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QUANTIC GRAVITY EVTD^2 AND PHOTONIC GRAVITATIONAL FIELDS: EXISTENCE OF MINI BLACK HOLES TO EXPLAIN PHENOMENA. THE SOLAR SYSTEM IS A DATABASE, PART I: THE SUN AND THE FOUR PLANETS CLOSE TO IT

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Abstract: *This paper is followed in this review, by its second part [1]. In it are proposed suite and additions to the assumptions of [2-3], in quantum gravity EVTD^2 [4-11], relatively to the quantum photonic gravity potential energy. The attractive and repulsive effects of loads and electric charges of opposite and same signs, the notions of black holes and white holes respectively positioned at the level of the zero resulting potential of these pairs of loads and charges [2-3] are here utilized only for masses. The Sun and its eight planets is a fairly well known database that will be used here to try to highlight the new assumptions of EVTD^2 physics. This will be highlighted by calculi on the photonic flow emitted by the concerned masses temperatures and arriving in the mini black hole in each zero resulting potential where there are, strongly probable, destructive interferences, which would furnish accreditation to the predictable functioning of a black hole. The correlation resulting from the calculi and that are compared to the gravitational accelerations confirms the process of compaction, in intensities and varying speeds, of the photons in the photonic and gravitational fields of black hole.*

Key words: *Photonic quantic potential, Quantic photonic compacting, Quantic Gravity EVTD^2, Quantic Substratum, EVTD^2 entities theory, Correlation between gravitational acceleration and compaction acceleration.*

1. INTRODUCTION

The quanta energy levels, took into account for the study of quantic gravity in EVTD^2, are calibrated from Planck quantum *h*. This was initiated by considering the "black body" emission of bodies in space-time due to their intrinsic temperature [12-14], which structure quantic gravitational fields in quanta *h*.

With regard to the electrostatic attraction and repulsion, as the results be suitable, it was necessary not to consider anymore the *h* quantum, but a higher energetic value: in this case the electron volt (*eV*) [15]. This allows to find the hierarchy of the electrostatic forces reported to the magnitude order of gravitational force.

As proposed and many times recalled [16-20], in EVTD^2 entities theory the structure of the energetic space-time would be very finely tri-quantic and more, animated by an primary coherent electromagnetic wave (EMW). It format and structure thus the quantum distributions of space in small deformable cubes: *EVTD^2 entities*. All this would be, for the entire universe, a relatively uniform coherent background till any condensed matter body just add, in a defined area, a special energy concentration ($E=mc^2$) [21].

But in the case where a physical object exists, this material (a singularity in this case) is itself structured in EVTD^2 entities (cubic volume of approximately $0.5 \cdot 10^{-105}$ m^3). This has the effect of disrupting the intrinsic uniformity of space-time by introducing specific fields and curvatures of the EVTD^2 entities, which more or less modify the stable characteristics of this space-time. This coherent background is composed from something (because otherwise nothingness does not

physic) is what is currently appointed by the unspecified term of diffuse energy.

With regard to the new physics EVTD^2: in this Coherent background it would exist a *substrate* of something that has been called here *Substratum* [13-17] and, which would give this diffuse energy by its vibratory animation of EMW.

Even the demonstration $E = mc^2$, based on EVTD^2, verifies [21] without postulate that mass is an energy realization and a concentration of this equivalence: ***the energy (in mechanics) is a potentiality to do mechanical work***.

The *Substratum* can be correlated to current notions of *dark energy* and *dark matter* as being an identical and common substrate but with quite different densities and subject respectively to positive and negative pressures [11, 18-20] in space. These opposite signs pressures allow to explain the foundations of gravity but also the why of the Universe expansion.

The primary electromagnetic wave (EMW) therefore induces ***a basic electromagnetic composition to any Coherent Background of vacuum as well as of the condensed matter itself***. More, the vacuum of condensed matter in space, of Universe dimensions till in the atomic nucleus, is preponderant: it indeed represents about 95% of the overall volume. This wave propagation is longitudinal, which structure the joined EVTD^2 in cubic volumes that are "pushed" and "pulled" during tiny laps of time, of the order Planck's half-time ($2.695 \cdot 10^{-44}$ s).

