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PRESS RELEASE

NORTH AMERICAN EDITORIAL GROUP, *GLOBAL OF RESEARCHES IN ENGINEERING*, HAS PUBLISHED TWO NEW ARTICLES ON THE THEORY OF DYNAMIC INTERACTIONS.

USE OF THIS THEORY IS PROPOSED ON ITS APPLICATION IN THE DESIGN OF NUCLEAR FUSION REACTORS OR ON THE INTERPRETATION OF TOP'S BEHAVIOR.



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In the latest number of GLOBAL JOURNAL OF SCIENCE FRONTIER RESEARCH: A PHYSICS & SPACE SCIENCE have been published two new articles related to the Theory of Dynamic Interactions:

Dynamic Interaction: A New Concept of Confinement

Dr. Gabriel Barceló Rico-Avello

In this article on nuclear fusion, trying to explain an unexplained anomaly observed in the plasma circular movement of Tokamak nuclear reactors, under the assumptions of the Theory of Dynamic Interactions (TDI).

Nuclear fusion research has defined a Tokamak prototype reactor based on a fluid conductor, isolated materially in a physical container and confined by means of magnetic fields. In this fluid-plasma, which interacts with magnetic fields, fusion reactions are caused that release energy, while at the same time a quantity of movement and angular momentum is moved or "rotated" and transported.

However, turbulence is caused in these magnetic confinement fusion processes that reduces system efficiency and prevents the obtaining of sufficient net energy from the nuclear reactions.

The paper aims to propose new dynamic hypotheses to enhance our understanding of the behavior of the plasma in the reactor. In doing so, the author proposes a thorough review of classical dynamics. After over thirty years studying rotational dynamics, the author proposes a new theory of dynamic interactions to better interpret nature in rotation. This new theory has been tested experimentally returning positive results, as ratified by third independent parties.

The author suggests that these new dynamic hypotheses, which we hold applicable to particle systems accelerated by rotation, be used in the interpretation and design of fusion reactors. This proposal could, in addition to magnetic confinement, achieve confinement by simultaneous and compatible dynamic interaction. Accordingly, the author is of the opinion that it would be possible to get better performance and results in the design of fusion reactors by way of simultaneous magnetic and dynamic interaction confinement.

The paper introduces a radical new physical hypothesis generalizing equation, which is proved experimentally by the author for macroscopic bodies in the specific physical process of simultaneous non-coaxial rotation coupling with translation processes in the microscopic physical state. It is assumed by the author that there must be also a similar macroscopic behavior when a particle has an internal spin which is assimilated to an initial rotation state.

The author supports his hypothesis in the observed plasma spontaneous rotation phenomenon, which is not totally yet explained by the complex gyrokinetic theory.

This is the second article of the author about the application of the theory to the fusion reactors. **World Journal of Nuclear Science and Technology (WJNST)**, in its number: Vol.4 No.4, October 2014, published: *Dynamic interaction confinement*, which can be read at:

<http://www.scirp.org/journal/PaperInformation.aspx?paperID=51026&http://dx.doi.org/10.4236/wjnst.2014.44031>

The Dance of the Spinning Top

By Alejandro Álvarez Martínez y Almudena Martín Gutiérrez

The authors propose, in this other published paper in the same journal, a new movement interpretation of the spinning top: "The dance of the spinning top"; a curved path which cannot be justified by the existence of central force because it does not exist. However, this curve movement can be interpreted by the Theory of Dynamics Interactions. This interpretation is valid regardless the way in which the spinning top has been activated.

Likewise, the text proposes that it would be also interpreted the movement of the planets orbiting around the Sun or the satellite around the Earth, because of the similarity to the spinning top case.

According to these hypothesis, it can be justified that the observed movement of the spinning top, and therefore the application of the Theory of Dynamics Interactions can be related to the fields theory.

Recently GLOBAL JOURNAL editorial, published a large paper about this research Project. The paper can be seen in this address:

<http://blog.gjre.org/2016/03/behaviour-of-rotational-bodies.html>

The paper incorporate a brief summery about the research contents about rotating bodies. The author has developed this research project during 35 years. The paper also describes the origin of this scientific research and the inspiration, ideas to the

future for this experimental tests, his learning in the project diffusion and a brief biography of the main researcher. In the paper it is described the research process carried out for the latest 35 years by this research Spanish group.

Full documentation about this theory please visit:

<http://advanceddynamics.net/>
<http://dinamicafundacion.com/>