



International Workshop
"Advanced Researches in Computational Mechanics and
Virtual Engineering "
18 – 20 October 2006, Brasov, Romania

SHORT PRESENTATION OF EVTD² ENTITIES THEORY

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Abstract: *The present paper presents a new model of the whole Universe organization, from the less spaces till the sidereal spaces, by elementary bricks that we called EVTD² entities.*

The EVTD² theory is based on the existence of an electromagnetic primary wave (EMW) that permanently format and animate by vibration these elementary entities having dimensions with values in the proximity of Planck dimension. The entities are generated as Energetic (E), Volumic (V), Temporal (T), Dynamic and Deformable (D²) and they at the bases of the New Physics of Everything. This one allows a great number of propositions for the understanding of physics phenomena. The proposed theory is sustained to be true on natural existence of simplicity and coherence criteria

Keywords (TNR 9 pt Bold): *primary electromagnetic wave, elementary entity, space -time,*

1. MAJOR ACTUAL DIFFICULTIES IN PHYSICS

Actual physics has great difficulties in explaining several subjects, especially on the question how to put together the relativity theory and the quantum physics? It seems that string theory as well as fields' theory attempt to give a long time expected answer for it. Other questions concern less important bugs in physics but with great interest in a more accurately understanding of phenomenon as: bodies' free falling, inertial and gravitational mass equivalence, mass – energy equivalence postulate of $E = mc^2$. What refraction and reflection indexes really represents in geometrical optics? What truly are in sidereal space the black holes? Is the Universe in expansion or in contraction and is it bounded or infinite? Etc.

In fact, scientific spirit often lacks rigor and drives itself to philosophy in assigning the name of particle either to a material identity perceived by its mass and volume and either to another named "photon" which would be simply energetic. Accepting that it has no mass in repose and it is always moving with the "constant" light celerity, this last one must be different in conditions where such speeds are considered non-realistic for material bodies. In order to get closer observations and theories, is taken the liberty to use, for example, sibyl terms: index, factors, and exotic particles. Elsewhere the interactions between particles are described by means of "photons" without mass, being changed as balls (with mass) between two persons in two boats going away one from the other.

The truth on the misunderstandings is often omitted or softened for the most of researchers and only few are advertised on real difficulties of these phenomena understanding. In comparison with their research, for certain Scientifics seems to be lacked of interest to mention the understanding difficulties they have in building their theories. Contrarily, other times being confronted with the impossibility to emit plausible explanations on concrete problems, scientific specific literature makes public all phenomena responsible for the generation of certain enigmas. It is evident that in case of adequate answers, interested researchers could earn at very low prices solutions and future topics to be developed.

2. EVTD² ENTITIES THEORY

In order to explain, from the point of view of phenomena, the trajectory curvature of the called "photon" around celestial bodies (sun or black holes, for example) this new theory of Everything was initiated and developed. It is

based on Energetic, Volume, Temporal Dynamic and Deformable entities that we abbreviated EVTD² and it was detailed in the two books [1.] and [2.] written in French.

In fact, this theory is *a model based on the next postulate: in whole Universe exists a primary electromagnetic wave that we can call Electromagnetic Mother Wave (EMW)*. It would have the greatest frequency (in the neighborhood of Planck frequency) and the highest energetic intensity among all existent electromagnetic waves. So, it will permanently format and animate in vibration entities in accord with its two opposites phase states in all space, from diffuse energy filled spaces till condensed matter and this represents the *entities' energetic (E) composition or more, its mass equivalent in accord with $E = mc^2$* .

These entities are formatted in volume: two dimensions are in correspondence with the two actions of electric and magnetic wave composing the EMW and the third one corresponds to the half wave length of the EMW, wherefrom the *Volume (V) entities' characteristic*. Especially, the diffuse energy is a medium that can be admitted as elastic one. Beginning with the smallest dimensions in atomic nucleus till the biggest ones in sidereal space, all Universe would be consequently organized in a *constructural mode* (more representative here than fractal) on the base of double vibrating state of the elementary brick (EVTD² entity). This is infinitely superposing (without intervals) alternately and periodically in all space –time thus creating diffuse energy or condensed matter systems.

As the two components - electric and magnetic of EMW permanently format and animate the elementary bricks in their double opposite vibrating state, in accord with the action quantum of Poincaré extended in volume and with the Liouville theorem of phase extension, *we can consider that all points belonging to an entity are in phase, what means that they are all living the same event in the very same moment*. So, they are all in phase and non-distinctive (uniform) and, consequently, the *entity's volume is non-divisible* because there are no possible difference inside it. From here, we understand that all points of the entity form a *Temporal (T) ensemble unified in the same simultaneity of its events' history*.

The Ether of ancient Greeks is occupied by very little volumes permanently formatted during the double vibrating action of the EMW's electric and magnetic components on it, what means *in a dynamic manner (D)*. The two components of EMW are progressive waves propagating by successive local elastic deformations and producing elastic shocks – impulsions between the entities. Thus, the generation and the transmission of the electromagnetic effect could be better understood as a succession of shocks – impulsions along the trajectory. By this approach, the propagation of electromagnetic effect (what means the ancient “photon”) does not need the existence of a specific strange particle without mass but with corpuscular effect. This effect is generated and propagated a little similar to the transmission of shocks – impulsions produced by a negative electric charge (electron) on EVTD² entities in space where it turns around the atomic nucleus as it was already shown in [1.] and [2.].

