity radiated from a mass or received by a mass is directional. Thus, as inertia is nulled out, the object will accelerate in the direction from which it is receiving the most Gravitron radiation. Thus nulling inertia process cannot be separated from self propulsion.

Nulling out inertia requires that you orient Gravitron random directions and thus the polarity of Gragitron motion in uniform directions, namely some in one direction and some in the opposite direction, resulting in a net imbalance which results in self propulsion of an object with near zero inertia.

This would allow near instantaneous accelerations, high speed right angle turns, etc.

Orienting molecule (made of Gravitrons) movement to uniform directions would involve tuning in to the electric nature of molecules. Controlling the uniformity of molecule motion is controlling the directivity of both gravity radiation and gravity reception.

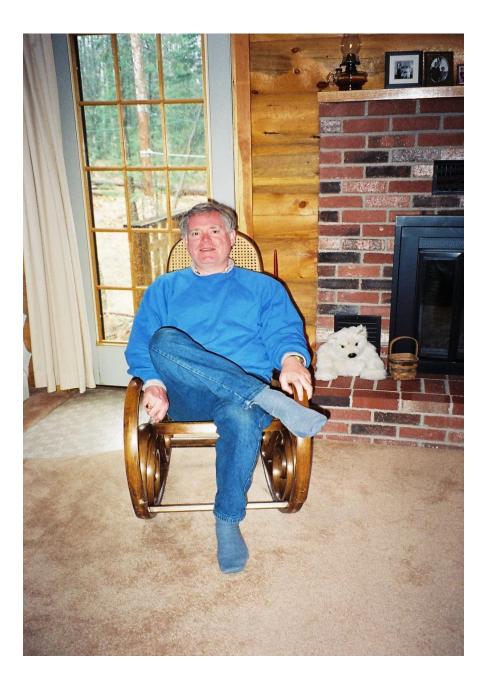
NATURE OF GRAVITRON RADIATION

Gravitron radiation is similar to radio, light, etc. radiation except it is generated by accelerating a Gravitron mass rather that accelerating a charged mass, such as an electron generating radio radiation. The Gravitron radiation, once received by another Gravitron, becomes attached to it by what is now the gravitational field, similar to an electrostatic field between two charged particles. Exactly how an accelerating electron can generate radio radiation or how an accelerating Gravitron mass can generate gravity radiation is not yet know.

SUMMARY

The purpose of this paper is to describe the two similar mechanisms of radio, light, etc. and gravity generation which have acceleration in common as well as to correctly explain, for the first time, the connection between gravity and ordinary acceleration. Secondly, we have, for the first time, properly defined mass.

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.



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.klman.com/fhb and also www.klman.com/wl0 and