According to our knowledge or estimations relative to the celestial body that compose the solar system, it is a good database (distances inter masses, masses themselves and their diameters, their various temperatures, equivalent black body, the albedo, the positions of the respective resulting potentials with the Sun etc.).

This does allow an assortment of values considered likely for us to engage in the calculations and estimates that will follow in two publications: this one and part II [1] in this review.

2. INITIALS COMMONS APPROACHES FOR THE FOUR DUETS: SUN AND EACH OF THE PLANETS: MERCURY, VENUS, EARTH AND MARS

Newton's law allows the next equality of ratios:

$$F_G = m_1 g_1 = m_2 g_2 = G\frac{m_1 m_2}{d^2};$$

$$\left(\frac{OM_1}{OM_2}\right)^2 = \frac{g_2}{g_1} = \frac{m_1}{m_2}, \qquad (1)$$

where m_1, m_2 are the masses, g_1, g_2 are the gravity accelerations in the balance point and, OM_1, OM_2 are the distances from the balance point O to the two respective masses.

In the EVTD^2 entities theory quantum gravitation require that gravitational fields be structured, intermittently, by electromagnetic quanta irradiated by the surfaces of the masses considered as pseudo black bodies if it is possible to know their equivalent black body temperatures, which are sometimes shown. So from there, we can only take into account geometrical quantities characterizing the duo of studied masses and the available temperatures of each of them. But also of the emissivity coefficients of surfaces, albedos of the atmospheres for each photonic flow being irradiated by each of the masses will be able finally to the area of O of the zero resulting potential for overlapping and or interfere with the photonic flow coming in the opposite direction since the mass face-to-face.

For example, this *double receiver*, will be conveniently, in O, on a surface of *1 m^2*, normal to the gravity centers axis. It is a particularly remarkable point, by ***this quantic gravity EVTD^2, because lengths of levels, respective to each of the masses, containing a quantum of photonic energy (here gravitational) are in O of the same dimension*** [14]. For example, for Earth-Moon lengths are reciprocally: $1.989896 \cdot 10^{-31}$ m [14], while in the case of the duo Sun-Earth the common value calculated in a similar way was: $1.1131327 \cdot 10^{-31}$ m. It is then necessary to deduce that each of the quanta

arriving in *O* from each of the masses has, in a way, the same wavelength (identical lengths of the previous levels for each of these photons).

This is absolutely essential to accept that there are ideal conditions for interfering or compacting in the mini black hole, which would be in O. ***This mini black hole would thus realize all properties to be the 'engine' in function to ensure the gravitational attraction by himself, what would then be no more the essential role of the two concerned masses***. *The masses would furnish only the gravitational fields by their photonic emissions* (*h·f*) *of equivalent black body*.

So in this study is targeted to try finding a suitable correlation that as part of EVTD^2 gravity and of photonic gravitational fields could more accredit the preliminary hypothesis of essential existence of a mini black hole in *O*. In addition, ***this would allow to correlate the compaction potentials at the black holes levels in report to the considered energy quanta with masses accelerations calculated for ideal conditions reported above***. This is got with a pretty good probability in the results of the common approach for different cases.

These compaction potentials of *both irradiated photonic flow, calculated, will be prioritized by their values in energy following their emitted spectral distributions*. *UV* rays are more energetic than the *IR* for example, so it will be considered. Indeed, for the compaction it is recognized that the photon energy quanta must carry a pulse, the EVTD^2 theory is in perfect agreement. In fact, in EVTD^2, photons are assimilated to shock pulse of electromagnetic vectors on the cubic entities, it therefore follows that the photon is spreading gradually in this way. Thus it is an impulse $p = h/\lambda$ or, more, $p = h \cdot f$. In SRT the relation between the energy *E* and the photon's impulsion *p* of the zero mass is: $E = c \cdot p$, hence $E = c \cdot h \cdot f$.

This is a setting of understanding ***for compaction performance of one flow relative to the other and thus inducing different gravity acceleration levels, caused by the relative attractions of mini black hole,*** which should check those obtained by the relationship of Newton.

