- 1 -

# **Complete Emptiness might be the Dark Energy**

Author: Moshe Segal moshe\_segal@yahoo.com

#### **Abstract**

In several articles such as: "Consolidated Waves might create Dark Energy" that can be found at <a href="http://viXra.org/abs/1909.0496">http://viXra.org/abs/1909.0496</a> a scenario of two one dimensional electromagnetic traveling waves, which collide and then consolidate and continue to travel in the same direction, is described. In these articles it was shown that in this scenario energy is lost such that it appears to violate the Energy Conservation Principle.

In some additional articles such as: "Energy Pairs Theory" that can be found at <a href="http://viXra.org/abs/1910.0523">http://viXra.org/abs/1910.0523</a> the Energy Pairs theory is presented which explains this energy loss. And, the above described scenario is presented as a proof of this Energy Pairs Theory.

Also, in some of these articles, it was shown that Energy Pairs might turn into Dark Energy, which is a mystery that the science of Physics seeks a solution to it.

In this article the argument that complete emptiness is actually the Dark Energy is presented.

# **Introduction**

In several articles such as: "Consolidated Waves might create Dark Energy" that can be found at <a href="http://viXra.org/abs/1909.0496">http://viXra.org/abs/1909.0496</a>, a scenario of two one dimensional electromagnetic traveling waves, which collide and then consolidate and continue to travel in the same direction is described. In these articles it was shown that in this scenario energy is lost such that it appears to violate the Energy Conservation Principle.

In some additional articles such as: "Energy Pairs Theory" that can be found at <a href="http://viXra.org/abs/1910.0523">http://viXra.org/abs/1910.0523</a>, the Energy Pairs theory is presented which explains this energy loss. The Energy Pairs Theory claims that certain energies, for example, electric fields energies or magnetic fields energies, which are dependent on the existence of a force field (electric or magnetic) in order to exist, can annihilate each other, in certain situations, an annihilation that seems to violate the Energy Conservation Principle.

And, the above described scenario is presented as a proof of this Energy Pairs Theory.

Also, in some of these articles, it was shown that Energy Pairs might turn into Dark Energy, which is a mystery that the science of Physics seeks a solution to it.

In this article the argument that complete emptiness is actually the Dark Energy is presented.

## **Equating Emptiness to Substance and Dark Energy**

Since Energy Pairs Theory, (which can be found in the article titled: "Energy Pairs Theory" that can be found at <a href="http://viXra.org/abs/1910.0523">http://viXra.org/abs/1910.0523</a>), states, that Energy Pairs of equal intensities residing in the same space volume might annihilates to nothing, then, the Energy Pairs concept can be extrapolated to predict that Energy Pairs can be also generated out of nothing.

Actually, the extrapolation just mentioned can be extended as follows:

It can be assumed, that the fact that energy pairs of equal intensities residing in the same space volume annihilate each other, can be viewed not as mutual annihilation, but as mutual disabling.

In other words, these energy pairs can be assumed to continue to **exist**, but their mutual existence in the same space volume causes each of them to **disable** the other, such that the net result is only seen as annihilation.

This is, actually, what happens, for example, with electric and magnetic fields of opposite signs, that exist in the same space volume, which cause mutual canceling also of the energies associated with these fields.

An analogy to the above might be the discription of what happens to the energy in a rope in a rope pulling game. When two people pull a rope, each in a direction opposite to the other, if their pulling force is exactly equal, the rope does not move. However, this does not mean that the pulling energies that are exerted on the rope really annihilate each other or disappear. These energies are accumulated or amassed in the rope tension.

The same should occur when two electric fields forces (or magnetic fields forces) of exactly the same intensity and opposite polarity annihilate each other. The energies of these electric (or magnetic) fields are not annihilated or disappear, they are accumulated or amassed in the location in space where they reside, but they cannot express themselves. They only disable each other.

This view attributes to the nothing (or complete emptiness) concept the same validity as the validity attributed to the existence (or substance) concept, assuming that the complete emptiness might be a combination of energy pairs that disable each other, and might be related to the Dark Energy mystery, since it does contain energies that cannot be traced.

and since this concept also assumes that something can evolve from nothing, it discards the need for the concept of creation.

Actually, this concept might view the state of complete emptiness (or combinations of energy pairs that disable each other) as the steady state of the existence that was, is and will be eternal, and, might transform into a different state of existence, in which energy pairs are created out of nothing, or converted to nothing (for example, in electron positron collisions).

#### **Summary, Results and Conclusions**

In several articles such as: "Consolidated Waves might create Dark Energy" that can be found at <a href="http://viXra.org/abs/1909.0496">http://viXra.org/abs/1909.0496</a>, a scenario of two one dimensional electromagnetic traveling waves, which collide and then consolidate and continue to travel in the same direction is described. In these article it was shown that in this scenario energy is lost such that it appears to violate the Energy Conservation Principle.

In some additional articles such as: "Energy Pairs Theory" that can be found at <a href="http://viXra.org/abs/1910.0523">http://viXra.org/abs/1910.0523</a>, the Energy Pairs theory is presented which explains this energy loss. And, the above described scenario is presented as a proof of this Energy Pairs Theory.

Also, in some of these articles, it was shown that Energy Pairs might turn into Dark Energy, which is a mystery that the science of Physics seeks a solution to it.

In this article the argument that complete emptiness is actually the Dark Energy is presented.

In several articles, such as: "Electric Charges as Energy Pairs" that can be found at <a href="http://viXra.org/abs/1909.0098">http://viXra.org/abs/1909.0098</a> and "Energy Pairs might turn to Dark Energy" that can be found at <a href="http://viXra.org/abs/1909.0149">http://viXra.org/abs/1909.0149</a> some of the issues presented in this article such as the Energy Pairs Theory is also presented, with more details.

## **References**

- 1. Electric Charges as Energy Pairs http://viXra.org/abs/1909.0098
- 2. Energy Pairs might turn to Dark Energy http://viXra.org/abs/1909.0149
- 3. Consolidated Waves might create Dark Energy <a href="http://viXra.org/abs/1909.0496">http://viXra.org/abs/1909.0496</a>
- 4. Energy Pairs Theory <a href="http://viXra.org/abs/1910.0523">http://viXra.org/abs/1910.0523</a>

This article was wtitten by: Moshe Segal, At the Date of: 10<sup>th</sup> October, 2019

Moshe Segal's address is: Ravutzky st. #78 Ra'anana ISRAEL 4322141

Email addresses:

moshe\_segal@yahoo.com

moshe\_segal@yahoo.com

leasegalster@gmail.com

mirch0@walla.com