

# Pulsation of Suns Gravity and Magnetic Field, According to the Theory of New Axioms and Laws

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Submitted: 2024, Jul 12; Accepted: 2024, Aug 16; Published: 2024, Sep 06

Citation: Markova, V. (2024). Pulsation of Suns Gravity and Magnetic Field, According to the Theory of New Axioms and Laws. *Adv Theo Comp Phy*, 7(3), 01-09.

## Abstract

This article uses and applies knowledge from previous works by the same author. The Theory of new Axioms and Laws is applied to explain the structure and action of the Sun.

According this new Theory the Sun is a generator of low-frequency Gravitational and high frequency Electromagnetic energy. The Gravity energy is two types - transverse and longitudinal. Each of them can be accelerating or decelerating.

The longitudinal Gravity vortices have properties to pack in Gravity Funnels . The accelerating longitudinal vortices make accelerating Funnel, but decelerating longitudinal vortices pack decelerating Funnel. The Sun is a source of Gravity as simultaneously attracts along a longitudinal wave (accelerating to decelerating Funnels) and repels along a transverse wave . Thus the Sun arranges the planets in the current order.

In periphery of decelerating Funnel, there are some vortices, which have almost zero acceleration. They are perceived as the Magnetic field of Sun. Because lack of acceleration the longitudinal vortices with almost constant speed do not pack into orderly Funnels. They are emitted (down) individually from the North Pole and sucked (on top) in from the South pole. This direction of Magnetic field of Sun is the same to direction of Magnetic field of planet Earth. It is very basic that in Earth the Magnetic field has completely different origin than this in Sun. The descripted situation is real only for case of minimum action of Sun and calm generation of Sun body. But in case of maximum action of Sun the situation is very different .Therefore it is very interesting the origin of the Sun bulges, as they are connected to the maximal and tense generation of the Sun body.

The new Theory includes 2 Axioms and 8 Laws. This article uses 2 Axiom and only 4 Laws.

#### **1. Introduction**

The Classic Axiom states that movement of a vector with constant speed always form closed loop [1]. This statement idealized the nature of the electromagnetic field, but for the purposes of theory and practice at the time it was very appropriatehis. This Classic Axiom becomes a base of ideal description of Electromagnetic field. It discribes Electromagnetic field as waves moving with constant velocity (Figure1a).

In this article is used invented by the author aTheory of new Axioms and Laws which consists 2 new Axioms and 8 Laws. In this article is used 1 new Axioms and onky 4 new Laws [2-4].

New Axiom 1: It states that the movement of a vector with a variable speed (monotonically decelerating or monotonically accelerating) always forms an open vortex.

The result in 2D is that we get a decelerating transverse or accelerating transverse vortex. And in 3D - we get a longitudinally

decelerating or longitudinally accelerating vortex. Therefore instead of 1 movement (according Classical Axiom) we get 4 types of movements as vortices in 2D and 3D. The other result is that the open vortex is always eccentric. The center of eccentric is not in Geometric center, but it is replaced in so called Gravity center. (Figure1b).

New Axiom 2: A pair of two orthogonal vortices exists in the same Time and Space as exchange matter and energy in resonance system.

For example proton emits matter to electron which emits energy to proton in resonance.

Law 1 for the Electron: It states that a transverse decelerating vortex from the outside-in in plane 2D generates in its Gravity center a longitudinal acceleration vortex in volume 3D which is perpendicular to plane 2D. An example of an open decelerating transverse vortex in 2D is an electron with Gravity center in second quadrant (Figure 1b) [4].

Law 2 for Proton: It states that a longitudinal decelerating vortex in volume (3D) generates accelerating transverse vortex in plane (2D) from Gravity center to outward .The example for the open accelerating transverse vortex is an proton with Gravity center in first quadrant (Figure 1c) [2-4].

**Law 5 for 2D:** The main decelerating vortex (in 2D) has decreasing longitudinal velocity (V) and emits outward many primary decelerating vortices with increasing amplitudes (W), where at every i-th step the variable is changed by a degree of the parameter  $\psi$  ( $\psi^1$ ) and  $\psi$  is equal to the Golden proportion (Figure 1d) [5, 6].