And, in summary, the photons of one mass will have opposite directions impulses compared to those coming from the other mass especially on the axis of the centers of the masses. The impulses will be even stronger that the frequencies of photons will be high (or short wavelengths). For equal impulses of opposite directions, there will be complete annihilation (destructive interference) while it will be partial for different levels of impulse. This means a little more opposite meetings and time to get to the complete annihilation of a high energy photon. This whole process is probably what happens in a black hole and so it seems entirely correlate *the presumptions of a mini black hole existence in the area of the zero resulting potential in gravity*.

The respective average distances of the four planets closest to the Sun until their zero resulting potential with this one must be determined. But also the distances to the Sun until each of these zero potential, using the Newton relationship.

Then, with the available data, photonic flow that reach these zero potential areas from each planet and from the Sun. it be determined. These last determinations will be not comfortable because it lacks some accuracies in the data that will be necessarily used.

3. GEOMETRICAL AND ENERGETICAL QUANTITIES ON THE SUN - MERCURY DUO DETERMINATION

The Sun-Mercury duo has an average admitted distance inter gravity centers of $57.91 \cdot 10^9$ m, Mercury mass is given of $3.302 \cdot 10^{23}$ Kg, while those of Sun is $1.9891 \cdot 10^{30}$ Kg. With equality of the attraction forces and its common value by the Newton's relationship it is determined, as in [14], among others, two distances of these masses to their zero resulting potential, noted here by O_1. The distance Sun - O_1 is found SO_1 = 57886414945 m and Mercury - SO_1 of MeO_1 = 23585054 m. More, each body will be considered as spherical and, the ray of Mercury is about 2440 km while those of Sun is indicated as 697500 Km. But for this study it seems to be appropriates to consider the effects of its

photosphere at 6000°K (average thickness of about 300 Km) and also the impact on the radiation emitted by the chromosphere at 100000°K and its crown emitting at one million degrees Kelvin with extreme very energetic UV rays. So for these calculations let's take an average black body temperature of about 6100°K and a radius of the emitting Sun sphere of $6.978 \cdot 10^8$ m.

With estimated values for the further calculi we will start with the estimation of the radiative energy on the whole emitting Sun sphere. It is considered very close to a black body and its emittance can then be calculated, i.e. its photonic energy per m^2 using Stefan's law:

$$M = \sigma \cdot T^4 \text{ W/m}^2.$$

Then simply multiply this M by the whole emitting surface, i.e. the sphere of the emitting Sun:

$$E_{Sphere\,Sun} = \sigma T_S{}^4 \cdot 4\pi(6.978)^2 \cdot 10^{16} =$$
$$= 5.6704 \cdot 10^{-8} \cdot (6100)^4 \cdot 4\pi(6.978)^2 \cdot 10^{16} =$$
$$= 4.804020258616771738 \cdot 10^{26} \text{ W}.$$

This value will be used for all Sun-planets of the solar system pairs that will be studied in two publications: part I and part II.

In the same way and with intrinsic data on Mercury can make similar determination of its global photonic energy from surface. Thus, in the presumption of the black body equivalent temperature at 320°K, we get:

$$E_{Sphere\,Me} = \sigma T_{Me}{}^4 \cdot 4\pi(2.44)^2 \cdot 10^{12} =$$
$$= 5.6704 \cdot 10^{-8} \cdot (320)^4 \cdot 4\pi(2.44)^2 \cdot 10^{12} =$$
$$= 4.448392766249 \cdot 10^{16} \text{ W}.$$

For needs of good correlation and compliance, to determine the two flows coming respectively from the Sun and Mercury and arriving on *1* m^2 in O_1, each of the incidents stars global flow on each surrounding spheres is considered (i.e., in the first hypothesis without absorption between the two spheres).

The rays of these sphere are, respectively, SO_1 and MeO_1. Thus these two opposite incidents flows per m^2 on the axis of the gravity centers for the Sun-Mercury duo will be calculated:

$$E_{\substack{Sphere \\ SO_1/m^2}} = 4.804020258616 7 \cdot 10^{26} \cdot \frac{1}{4\pi(SO_1)^2} =$$
$$= \frac{4.804020258616771738 \cdot 10^{26}}{4\pi(57886414945)^2} = 11408.8\, W/\text{m}^2,$$

$$E_{Sphere\,MeO_1/m^2} = \frac{4.448392766249 \cdot 10^{16}}{4\pi(23585054)^2} =$$
$$= 6.3638\, W/\text{m}^2.$$

Furthermore we need, surely in the case of comparisons and reports of considered flows values but also of their energetic levels, a way to encrypt this proportionality of annihilation of a more energizing flow on a less opposing flow.

