

ABSTRACT

A tiny composite field – mass particle is identified which accounts for all mass in the universe and explains both inertia and also suggests the intimate relationship between what is traditionally thought of as gravity and acceleration.

POSTULATES:

- (1) All mass must be elastic to be consistent with the Second Law of Thermodynamics
- (2) A tiny gravitron mass particle cannot be separated from its surrounding spherical elastic field (Gravitron exclusion principle)

Gravitrons (note the spelling) replace the so called Higgs particle and are responsible for all mass in the universe. Each gravitron has a permanently surrounding spherical field (not electrostatic) which acts as a “shock absorber” and thus vibrates when gravitrons bump into each other. Similar to the behavior of electrons radiating radio, heat, light, X, gamma, and Delta when they accelerate or decelerate, gravitrons accelerating or decelerating cause a “disturbance” (in what I define as the gravitational field that permeates all space in the universe as a void [2] would do), which travels as a wave at constant speed g with respect to the location of the gravitron at the instant of emission. g is faster than c , the constant speed of light with respect to the location [1] of the light source at the instant of emission.

When the wave from a gravitron encounters another gravitron, it exerts a force on that gravitron that we normally call gravity. This force is temperature dependent. The wave carrying this also exhibits a frequency of oscillation. Each Gravitron thus has kinetic energy which is temperature dependent.

A Gravitron can accept kinetic energy and thus radiation energy such infrared or heat. This is as close as you can get to any connection between mass and energy.

Gravitrons are the smallest mass components in nature and can attach to one another to form any and all particles in physics including the very complicated electron.

Thus the above gravitational field, identical to a void that permeates all of space in the universe, replaces the so called Higgs field; the gravitron replaces the so called Higgs particle; and the wave radiated by the gravitron replaces the so called Higgs boson.

Radio and light, etc., type waves radiated by electrons slow down when passing through a collection of gravitron particles such as a piece of glass.

Light, etc. is a disturbance that travels as a wave through what I define as the electromagnetic field which also permeates all space in the universe as would a void.

Light and gravity waves pass through each other and probably do not directly interact with each other. They might, somehow, however.

INERTIA

If you try to push (accelerate) a collection of gravitrons, they will want to radiate gravity and will naturally resist such an attempt and exhibit inertia. Thus there is an intimate relationship between acceleration and what we normally think of as "gravity."

[1] UNIQUE REST FRAME

A void does have a UNIQUE rest frame. Removing everything from a space would leave a "void" through which light is proposed here to travel from any source at velocity c relative to its starting scalar LOCATION. The location's velocity is effectively cancelled and therefore further not involved. If the first "bit" of light is emitted at time $t = 0$, the location in the void of the source at $t = 0$ can be found at time t by going scalar distance ct in the opposite direction of the light bit at time t .

If the source at time $t = 0$ happens to have a relative velocity v with respect to the destination or anywhere else at time t , the velocity of light between the source LOCATION at time $t = 0$ and destination or anywhere else will always be c . This is the constant nature of the speed of light. However, there will be a red or blue shift observed at any destination, and there will also be a calculated relative speed of light (c') which is quite different from the actual speed of light (c). The red or blue shifts observed at a destination have different observed frequencies and observed relative velocity such that wave length remains unchanged according to $\lambda = \text{relative } c' / \text{relative } f$.

[2] A void is space with nothing else in it.

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.

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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