Law 5 for 3D: The *deceleration* vortex in 3D is described with a <u>system of 4 equations</u> in which: longitudinal velocity (V) decreases in (n) portions ( $\psi^n$ ) times; the angular velocity (w), the amplitude (W) and the number (N) of cross vortices increase in (n) portions ( $\psi^n$ ) times:  $I V^2 = V_0 (1 - V)$ ,

$$I W^{2} = W_{0}(1 + W),$$
  

$$I W^{2} = W_{0}(1 + W),$$
  

$$I W^{2} = W_{0}(1 + W),$$
  

$$I N^{2} = N_{0}(1 + N).$$

where vn, wn are periodic roots with period n; vn, wn are **mutual** orthogonal that fulfill the requirement for orthogonality :  $\mathbf{v}_n \cdot \mathbf{w}_n = \mathbf{V}_0 \cdot \mathbf{W}_0$ ;  $\mathbf{n} = \mathbf{0} \div \infty$ ; the roots  $\mathbf{v}_n$ ,  $\mathbf{w}_n$  and  $\mathbf{\omega}_n$  and  $\mathbf{n}_n$  are expressed as:  $\mathbf{v}_n = (1/\psi^n) \cdot \mathbf{V}_0$ ,  $\mathbf{\omega}_n = \psi^n \cdot \mathbf{W}_0$ ;  $\mathbf{w}_n = \psi^n \cdot \mathbf{W}_0$ ;  $[\mathbf{n}_n] = \psi^n \cdot \mathbf{N}_0$ ; linear velocity  $\mathbf{V}_0$  is the starting value of  $\mathbf{V}_n$ , amplitude of cross vortex  $\mathbf{W}_0$  is the starting value of  $\mathbf{\omega}_n$ , angular velocity  $\mathbf{w}_0$  is starting value of  $\mathbf{n}_n$ ,  $[\mathbf{n}_n]$  is the closest integer ;  $\psi$  is a proportional that fulfills the requirement:  $\psi - 1/\psi = 1$ ,  $\psi$  is known as Golden ratio.

In Space where we live the most movements are decelerating. The reason is that the transverse vortices have density and their some kind of mass. The result is that this Space is full of transverse vortices and they exerts resistance. The corresponding Space-Time is described by constant of Time (as a proportion).

**Law 6 for 2D:** The main *accelerating* vortex (in 2D) has increasing longitudinal velocity (V) and sucks inward many primary accelerating vortices with decreasing amplitudes, (W), where at every i-th step the variable is changed by a degree of the parameter ( $\psi^i$ ). and  $\psi$  is equal to the Golden proportion, (Figure 1e) [6, 7].

**Law 6 for 3D:** The *acceleration* vortex in 3D is described with a system of 4 equations in which: longitudinal velocity (V) increases in (n) portions ( $\psi^n$ ) times, the angular velocity (w), the amplitude (W) and the number (N) of cross vortices decrease in (n) portions ( $\psi^n$ ) times: I V<sup>2</sup>= V<sub>a</sub> (1 +V),

IV	$V^{2} =$	W	"(1 -	Ŵ),
I v	$v^2 = v^2$	พ	(1+	w),
IN	$N^2 = 1$	Ň	(1+	N).

where  $v_n, w_n$  n are periodic roots with period n;  $v_n, w_n$  are **mutual** orthogonal that fulfill the requirement for orthogonality :  $v_n.w_n = V_0.w_0$ ,  $v_n.\omega_n = V_0.W_0$ ;  $n = 0 \div \infty$ ; the roots  $v_n$ ,  $w_n$  and  $\omega_n$  and  $n_n$  are expressed as:  $v_n = (\psi^n).V_0$ ,  $\omega_n = (1/\psi^n).W_0$ ,  $w_n = (1/\psi^n).W_0$ ,  $n_n = (1/\psi^n).N_0$ ; linear velocity  $V_0$  is the starting value of  $V_n$ , amplitude of cross vortex  $W_0$  is the starting value of  $\omega_n$ , angular velocity  $w_0$  is starting value of  $w_n$ , **number**  $N_0$  is starting value of  $n_n$ ;  $\psi$  is a proportional that fulfills the requirement:  $\psi$ -1/ $\psi$ =1, where  $\psi$  is Golden ratio.