The Wien law enforcement seems to be a correct criterion in this sense. So, for the equivalent black body temperature of the Sun estimated to 6100 ° K are obtained, following the law of Wien, the wavelength of the maximum of the spectrum and for Mercury in the same way:

$$\lambda_{S\,max} = \frac{2.898 \cdot 10^{-3}}{6100} = 0.475 \cdot 10^{-6} \text{ m};$$

$$\lambda_{Me\,max} = \frac{2.898 \cdot 10^{-3}}{320} = 9.056 \cdot 10^{-6} \text{ m}.$$

The photon energy is given by ($E=h \cdot f$) and, knowing that there is the ratio between frequencies and wavelength as:

$$\frac{f_{S\max}}{f_{Me\max}} = \frac{\lambda_{Me\max}}{\lambda_{S\max}} = \frac{9.056 \cdot 10^{-6}}{0.475 \cdot 10^{-6}} = 19.07.$$

So in this case, we get an energy efficiency coefficient for compacting between photonic energies of (19.07) and so we can multiply the flow in O_1 from the Sun since it is he who has, among other things, the more *UV*. So the value

of the flow, per m^2 from the Sun, ***in energy equivalence*** can be represented, in O_1, by the following product which gives an equivalence between the energies of the two flows:

$$11408.8\ 19.07=217585.8\ W/m^2,$$

according with the theory, which was initially developed for gravity that would be the consequence of a photons compaction from two equivalents of black bodies, at certain temperatures, (the considered masses) in a mini black hole, here in O_1.

So we are trying to verify that the report of the respective equivalent flows in O_1 is very close to the ratio of the accelerations of the two celestial bodies in a thought experiment where they would be isolated in space. But the report of accelerations is identical in value to the report of the masses (relationship (1)), wherefrom:

$$E_{\substack{Sphere \\ SO_1/m^2}} / E_{\substack{Sphere \\ MeO_1/m^2}} = \frac{217585.8}{6.3638} = 34188;$$

$$\frac{m_S}{m_{Me}} = \frac{1.9891 \cdot 10^{30}}{3.302 \cdot 10^{23}} = 6023600 = \frac{g_{Me}}{g_S}.$$

By this first calculation, the result found (34188) is far the pseudo acceleration or the masses compliant report (*6023600*). But may be missing some data of the fact that *Mercury is the most difficult to treat because it is the closest planet to the Sun*.

This situation probably induces certain characteristics not taken into account at the moment in this first calculation. So we'll study the other three duets and further, back to the Sun-Mercury then cases where other parameters will be taken into account.

4. DETERMINATION OF THE THREE DUOS GEOMETRICAL SIZES: SUN WITH VENUS, EARTH, MARS

The zero resulting potential duo Sun-Venus is named O_2, for Sun-Earth it will be O_3 and for Sun-March O_4. For these duos couples of distances respective to zero potential is determined by calculations similar to those made for Sun-Mercury.

For Venus we consider:

- the mass of $4.8685 \cdot 10^{24}$ Kg;
- the ray of 6023.84 Km;
- VeO_2 =169025982 m;
- SO_2 =108039904017 m.

The flow in O_2 is considered at 232°K because indicated balance black body temperature is *231.7°K* in the case of Venus:

$$E_{Sphere\ VeO_2/m^2} = 0.210588\ W/m^2;$$

$$E_{Sphere\ SO_2/m^2} = 3265.735\ W/m^2.$$

The report of the frequencies of the maxima of spectral distributions, according to the law of Wien, is found here equal to: 26.3. Therefore, as previously:

$$E_{\substack{Sphere \\ SO_2/m^2}} / E_{\substack{Sphere \\ VeO_2/m^2}} = \frac{3265.735 \cdot 26.3}{0.210588} = 407852;$$

$$\frac{m_S}{m_{Me}} = \frac{1.9891 \cdot 10^{30}}{4.8685 \cdot 10^{24}} = 408523 = \frac{g_{Ve}}{g_S}.$$

Here, without taking into account other parameters, the concordance between the reports to correlate is very good! This is encouraging for the probability of the working hypothesis that has been set but, further confirmation will be required.