Due to the characteristics energy equivalent masse ($E = mc^2$) of the EVTD² entities and also due to their triple equivalence masse, energy, electric charge ([2.]) they are very interesting for the transmission of the electromagnetic effect (light) without using the notion of so called “photon”.

In fact the EVTD² property to be deformable devolve from certain characteristics exclusively elastic for the diffuse energy of space –time or deformable milieu for the condensed matter. More, with the well-known equivalence relationship between mass and energy ($E = mc^2$) it is evinced that there is an equivalence relation between energy and the electric charge. On the other hand, in [2.] it is proved that there is a relation between unitary electric charge and mass. Thus, there is no contradiction in assimilating to diffuse energy and even to supplementary energy given by the electric charge of a particle the mechanical characteristics of mass.

Taking into account that magnetism and electricity are closely tied we can infer that the magnetic pole could be in certain equivalence with diffuse energy and so, there is an equivalence between masse and magnetism. Consequently, *the EVTD² entities in whole Universe, could be considered as very little Deformable (D) energy volumes that are, also, equivalent mass, electric charge and thus, magnetic pole*.

The principal characteristics of the EVTD² were briefly presented as to make simpler the minimum understanding for lecturer. In fact the great innovation of Everything theory based on EVTD² entities is not simplistic but after getting its logic instruments it becomes simply and with a huge coherence and explanation power for many natural phenomena still unexplained but only observed.

What is to be most appreciable for *this Physics of Everything consists in the wonderful simplification because “photon”, “graviton” and “gluons” for example, are no more necessary for the representation of phenomena that already got an explanation or still are non-understood*, the characteristics of EVTD² entities being sufficient. The consequences of this new theory are praiseworthy in the great simplification of actual physics by reducing the number of real or still “virtual” particles necessary for the models allowing a better knowledge of our Universe without generating new contradictions.

It allowed us already explaining the experiment of Michelson and Morley, the light reflection and refraction (the refraction index being the ration of two mediums' stiffness), the stars' aberration [1.].

The problems of bodies' free falling, confirmation by calculus of postulate $E = mc^2$ and also the phenomenological understanding of quanta gravitation or, more, the Casimir force seem to be finally solved by this theory [2.].

The four fundamental forces' unification is considered *to devolve from the mechanic work of gravitation* (and not from the work of a force or of the space – time curvature) *that would be the Mother of three others actions, then considered to be hers daughters*. That means that these three last can be of the same phenomenological nature as gravitation *because they are gravitational interactions more or less "busted" by the electric charges, magnetic poles or by the neighborhood of different particles' mass (weak and strong "forces")*. *Then, the interaction of gravity must be assimilated with a true mechanic work of double vibration of EMW in the spaces formed of EVTD² between and around of considered masses* [2.]. *The same situation is found for the other forces where is no more necessary a certain existence of so-called "photons, gravitons and gluons" because the EVTD² entities are simply and coherently sufficient to explain the phenomena generating and transmitting the fundamental interactions.*

3. CONCLUSION

The theory based principally on the existence of an *Electromagnetic Mother Wave* was very briefly presented above, as well as its great potential and possibilities as an Everything theory in the phenomenological context of Universe.

Firstly, it is suitable to emphasize here its explicative and understanding contribution, non-exhaustive of course, already made evidently in a great number of different physics enigmas' resolution.

Secondly it is very important to show that this new Physics does not exclude the classical one, the two being complementary and creating the premises of a complete powerful and coherent theory.

By the explanations given to the Michelson and Morley experiment and to bodies' free falling, the Everything theory is concordant with the relativity theories – limited and general. Also, being based on the quantification of space – time and energy equivalent mass and electric charge, it includes the quanta theory. More, as all spaces are entirely quantified in energy, in dimensions and in time it is effective that there is no theoretical impossibility to amalgamate the relativity and quanta theory (reconsidered on certain points) because from the point of view of phenomena this union is already done.

This theory, based on vibrating state of entities of agglomerated systems of entities is in good agreement with the bases of string theory through similitude with vibrating structure of the particles.

The permanent existence of EMW in all space allows a new study on the particles' entanglement. The spatial – temporal principle of causality and the existence of time are not abolished by introducing specific waves proper to Nature by the action of EMW (paper accepted to be published in September).

REFERENCES

- [1] Conte M., Rosca I.: *Une histoire de famille: photon, Graviton, X-on et compagnie*, Triumf Print, Brasov, Roumanie, 2002.
- [2] Conte M., Rosca I.: *Physique de Tout. Les EVTD2*, Graphica Print, Brasov, Roumanie, 2004.
- [3] Conte M. L'histoire amoureuse du temps, Editions Graphica, Brasov, Roumanie
- [4] www.antigravite.org.