

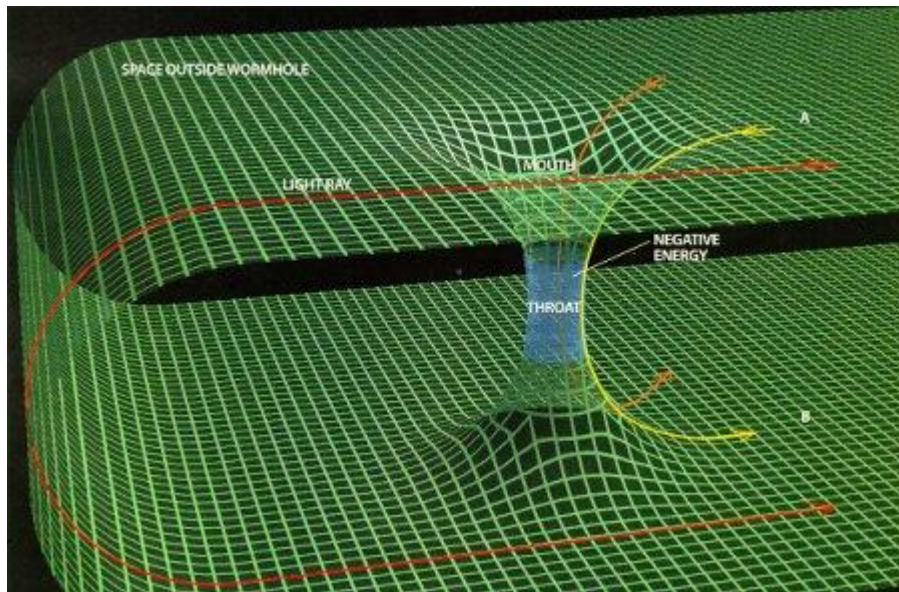
Portals, Vortices and Wormholes - Part 2

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"The truth is wormholes are all around us, only they're too small to see. They occur in nooks and crannies in space and time. Nothing is flat or solid. If you look closely enough at anything you'll find holes and wrinkles in it. It's a basic physical principle, and it even applies to time. Even something as smooth as a pool ball has tiny crevices, wrinkles and voids."

– *Stephen Hawking* –

First, a little background is required. While this may be a bit advanced for some, it will lay the foundation for my hypothesis on terrestrial wormholes and their possible relationship to paranormal phenomena. Trans-universal wormholes theoretically connect one universe with another. Even though their existence has yet to be proven, I believe they do indeed exist, and that it is possible to use an trans-universal wormhole to travel from one parallel universe to another.



A wormhole which connects (usually closed) universes is called a Schwarzschild wormhole. In string theory, a wormhole has been envisioned to connect two D-branes, where the mouths are attached to the branes and are connected by a flux tube. If a brane is in fact a universe, this would make perfect sense. Also wormholes are believed to be a part of space-time foam. There are two main types of wormholes: Lorentzian wormholes and Euclidean wormholes.

Lorentzian wormholes are a product of general relativity and semi-classical gravity, but Euclidean wormholes are studied in particle physics. Interestingly, traversable wormholes (a special kind of Lorentzian wormhole) could possibly allow a human to

travel from one side of the wormhole to the other. It would certainly allow a cross transmission of EMF, which is pure energy.

Lorentzian wormholes are not excluded within the framework of general relativity, but the physical plausibility of their existence has remained elusive. Equally elusive is whether a theory of quantum gravity, merging general relativity with quantum mechanics, would still allow their existence, but in my opinion they would, since I can find no reason to prohibit it. Of course, my opinion is subject to change at any time if it is proven to be incorrect.

Most of the accepted solutions of general relativity which allow for traversable wormholes require the existence of “exotic matter”, a theoretical substance which would have to have a negative energy density. However, it has not been mathematically proven that this is an absolute requirement for traversable wormholes, nor has it been established that exotic matter cannot exist. And, the exotic matter I speak of, may not originate in this universe at all, but in a connecting parallel one.



Exotic matter is a hypothetical concept of particle physics. It covers any material which violates one or more classical conditions or is not made of known baryonic particles (rather similar to paranormal events violating certain aspects of physics). Such materials would possess qualities like negative mass or being repelled rather than attracted by

gravity, or being dark in the manner of photonic emissions, instead of light. The closest known real representative of exotic matter is a region of pseudo-negative pressure density produced by the Casimir effect.

In physics, the Casimir effect and the Casimir-Polder force are physical forces arising from a quantized field. The typical example is of two uncharged metallic plates in a vacuum, placed a few micrometers apart, without any external electromagnetic field. In a classical description, the lack of an external field also means that there is no field between the plates, and no force would be measured between them. When this field is instead studied using quantum electrodynamics, it is seen that the plates do affect the virtual photons which constitute the field, and generate a net force by either an attraction or repulsion depending on the specific arrangement of the two plates. This force has been measured, and is a striking example of an effect purely due to second quantization.