With respect to the Sun-Earth duo, for Earth the data are:

- Sun-Earth distance is 149597870700 m;
- Earth mass is $5.9736 \cdot 10^{24}$ Kg;
- Earth ray of 6378 Km;
- black body balance temperature of about 250°K (indicated in literature);
- TO_3 = 258799365 m;
- SO_3 =149339071334 m.

The results in O_3 for the flow values that are respectively coming from the Earth and the Sun, calculated in the same way are:

$$E_{Sphere\,TO_3/m^2} = 0.13453\,W/\mathrm{m}^2;$$

$$E_{Sphere\,SO_3/m^2} = 1712.71\,W/\mathrm{m}^2.$$

The wavelength of the maximum spectral distribution emitted by the Earth at 250°K is $11.592\cdot10^{-6}$ m, while for the Sun it is always of $0.475\cdot10^{-6}$ m. This makes a report of 24.404 times more energizing for the solar flux compared to the one of Earth. If in addition, the transmission of the flow emitted by the Earth's surface has a transmission factor of 0.935 through Earth's atmosphere, in the end for the report of energy flows in a comparable way in equivalence is obtained:

$$E_{\substack{Sphere\\SO_3/m^2}} / E_{\substack{Sphere\\TO_3/m^2}} = \frac{1712.71\cdot 24.404}{0.13453\cdot 0.935} = 332287;$$

$$\frac{m_S}{m_T} = \frac{1.9891\cdot10^{30}}{5.9736\cdot10^{24}} = 332981 = \frac{g_T}{g_S}.$$

Again, as with the results for the Sun-Venus duo, those related to Sun-Earth are also very consistent and begins to accredit the initial hypothesis of this work.

With regard the duo Sun-Mars, the data for Mars planet are:

- Mars-Earth average distance is indicated as 227937000 km;
- Mars mass is $6.4185\cdot10^{23}$ Kg;
- Mars average ray of 3390000 m;
- indicated average temperature is about 210°K.

The zero resulting potential of Sun-Mars duo is here noted with O_4. The respective distances from the point O_4 to each celestial body are:

- MaO_4 = 129406670 m;
- SO_4 = 227807593330 m.

The results for the flow in O_4 originating respectively in Mars and the Sun are, from an estimated equivalent black body temperature which would be closer to 150°K, rather than 210°K, to the surface of Mars:

$$E_{\substack{Sphere\\Ma}} = 5.6704\cdot10^{-8}\cdot(150)^4 4\pi(3.39)^2\cdot10^{12} = 4.14560569758137\cdot10^{15}\ \mathrm{W};$$

$$E_{Sphere\,Sun} = 4.804020258616771738\cdot10^{26}\ \mathrm{W};$$

$$E_{Sphere\,MaO_4/m^2} = 0.0197\,W/\mathrm{m}^2;$$

$$E_{\substack{Sphere\\SO_4/m^2}} = \frac{4.804020258616771738\cdot10^{26}}{4\pi(227807593330)^2} = 736.645\,W/\mathrm{m}^2.$$

The wavelength of the maximum spectral distribution emitted by Mars at 150°K is $1191.32\cdot10^{-6}$ m, while for the Sun it is always of $0.475\cdot10^{-6}$ m. This makes a report of 40.673 times more energizing for the solar flux compared to the one of Mars, wherefrom the results:

$$E_{\substack{Sphere\\SO4/m^2}} / E_{\substack{Sphere\\MaO_4/m^2}} = \frac{736.645\cdot 40.673}{0.0197} = 1520917;$$

$$\frac{m_S}{m_{Ma}} = \frac{1.9891\cdot10^{30}}{6.4185\cdot10^{23}} = 3099010 = \frac{g_T}{g_S}.$$

The difference between the results is great. It therefore seems to must appeal to other considerations in this case.