From previous publications a very useful conclusion has been drawn that in Space out of Earth live the most movements are of longitudinal vortices .But they are not decelerated. but they are even accelerated The reason is in qualities of longitudinal vortices and lack of matter in Space and the result is lack of resistance.The corresponding Space-Time is described by constant of path (as a length of spiral).



Figure1: Description of Law1, Law2, Law5 and Law6

#### 2. Description of the Decelerating Longitudinal Funnel

a) Description of Spirals (Vortices) in Decelerating Funnel According to Law 5 for 3D the main decelerating vortex with decreasing velocity (V) emits decelerating primary vortices to the surrounding Space with increasing amplitudes (W) (or radius R) increasing angular velocity (w) and increasing number of loops (N) (Figure1d) [7].

Because of friction of decelerating primary vortices to environment the main decelerating vortex is delayed even more. As less is a longitudinal speed (V) as longer are amplitudes (W) of the transverse emitted vortices. And inverse - as more is a longitudinal speed (V) as shorter are amplitudes (W) of the transverse emitted vortices (Law5) [8].

Thus the longitudinal decelerating vortex which has greater velocity (V1) (shorter primary emitted vortices) and less radius (R) to insert inside a longitudinal decelerating vortex of lower velocity (V2) and larger radius(R). This occurs like the faster vortex (V1) is inserted into the center, and the slower vortex (V2) is coiled on the outside and they make some kind of package. The reason is that the longitudinal decelerating vortex with lower velocity (V2) is that has shorter transverse (W1) vortices than the slower vortex (W2):W1<W2 (R1<R2). This means that the slower vortex sucks to inward the faster vortex (Figure 2a).

**Result:** The reason a longitudinal decelerating vortex with more velocity to insert inside the longitudinal decelerating vortex with lower velocity is that the faster vortex has shorter transverse vortices and radius than the slower vortex.

This package may contain not only two but many more longitudinal decelerating vortices with different longitudinal velocities and negative accelerations.In such way is formed a longitudinal decelerating Funnel (Figure 2a).

**Result:** The decelerating longitudinal vortices forme an unique longitudinal decelerating Funnel.

Therefore the structure of decelerating Funnel is that in the

a)

b)

Accretion disks thicken toward periphery center of the Funnel inserts the longitudinal vortex with maximum longitudinal speed (Vmax) and minimum number of windings (Nmin), minimar radius (Rmin) and the primary transverse vortices with minimal length (Wmin) and minial angular velocity (w min). But in the periphery, the longitudinal vortex has minimum longitudinal speed (Vmin) and maximum number of windings (Nmax) (maximal radius, Rmax) and the primary transverse vortices are with maximal length (Wmax) and have maximal angular speed (wmax) of rotating (Figure 2a).

Therefore the outer (peripheral) spirals not only have a larger radius in Space, but simultaneously they also expand in Time in the direction from the beginning to the end of the Funnel. The decelerating spirals and the decelerating Funnel in Time rotates to right (if observer is opposite the moving).

**Result:** The decelrating longitudinal Funnel expands from inside -out and simultaneously is rotated to right (if observer is opposite the moving).

The radius of the decelerating Funnel increases (to maximal, Rmax), the transverse velocity of the peripheral vortex increases as well (wmax) Thus the decelerating Gravity Funnel emmits primary transverse vortices to outside. Actually the primary transverse vortices pushe the primary form of matter in direction from inside-out [9-11].

**Result:** The decelerating Gravity Funnel generates primary matter to the surrounding Space outwards.

The Funnel acts so that it works pushing and expanding its radius (R) decelerating outward also in non-linear mode. At the same time it rotats the primary matter outward its radius.