I personally believe this to be a possible example of the Zero Point Energy Field. Physicists at Princeton believe this as well, so I feel I am in good company. The term is also casually attached to any material which is difficult to produce (such as metallic hydrogen or a Bose-Einstein condensate) or which exhibits unusual properties (such as fullerenes or nanotubes), even though these materials have been created and are relatively well understood. It can also refer to material composed of some form of exotic atom, such as an undiscovered element.

Although no particles are known to have negative mass, physicists (primarily Bondi and Robert L. Forward) have been able to describe some of the anticipated properties such particles may have. Assuming that a condition in which all three concepts of mass are equivalent would produce a system where negative masses are attracted to positive masses, yet positive masses are repelled away from negative masses would be the norm. As well, negative masses would produce an attractive force on one another, but would be repelled because of their negative inertial masses. But wait, it gets worse! For a negative value of m_p with positive value of m_a , F is negative (repulsive). At first glance it would appear that a negative mass would accelerate away from a positive mass, but because such an object would also possess negative inertial mass it would accelerate in the opposite direction from F . Furthermore, it can be shown that if both masses are of equal but opposite mass, Bondi pointed out then the combined system of positive and negative particles will accelerate indefinitely without any additional input into the system.

Now I have a headache.

This behavior is bizarre in that it is completely inconsistent with our 'normal universe' commonsense expected behavior from working with positive masses. Yet it is completely mathematically consistent and introduces no apparent contradictions when physics analysis is performed on the behaviors. First impressions may be that this arrangement violates conservation of momentum and/or energy, but in fact if the masses are equal in magnitude, one being of positive value and the other negative,

then the momentum of the system is zero if they both travel together and accelerate together, no matter what speed:

$$P_{\text{sys}} = (v \times m) + (v \times (-m))$$

$$P_{\text{sys}} = v \times (m + -m) = v \times 0 = 0$$

...and an equivalent equation can be calculated for K_e :

$$K_{c \text{ sys}} = (1/2 \times m \times v^2) + (1/2 \times (-m) \times v^2)$$

$$K_{c \text{ sys}} = (1/2 \times v^2) \times (m + -m) = (1/2 \times v^2) \times 0 = 0$$

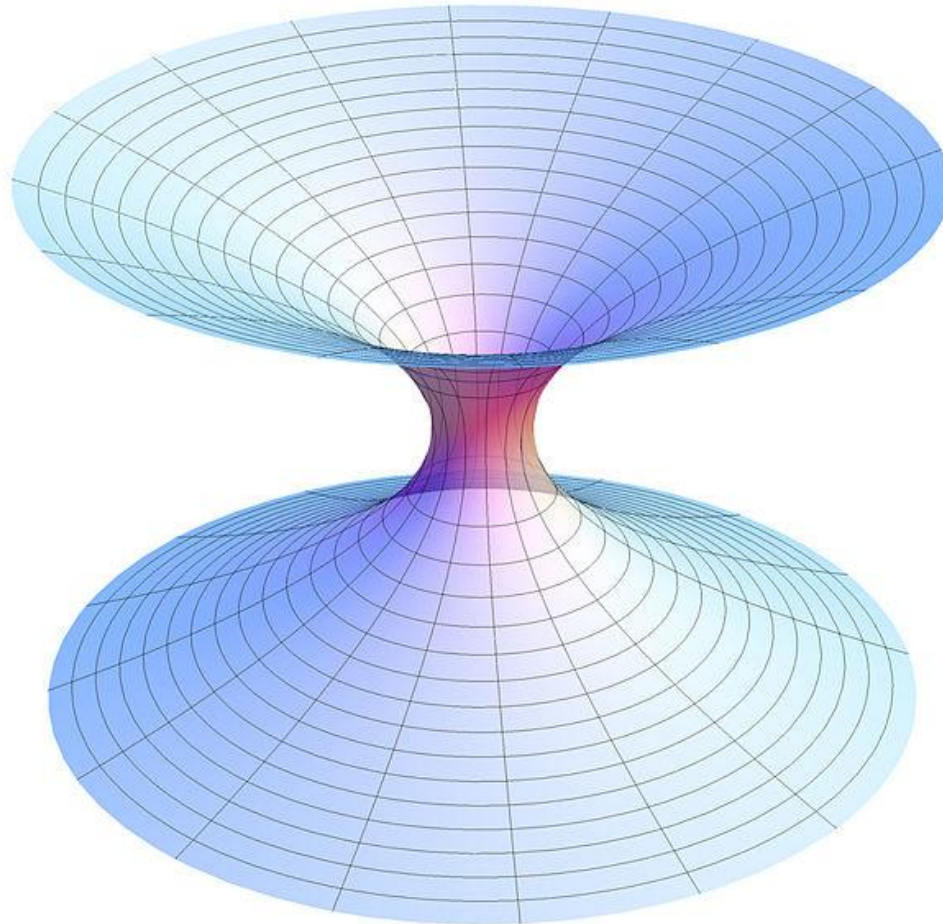
Forward extended Bondi's analysis to additional cases, and showed that even if the two masses $m(-)$ and $m(+)$ are not the same, the equations remain still consistent. Some of the behaviors this seems to introduce are bizarre, such as a co-mingled positive matter gas and negative matter gas having the positive matter portion increase in temperature without bound. However, the negative matter portion gains negative temperature at the same rate, again balancing out. Geoffrey A. Landis pointed out other implications of Forward's analysis, including noting that although negative mass particles would repel each other gravitationally, for electrical forces, like charges would attract each other (in distinction to positive mass particles, where like particles repel.) In effect, this means that for negative mass particles, gravitational and electrostatic forces would be switched.