On the other hand, it is recognized that the atmosphere of Mars for red, relatively dense dust clouds, can absorb up to 40% of the solar radiation. So these clouds can have an equivalent effect of average transmission of 60% on the *IR* radiation, irradiated by the Martian soil to especially O_4. In addition, the surface of Mars is probably not an almost perfect black body so it has an emissivity factor less than 1.

Ultimately we must multiply the flow emitted by March and arriving in O_4 by an estimated overall factor of combined transmission, for example, to the value of *0.48*. Thus, the previous report made closest to Martian ground and atmosphere circumstances indicates the value:

$$E_{\substack{Sphere \\ SO4/m^2}} / E_{\substack{Sphere \\ MaO_4/m^2}} = \frac{736.645 \cdot 40.673}{0.0197 \cdot 0.48} = 3168577,$$

this compared to the same report that initially was:

$$\frac{m_S}{m_{Ma}} = \frac{1.9891 \cdot 10^{30}}{6.4185 \cdot 10^{23}} = 3099010 = \frac{g_T}{g_S}.$$

It's so that the same mode of relative calculations also allows for the duo Sun-Mars a third time to correlate reports of the masses and respective gravitational accelerations with the corresponding equivalent photonic flow arriving at zero resulting potential respective to each of the duos and, this with a very good agreement.

Therefore, before these encouraging results for Venus, Earth and Mars, to take back in account to the Sun-Mercury duo.

It seems maybe proper that we should intervene on the flow that is used from the Sun and arriving in O_1 because Mercury is the closest planet to the Sun. Here it must be mentioned that close enough to the heliosphere the Voyager determined solar winds with large magnetic fields in Parker spiral shape and, also very high energy levels at the borders of the heliosphere.

In addition, because of its proximity, extreme *UV* radiation happens surely in O_1 so, for these reasons *it seems more to consider a stronger energizing factor of the solar radiation* than *19.07* who initially was took into account.

Then, the problem is how does be increased this latter? Furthermore, on the side of the *IR* photons flow arriving in O_1 since Mercury it is likely that very large solar magnetic fields detract and deviate the its density and propagation.

The second problem is to estimate this mitigating effect on the Mercury radiation reaching in O_1.

A third factor is to take into account, for example, the Mercury flow decrease by estimating of an emissivity factor value of the Mercury ground.

So, a possible approach is to encrypt these three effects that are complementary to an increase of the calculated report in comparable proportion, who would then be much more nearby in value compared to the so-called reference value, in the case of 6023600.

This is a new calculation, taking into account of these kinds of factors, to bring much closer the flows' report to the Sun and Mercury masses ratio.

So, we take the supplementary energizing factor of 40 for extreme *UV* solar radiation, the attenuating effect of 0.5 in this space for the radiation emitted by mercury and, factor the 0.45 value for the emissivity factor of soil:

$$E_{\substack{Sphere \\ SO_1/m^2}} / E_{\substack{Sphere \\ MeO_1/m^2}} = \frac{217585.8 \cdot 40}{6.3638 \cdot 0.5 \cdot 0.45} = 6078431,$$

$$\frac{m_S}{m_{Me}} = \frac{1.9891 \cdot 10^{30}}{3.302 \cdot 10^{23}} = 6023600 = \frac{g_{Me}}{g_S}.$$

Thus the correlation between studied reports is being found, in a suitable way, as with the other three pairs studied in this work. So, the four calculations provide a strong correlation to the hypothesis and are recalled in Table 1.

Table 1.

Synthesis of the intermediate results and equivalent flows from the Sun and planets to the respective zero resulting potential. The calculated R_a (flows' ratio) for each of four duos Sun and a planet are compared in correlation with masses ratios and with respective gravitational accelerations.

Duos Sun (*S*) – Planets (*P*)	Equivalent flows in zero resulting potential from: W/m^2		Flows ratio $R_a = \frac{F_S}{F_P}$	$\frac{m_S}{m_P} = \frac{g_P}{g_S}$
	Sun (F_S)	Planets (F_P)		
Sun -Mercury	8703432	1.43186	6078431	6023600
Sun - Venus	85888.83	0.210588	407852	408523
Sun - Earth	41797.00	0.125786	332287	332981
Sun - Mars	29961.56	0.09456	3168523	3098710

4. CONCLUSION

Relatively solar system probable data here used allowed to highlight certain coincidences and correlations between the masses and gravitational acceleration ratios and, those relating to the various reports of the photonic flow equivalent in energy levels arriving in their zero resulting potential for each of the considered celestial bodies duos.