**Result:** The emitting outward and rotating to right the decelerating Funnel also is in decelerated non-linear mode.

This means that the negative acceleration of longitudinal velocity (V) decreases with a increasing step (Law 6).

V- long.velocity;w-angular velocity; R-radius; N-number of loops. W-amplitude of transverse vortices

> V decreases; w,R ,W increases V1>V2; w1<w2; N1<N2

Decelerating Funnel works from center to periphery and stirs to right

Accretion disks expand and rotate and generate matter

Figure 2: Decelerating Funnel: Decelerating Spiral Rotates to Right in Time (While Accelerating Spiral Rotates in Time to Left)

decelerating

-point of observer

rotates to right For Example: According Law5 if the starting longitudunal velocity is V1, the firs current longitudinal velocity equals V1:( $\psi^1$ ), the second current velocity will decrease to V1: ( $\psi^2$ ), the third velocity is much less V1:( $\psi^3$ ) and so on to n-th velocity which is minimal V1:( $\psi^n$ ), where  $\psi$  is the Golden proportion equals approximately to 1,62.

If the starting amplitude is W1, the amplitude of the first emitted vortex is W1. ( $\psi^1$ ), the second amplitude will increase to W1. ( $\psi^2$ ), the third amplitude is much more W1. ( $\psi^3$ ) and so on to n-th amlitude which is maximal W1.( $\psi$ n), where  $\psi$  is the Golden **proportion** equals approximately to 1,62.

If the Funnel consists of several decelerating spirals their diameters are also increase decelerating (the difference  $2R_{i-2}R_{i-1}$  decreases). This means that in cross section the circles with increasing diameters (...2 $R_{i-3}$ ,  $2R_{i-2}$ ,  $2R_{i-1}$ ,...) will form condencing circles with decreasing distance between them. The decelerating rate of increase in the amplitude of the transverse vortex of the Funnel means that the increasing of radius of the Funnel is also non -linear decelerated.

**Result:** The Increasing of Radius of the Decelerating Funnel is Non -Linear Decelerating.

The circles of cross section of decelerating Funnel form so called Accretion Discs. They represent concentric circles with decreasing distance between them in direction from center to the periphery of Funnel (Figure 2b).

**Result:** The Accretion Discs are concentric circles in cross cection of decelerating Funnel with decreasing distance between them in direction center -out.

It is well known that the non-linear distribution around an object as the Funnel distorts the Space.

**Result:** The uneven non-linear distribution of decelerating Accretion Disks distorts the Space from inside to outward of the decelerating Funnel.

**Result:** The expansion of Accreation Disks around body from inside to outward means that the body repulses other bodies from itselve to outward.

It is obviously that the spirals and the Funnel expands non-linearly in form of decelerating Accreation Disks as well (Figure2b). But the reason for distortion of Space is the non-linear acceleration with which the primary matter is radiated from inside the Funnel to the Space around.The non-linear negative acceleration is reason but it form decelerating Accreation Disks as result.

**Conclusion:** The non-linear negative acceleration of decelerating Funnel is the reason, but for the distortion of the Space inside and around the decelerating Funnel is only one of result. This distottion has form of decelerating Accreation Disks in direction center-out.

The scientists observe these Accretion wheels and make conclusions about the magnitude of the negative acceleration.

**Conclusion:** The Classical Gravitational Theory claims that the Gravitational repulsion of material bodies due to distortion of Space around them because of forming decelerating Accreation Disks round them.

#### b) Hight-frequency modulation in decelerating Funnel

All spirals involved in the decelerating Funnel pulsate at a very high frequency (not known). This high frequency is both amplitude and frequency modulated on the carrier spiral. Therefore, the spiral in center, which is almost straight will pulsate both in width (amplitude) and in length (frequency).

In the central vortex, the frequency modulation (along length) is much more significant then amplitude (in width). The sharp contraction of the length of the longitudinal spiral means the sharp decreases of longitudinal velocity. This is the reason to emit the primary transverse vortices around (Law 5). This is the reason that the Space inside the decelerating Funnel is saturated with primary longitudinal vortices in direction from in to out.

