On Alzofon Experiments of Gravity Control

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Abstract. Physicist Frederic Alzofon provided the first effective theory of gravity beyond just providing a static model, like those of Newton and Einstein. The goal was to explain how that it is possible to control gravity, as hinted by indirect evidence collected from external sources. The 1994 experiments confirmed this possibility.

Recently, a theory of Gravity based on the Standard Model was also provided by the author, in and independent line of research. It sets an explicit foundation for Alzofon's Theory.

1 Introduction

Alzofon's Theory of Gravity is based on a thermodynamics model, where the gravitational potential can be "cooled" by Dynamic Nuclear Orientation.

Classically the gravitational potential is a solution of Poisson equation, and Coulomb Law is essentially just its fundamental solution. But that there is an underlying "heat flow" that can affect it, without mass displacement, is a novelty.

Later it will be explained that the corresponding "temperature" is the degree of order of spin alignment to an ambient magnetic field, needed to start the process. It will also be explained why spin directions of two electrically interacting neutrons[1] matter, and that the residual electric force in the quark model, is just Gravity, but depending on these directions:

$$F_E(n_1, n_2) = K\ S_1 \cdot S_2 / r^2,$$

where S_i are spin directions.

Now these orientations are chaotically distribute, and it would result a null force, except minimizing mutual energy leads to a slight bias in orientation. Flipping the

[1] Of course, classically, neutrons are pointlike neutral particles; but in the Quark Model, Gauss Law does not hold in this discrete/quantum setup.

orientation leads to a higher energetic level, but nullifies gravity; like escaping from Gravitational attraction.

For further details see [1, 2].

2 Alzofon's Experiments

The experiments are documented in [6]; see also [7] for the original article. A critique of these experiments is presented in [8]. Comments on the weakness of the critique itself will be included below.

2.1 1994 Experiments

The basic concepts involved are:

1. Ambient magnetic field: intensity and orientation relative microwave radiation;
2. Microwave pumping, with specific parameters: frequency, amplitude and gaps between pulses;
3. Electron Precession Resonance (EPR), also called Larmour precession [9], that allows to transfer the microwave pumping energy to the nuclei's spins;
4. Nuclei relaxation times [10], material specific;
5. Amount of reduction of Gravitational interaction due to this DNO.

Overall, this process is very much similar to LASER, as a pure EM pumping process to achieve the inversion of population, lifting it to a higher energy level, with the exception regarding the emission part of coherent light. In the case of DNO, this last aspect corresponds to the relaxation of the spin orientations, back to a random orientation state; hence the need to repeat the inversion of population, from a lower energy state of Newtonian gravitational potential to a higher energy gravitation-free state, after a *gap* in the microwave stimulation.

The diagrams in [6] show the variation in weight under such a microwave stimulation.

In [6] a reduction of 80% of the weight is claimed as being measured during experiments.

2.2 On Prutchi critique

One of the main points in his critique is the refers to the presence of the above weight variation even with the magnetic field turned off.

The author's opinion is that the magnetic field is needed initially to polarize the spin directions, after which the process can continue without it, similar to how a car starts, after which the engine supplies the needed electricity for the car's operation.

2.3 The Gyroscope Model

The microwave source at Larmour frequency excites the electron to an orbital precession state similar to a gyroscope, oriented with the axes aligned to the external magnetic field. The coupling with the nuclear spin allows its transfer to the protons and neutrons of the nuclei. The higher the percentage of such aligned nucleons is, the higher the reduction of the gravitational interaction is correspondingly achieved.

The presence of a gap allows for this alignment to spread in the nucleon. Repeating the process leads to a higher percentage of alignments, uniform within an individual nucleus.

The analogy with an oscillating swing, increasing the amplitude for a few periods, than allowing the free oscillation, is also helpful to understand DNO driven by a microwave stimulation with gaps corresponding to the relaxation times.

3 Conclusions

Alzofon's Theory on the origin of gravity drew on Einstein's theories (Special and General Relativity), with the novelty of involving the quantum fluctuations of particle-antiparticle pairs generation, which when polarized by two masses would produce the gravitational attraction.

Yet the emphasis in experiments is on DNO of the spins! The thermodynamical framework can be directly applied, leading to the idea of "cooling" the gravitational potential.

This is an effective theory, which gives a reasonable explanation of the experiments which confirmed the weight loss under DNO.

The parameters were taken from USAF data chasing an UFO, which clearly uses gravity and mass manipulation technology [11].

Alzofon's effective theory is presently confirmed by the author's research on unified Field Theory and the introduction of discrete (finite) groups of symmetry, leading to a Platonic geometry model of fermion generations and quark flavors.

As a historical side remark, that the prediction that Gravity would emerge from this later framework and its possibility of being manipulated was prior to the present

author finding Alzofon's writings. Hence Alzofon's work and especially his experiments *confirm and support* the author's theory. Also note that this new foundation for the Theory of Gravity, based on the theory of elementary particles modeled as in the SM, comes as mandatory. Hence in turn, it supports Alzofon's intuition about gravity, leading to his theory.

In conclusion, the finite quark model, also called by the author the Platonic Qubit Model, implies that Gravity is not a fundamental force and can be controlled, together with the corresponding inertial mass, as a specific source for Gravity. Alzofon's Theory is an effective theory, based on thermodynamics formalism, free of underlying SM details. Finally, his experiments confirmed what the theory, qualitatively predict.

The need for reproduce F. Alzofon's experiments is obvious, and also to diversify the parameters as well as the materials used. This is currently undergoing in Falcon Space Labs experiments, under the direction of Mark Sokol [12].

On the theoretical side, the precise mathematical model for nucleon-nucleon EM interaction, in the quark model, spin direction dependent, and reffered to as non-commutative / tensorial Coulomb law is also needed.

Remarkably, the technology for the above experiments and theoretical R & D is well developed as part of Magnetic Nuclear Resonance theory and experiment [10, 13].

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