The "BIG BAND" Gravity Theory®

by

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An explanation for gravity was listed as one of the 11 greatest unanswered questions of physics in 2002 [Discover Vol. 23 No. 2 (February 2002)] and still remains a hot issue. Many have tried; none has successfully succeeded. Einstein spent much of his later life trying. The quantum theorists have proceeded under two hypotheses: that gravity is a separate force from other forces and that it fits the quantum theory ideal (thus, the proposed "graviton"). After a fruitless 80-year attempt to explain gravity with these restrictions and make it fit a grand unification theory, it should strike most that these tenets are faulty. That the premises were not changed long ago testifies to just how completely quantum theory has dominated science, crushing or simply ignoring thought perceived to be inconsistent with its tenets. No one dares challenge this religion for fear of being ostracized or more importantly admitting that one's own high IQ was insufficient to see its fallacies. It is doubtful that venerable peers would welcome changes that would make their thinking no better that that of an undergraduate. Peer review by the establishment becomes self-aggrandizing while claiming impartiality. Only now are novel ideas beginning to become widespread from unorthodox thinkers who pen non-peer-reviewed "papers" and "publish" on the world wide web

Consider the simple equations for electronic and gravity interactions as the starting point for pondering what causes gravity.

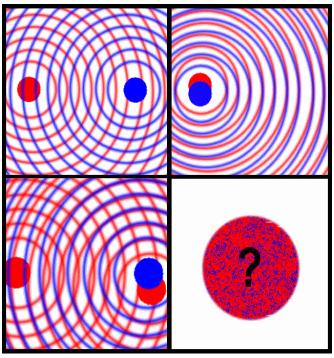
Electrostatics

Gravity

$$E = F (q_1 q_2)/r^2$$

$$E = G (m_1 m_2)/r^2$$

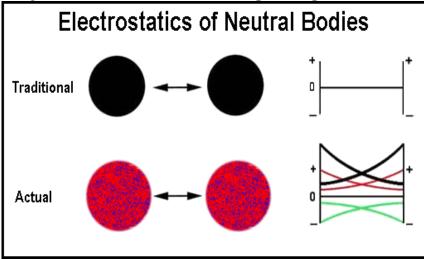
Gravity would not be an unanswered question if it could be shown that an object emits an omni-directional, electrostatically neutral, wave that maximally combines with other like waves. The existence of such a neutral wave has been the difficulty. This contrasts with like-charge electrostatic waves. The electrostatic effect of a solitary particle flows outward from the particle in every direction at mathematically defined levels. Classical physics has demonstrated that similar effects are additive and that a NULL occurs when the sum of the positives equals the sum of the negatives and NOT because the components vanish. The figure at the right illustrates several of the points.



The traditional view of a neutral body has a single component, electrostatic field that is zero at all distances from the object (see figure below). Neglected in this view are the ever-present positive and

negative fields generated by the many charged entities that form the objects. Opposing electrostatic waves from an object do not cancel, but nullify by opposition. The intensity of the resulting "neutral wave" is the sum of the absolute intensity of all the individual electrostatic waves. Since most matter is made up of very tiny, charged species, the intensity of the neutral wave will also be directly related

the neutral wave will also be directly related to mass²; hence the similarity of the gravity mass-formula to the electrostatic charge-formula. In the quantum theory vernacular,

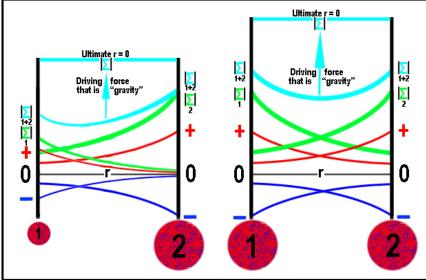


the interaction of two neutral electrostatic waves is equivalent to orbital overlap (think BIG spheres) with no net electrostatic repulsion or attraction from the sources. Here, the positive (dextral?) components combine; so do the negative (sinistral?) ones.

Electrostatic waves string a dual, three-dimensional fabric (mesh or solid?) out to infinity. The summation of opposing components remains neutral, but the crescendo rises as the overlap like-

components maximizes -- halting only when the two masses slam together. The force constant (G) is weak, but positive, for the overlap. Electrostatic repulsion/attraction is zero when the bodies are neutrally charged.

If the electrostatic "fabric" (solid or mesh) of the universe is an electrostatically neutral double-weave formed from two like-charged waves, gravity is simply the propensity of like-charge waves to maximize overlap. Any unification theory that includes electrostatic charge forces already provides the means for handling the gravity force. Gravity does not require, nor



have, an independent source. For over three-quarters of a century, some of our most intellectual scientists have searched for an independent source of gravity for their grand unification of forces. All have failed, as there is none. Gravity is a force subset, not an independent set.

The BIG BAND theory describes a law of the universe: "'Neutral' bodies attune" to provide maximum crescendo of the charges -- order from chaos, even as the 2nd Law of Thermodynamics grinds away to create more chaos. This explains the scientific dilemma of why we have any order at all. That electrons have spin allows another kind of order (spiral) to occur.

The following is offered to add a bit of levity to the issue:

A crowd gathered as the fiddler strummed the strings to set the tone. The trumpet blared to signal the spot and the sax blew a nostalgic note. The base and drums kept the beat, while the piano spewed out a catchy tune. Sound, in through the head -- out through the foot, induced the audience to hum. Some joined the instrumental gig and the band played on with a bit more gain. Few could pass by without being drawn near to check it out. Unfretted by time or space the band grew unbounded. Eventually the entire world heard the sound - a harmonious beat - and clustered around.

A musician might deem this "primal urge" -- this scientist deems it "gravity"!

Gravity -- the tuning of the universe crescendo to the max. Tuning is lost to generations that have only auto-tuned.

BIG BANDS play on to ever growing crowds even while they "sweat" (mass to energy).

Conclusion: it is not gravity that needs explaining, but rather

"what is the nature of the "fishbowl 'fluid/fabric'" in which all the "universes" are floating?"

More specifically, "what is medium that allows "matter as we perceive it" to communicate through what seems like void space (nothingness) with one another via gravity and light transmission?" Is it what is being touted as "dark matter?" Do the "new aether" folks and the "dark matter" folks just differ in semantics - unable to agree that linen and worsted are fabrics?

[©] Concept originally penned in 2002, partially included in "Challenging Science", Joel M Williams, AuthorHouse (2005); the forerunner of this article is included in the author's website at http://pages.swcp.com/~jmw-mcw/BIG%20BAND%20Gravity.htm

¹ A set of beliefs concerning the cause, nature, and purpose of the universe. The scientific religions have as their purpose the defining of the first two.

² To the extent that the charge/mass value of the smallest charge subatomic particles may be different, so will the gravitational force; achieving a normalized value as the average charge/mass value grays through astronomical numbers of each different entity. Does a hydrogen star have the same gravitational constant as a neutron star with the same mass? Closer to home, does the sun have <u>precisely</u> the same gravitational constant as the earth? Would a vastly non-spherical body (increased surface area, less shielding) behave differently than a spherical one?