**Result:** Due to high-frequency modulation, the vortex in center emits out of itself primary transverse vortices as fills and expand the internal space of Funnel.

In the peripheral vortex, the amplitude modulation (in width) is much more significant than frequency modulation (along length). The sharp contraction (in width) of the radius of the peripheral vortex attracts primary vortices from each outer layer. The sharp expanion of radius repulse each outer layer and emits primary vortices outward.

**Result:** High frequency Pulsating of decelerating Funnel causes much more emitting of primary vortices outwards.

Except this is observed the fenomena of Back wave. The reason is friction of Funnel by environment. The starting outer layer lags a little (d) and arrives at time t0. The first outer layer lags more (d. ( $\psi^1$ ) and arrives at time t1. The second outer layer lags even more (d. ( $\psi^2$ )) and arrives at time t2. The third outer layer lags even more (d.( $\psi^3$ ) and arrives at time t3, and so on until he n-th layer, which lags behind the most (d.( $\psi^n$ ) and arrives in time tn, where ( $\psi$ ) is Golden proportion. If we connect t0,t1 ,t2 , t3 etc., we will get a reverse transverse wave orso called Back wave in the opposite direction of the initial longitudinal-transverse vortex.

**Result:** Due to low viscosity and high friction, the outer layers lag behind each other **in Space** (not in Time) but form a reverse Back wave **in Time.** 

But the most curious effect is that although the outer layers move decelerated (due to friction) the reverse Back wave move accelerated. The special thing is that this acceleration is not in Time, but in SpaceThe reason is that in every outer next layer the viscosity decreases. The result is that the delay increases in Space (not in Time). Therefore the Back wave turns out to be accelerating in Space (not in Time). The reason is that in each subsequent outer layer the viscosity (cohesion) decreases and each subsequent outer layer lags more and more or it slides more and more [8, 9].

**Result:** The return Back wave is accelerating in Space (not in Time). Therefore, on the return trip for the Back wave, this increasing lag becomes an increasing acceleration. The Back wave becomes an accelerating wave for the Space of (n) layers in the direction from the center to the periphery.

# 3. Properties of Longitudinal Vortex and Longitudinal Funnels

a) Longitudinal Vortices are Invisible to an Outside Observer The reason for that the longitudinal vortices are invisible to an outside observer is that there is a qualitative difference between the light wave and the longitudinal vortex. The light wave is transverse and moves transversely to the direction of motion, and the longitudinal wave has a longitudinal structure and twists longitudinally along the direction of motion.

The reason of process of invisibility is as follows: First- the transverse light wave reaches to the longitudinal thread of the longitudinal vortex. Second - the light wave crosses the longitudinal thread, but is not reflected by it. The reason is that the thickness of the longitudinal thread is incommensurately smaller than the wavelength of the light wave.

**Result:** The longitudinal vortex is invisible because the light wave is a transverse vortex which only surrounds the thread of longitudinal vortex but not reflects by it.

Therefore the light wave is not reflected but goes around the thread and continues in the previous direction and with the previous speed .This reaction is known and defined as diffraction [6-8].

**Result:** The longitudinal vortex is invisible because light wave continues in the previous direction and with the previous speed.

This described reaction is known and defined as diffraction [7,11,14].

**Result:** The longitudinal vortex is invisible because light wave (as transverse wave) makes diffraction around the thread of longitudinal vortex.

#### b) Decelerating Funnels from Longitudinal Vortices are also Invisible. Accelerating Funnels are Invisible as well

Diffraction is the reason why Funnels from longitudinal vortices are also invisible

**For example:** The longitudinal bond between the electron and the proton is also invisible. The unique phenomena is that the direction is from electron to proton. The reason is that the longitudinal connection from the electron to the proton also represents a longitudinal Funnel which first is an accelerating Funnel, then is a decelerating [7, 8]. **For example:** The longitudinal link between planet Earth (all internal planets) and the Sun is invisible as well. The reason is that the longitudinal connection from the Earth to the Sun also represents a longitudinal Funnel which first is an accelerating Funnel (at Earth ), then is a decelerating Funnel (at Sun) [9].