Forward also coined a term, "nullification" to describe what happens when ordinary matter and negative matter meet; they are expected to be able to "cancel-out" or "nullify" each other's existence. If equal and opposite types of matter are involved, no energy would be left over. However, it is easy to show that some momentum would be left over (none is left over when they move in the same direction, as described above, but they have to move in opposite directions to be able to meet and mutually nullify). This can in turn explain why equal quantities of ordinary and negative matter don't spontaneously appear out of nowhere (the opposite of nullification): Momentum would not be conserved by that event, either. So where am I going with all of this? Simply put, in some paranormal events, EMF, which is energy, does spontaneously appear, but from where and how?

Lorentzian wormholes known as Schwarzschild wormholes or Einstein-Rosen bridges are bridges between areas of space that can be modeled as vacuum solutions to the Einstein field equations by combining models of a black hole and a white hole. This solution was discovered by Albert Einstein and his colleague Nathan Rosen, who first published the result in 1935. However, in 1962 John A. Wheeler and Robert W. Fuller published a paper showing that this type of wormhole is unstable, and that it will pinch off instantly as soon as it forms, preventing even light from making it through. One type of non-traversable wormhole metric is the Schwarzschild solution:

$$ds^2 = -c^2 (1 - 2GM/rc^2) dt^2 + dr^2 / (1 - 2GM/rc^2) + r^2 (d\theta^2 + \sin^2 \theta d\phi^2)$$

While Schwarzschild wormholes are not traversable, their existence inspired Kip Thorne to imagine traversable wormholes created by holding the 'throat' of a Schwarzschild wormhole open with exotic matter (material that has negative mass/energy).



Theories of **wormhole metrics** describe the space-time geometry of a wormhole and serve as theoretical models for time travel. An example of a (traversable) wormhole metric is the following:

$$ds^2 = -c^2 dt^2 + dl^2 + (k^2 + l^2) (d\theta^2 + \sin^2 \theta d\Phi^2)$$

But what if wormholes exist in non-vacuum environments? What if instead of a single conduit, there formed a double helix conduit, modeled after a black and white hole, in which you essentially had a two way connection from one universe to another? What if paranormal activity doesn't originate here at all, but from a parallel universe? These are questions I have been asking myself often over the past five years, and I have pondered on ways of not only proving that paranormal activity originates from a parallel universe, but of the existence of wormholes as well!

This would not only advance paranormal research, and perhaps finally get it accepted in mainstream science, but would also be a huge discovery in physics.

Am I thinking large?

Perhaps I am, but if I fail, there is a lesson in that failure as well. The hardest part of the project is to remain objective. The first inkling that I was on to something was the discovery of time anomalies surrounding paranormal places and events. The second clue was a burst of gamma radiation associated with recorded paranormal events. The Gamma radiation could have only been caused by particle annihilation. Something has to cause particle annihilation, and since no man made atom-smasher or nuclear war head detonation was present, there had to be another answer. A portal opening between two universes that allows matter from one to mix with matter from the other, may be the answer to the mystery, and if it is, the implications are huge. When we die, our consciousness may maintain its integrity as pure energy, and vibrate at a higher frequency, shifting it via a wormhole as pure energy, to a parallel universe. This coincides rather nicely to descriptions of people who have had near death experiences who report traveling along a dark tunnel with a light at the end. It is certainly food for thought, and experiment! So, with this in mind, I designed an experiment to see if I could locate the point in which EMF and EVP entered into the environment in an area with reported paranormal activity. Those experiments are outlined in the Experiments section of this site.