

2017

**Scientific proposal: HOW TO ACHIEVE AN IMPORTANT ADVANCE IN SPATIAL PROPULSION**

**NEEDS:** There have been theoretical and practical obstacles in the field of transport to which a viable solution is sought. These obstacles appeared due to the following needs:

- a. Develop air transport technology that is both non-polluting and at the same time swift, which is far in excess of current air transport.
- b. Develop transport technology for outer space, non-polluting and at the same time faster, such that far exceeds current drive technology (rockets). In relation to this last need, space agencies seek to access a scientifically revolutionary knowledge, such that allows access to interplanetary and interstellar travel that last a short time, since a trip to the star that is nearest of the Sun, could last for millennia using the current technology. As an example is the site <http://www.100yss.org/> . International prizes are also offered for this purpose. An example of this can be found at <http://www.goede-stiftung.org/en/goede-award/>
- c. Overcome contradictions that tend to unbalance life on Earth.

**DEFINITION OF THE SCIENTIFIC QUESTION:** How to get a material object can propel to itself without losing part of its mass, and how articulate said effect with the principles and laws of physics?

**OBJECT OF MY INVESTIGATION:** The magnetic forces that result from electromagnetic interactions in an environment of simultaneity.

**FIELD OF ACTION:** The vector sum of simultaneous magnetic forces that appear in and because of a system formed by a pair of radiating magnetic dipoles.

**THE OBJECTIVE OF THE INVESTIGATION:** To prove that the vector sum of simultaneous magnetic forces appearing in  $\gamma$  due to a system made up of at least a pair of magnetic dipoles radiating at the same frequency do not cancel out if an inequality between three parameters, is met.

In order to achieve that objective, the following specific objectives are proposed:

- 1) Perform computerized and animated electrodynamic calculations on the screen, applied to an efficient experimental model, which consists of two circular antennas radiating EM waves determined by oscillating electric currents.
- 2) Propose an inequality relationship between three parameters (phase difference between the two interactions, separation distance between both dipoles, and radiated wavelength), such that the simultaneity environment in which both interactions occur produces two vectors of magnetic forces that do not cancel out.  
Note: This inequality was constructed by the test and error method, using electrodynamic calculations mentioned in point 1).
- 3) Articulate the proposed effect with general relativity, since if an electrodynamic calculation predicts it, then a mathematical development through general relativity, should also predict it.

To achieve that articulation, it is argued that this effect is probabilistic in nature, since if the values for those three parameter, are taken at random, it could also result that the mathematic condition be not met and therefore the total magnetic force would be null. That probabilistic behavior of such system could be taken into account in an even more general description of the coordinate transformation posed by the Principle of Equivalence.

I think that here there is a point of opinion to solve:

- a) On the one hand, if the electrodynamic calculations and their respective animation are understood as a logical behavior, then we can say that the proposed effect is at least conceptually viable, since the proposed experiment has not yet been physically realized.
- b) On the other hand, and on the basis that the proposed effect can be understood in its electromagnetic mechanism of simultaneity, in my opinion it would be advisable that the theoretical basis of General Relativity, which is the Equivalence Principle, assumes out this effect as a probabilistic phenomenon. That is, as a quasi-exotic event that could happen suddenly.

This probability would remain in any calculation developed through general relativity. This inclusion would be the articulation proposed, which would translate into the ideological challenge of accepting as real facts, observations that until now do not conform to scientific acceptance. Therefore, we would have understood the foundation of simultaneity that makes feasible that the proposed effect may be observable.

The proposal of articulating the proposed effect with the theory of General Relativity, is then limited to include it in the Principle of Equivalence, due to the conceptual evidence provided by the two electrodynamic calculations corresponding to the two simultaneous interactions.

The feasibility of this proposal would leave open the field for the mathematical development in General Relativity, including a different probability of zero for the proposed effect, that is in agreement with the behavior predicted by the inequality found and corroborated by the electrodynamic calculations.

For the development of this research were consulted different works about electromagnetic forces, the Equivalence Principle that is the starting point of General Relativity, the Mach's Principle, and a programming language to systematize this presentation.

In the following link you can download the latest version of the systematized presentation of my scientific proposal:

<https://drive.google.com/drive/folders/OB6KvArnJniT1RTlnM24xZmRtUzA?usp=sharing>