The major importance of the zero resulting quantum potentials has been demonstrated by encryption of intrinsic essential conditions to this area inter masses.

These results and those in the following second part bring additional accreditation to the hypothesis of the existence of mini black holes "vacuums" consistent with observed effects, but not fully explained, so far, of gravity between two masses. ***These black holes should be positioned to zero resulting potential. In the end the masses are playing only a far more passive role consisting only in the implementation of gravitational fields, structured in quanta h levels.*** These fields are structured by radiative emissions “black body” of masses at temperatures above 0°K.

The "vacuum" effect would be an area (black hole) where the photonic flow from the masses would annihilate (destructive interference). Thus, these mini black holes would be the representation of areas where specific radiative energy disappear to be transformed into diffuse energy level (according to the energetic state of the consistent background of quantum space-time $EVTD^2$).

Various compaction relative speeds are directly linked to evolutionary speeds of masses approaching displacements to their zero resulting potential area and so, to govern the acceleration of the masses movement (when they are compatible with the involved physical processes).

In this sense the image, that would represent this new understanding of the attractive effect of gravity, ***is annihilation of photonic potentials so-called gravitational and each masse into the black hole that is positioned at zero resulting potential***. ***It is acting somewhat like a vortex vacuum cleaner until the masses directly related to their photonic energy potential***.

These are various work compacting and spacing of EMW, omnipresent throughout space-time, to induce these different phenomena on and around the zero resulting potential.

It is the masses of Sun-Venus duo who offers the better approached correlation because calculi are the most direct without adaptations as is mostly the case of Sun-Mercury, this planet being the closest to the Sun, with all the implications that this entails.

The results are very suitable for Earth and Mars.

So the results indicate a clear correlation, which will also be confirmed in [1] (second part) for the other four planets beyond the asteroid belt: Jupiter, Saturn, Uranus and Neptune.

From this beginning of presumption, which is being supported in part II, it seems likely, for the existence of a mini black hole in zero resulting potential, to can even extrapolate this situation within all agglomerates of condensed matter which would have enough volume symmetry.

This last phenomenon is due to the electromagnetic waves emitted by all the electrons of the atoms, and there would be the possibility of their annihilations at the center of mass symmetry. Indeed radiation can pass in condensed matter since it is empty to over 95%.

This is to put in parallel with the work [12] on the nature and the creation of a black hole at the center of most galaxies.

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Gravitația cuantică EVTD^2 și câmpurile gravitaționale fotonice: existența unor mini găuri negre în explicarea fenomenelor. Sistemul Solar constituie o bază de date, partea I: Soarele și cele patru planete apropiate de el

Rezumat: Această lucrare este urmată, în același număr al acestei publicații de partea a doua [1]. În acest articol sunt propuse continuări și adăugiri la lucrările [2-3], în gravitația cuantică EVTD^2 [4-11], referitor la potențialul energetic fotonic gravitațional. Efectele atractive și repulsive ale sarcinilor electrice de semne opuse sau de același semn, noțiunile de găuri negre și găuri albe, respectiv poziționate la nivelul potențialului rezultant zero al acestor perechi de sarcini [2-3] sunt utilizate aici numai pentru mase. Soarele și cele opt planete ale sale constituie o bază de date ce va fi utilizată în studiu pentru a încerca să se pună în evidență noile ipoteze ale fizicii EVTD^2. Aceasta se va realiza prin calcule referitoare la fluxul fotonic emis din cauza temperaturii maselor considerate și care, ajunge la mini gaura neagră poziționată în fiecare potențial rezultant zero unde se produc, foarte probabil, interferențe destructive. Aceasta ar acredita funcționarea previzibilă a unei găuri negre. Corelația rezultată din calcule, comparate cu accelerațiile gravitaționale, confirmă procesul de compactare cu intensități și viteze variabile ale fotonilor din cele două câmpuri fotonice și gravitaționale în gaura neagră.

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