We saw that the effect of invisibility is the result of diffraction of a transverse light wave around the thread of longitudinal vortex. If this light wave is modified, perhaps a denser Funnel can be seen, albeit as a silhouette or shadow. Such modification can be light polarization, frequency or phase modulation or etc.

## c) An Very Unique Space-Time in Longitudinal Funnels (Accelerating or Decelerating) are Formed. They have a Constant Path along the Spirals which are Inserted one into the Other: S=Const.

A new type of Space-Time is formed inside the longiyudinal Funnel. The longitudinal vortices self-organize so that they arrange themselves inside the Funnel, according to the differences in their longitudinal velocity (V), which covers the longitudinal path in time (T). Also it has a precisely defined transverse (angular) velocities (W) and precisely number (N) of transverse loops [9].

**Result:** The longitudinal vortices self-organize so that they arrange themselves inside the Funnel, according to the differences in their parameters: longitudinal velocity (V) angular velocity (w), amplitude of primary transverse vortices (W), nuber of loops (N).

**In the center** is the fastest longitudinal vortex with a maximum longitudinal speed (Vmax). It covers the spiral road in minimal time (Tmin). This is occured because the central longitudinal vortex is straightening because it has a minimum number of loops (Nmin) with minimum radii (Rmin), in which the vortex along loops has a minimum angular velocity (w min). Therefore in center: Tmin=F(Nmin,Rmin,w min), where F is complex non-linear function. The longitudinal vortex straightens, longitudinal velocity increases, but radii decrease. This is the reason the path along the the spiral to stay constant:

#### S=Vmax .Tmin=const.

**Result:** The central longitudinal spiral vortex has maximal velocity (Vmax) and minimal number of loops (Nmin) and is therefore almost upright.

**Result:** The central spiral experiences almost no resistance from the material environment and passes through it as if through a transparent medium.

In the middle it is posed the adjasent slower vortex with an average spiral velocity (Vav) which covers the road in average time (Tav). In the same time It has an average transverse angular velocity (w av) with an average number of transverse loop (Nav). Thus the path of this comparatively more coiled spiral is also is equal the previous constant: S=Vav.Tav. = const.

**For Example:** Let's imagine a spring that we stretch and contract in length. When the spring is stretched, it has a small number of loops with a smaller radius. When the same spring is comressed, it has bigger number of loops but with bigger radius .But the length (S) of spring is one and the same and S=const.

Therefore if the central spiral is maximum crucified, then the peripheral spiral is maximal rolled up. And when the one and the same spring coiled it has a larger number of loops with a larger radius .But the length is the same because it is one and the same spring in a different stretched state [7, 8].

**Conclusion:** The internal and external spiral in a Funnel have the same length because they represent the one and the same spiral in different stretched states.

**In the periphery** is coiled the slowest vortex with smallest spiral velocity (Vmin). It covers the spiral path in maximal time (Tmax). This is occured because the spiral vortex is maximal coiled with a maximal number of loops (Nmax) with maximal radii (Rmax), in which the vortex must travel with a maximal angular velocity (w max) Therefore: Tmax=F(Nmax,Rmax,wmax). When longitudinal velocity (Vmin) is minimum ,angular velocity (wmax) is maximum and radius (Rmax) is maximum as well.

We saw that in periphery the spiral vortex is much coiled with many in number and large loops while in the center the spiral vortex has long but straight path almost without loops. This is the reason the path along the periphery spiral to be equal to the path of central spiral .This means that the path remains the same constant as it is equal to the previous and to more previous constant: **S=Vmin .Tmax = const.** 

**Result:** The peripheral vortex is highly coiled and highly retarded.

When longitudinal Funnel is a decelerating Funnel, then (according Law5) the periphery vortex emits primary transverse vortices to environment The most important is that this peripheral longitudinal vortex posses the largest transverse angular velocity (w max) with the largest radius (Rmax). This means that it acts like a stirrer .For example : by this way the proton particle is generated as stired in vacuum.

**Result:** In decelerating Funnel the peripheral spiral experiences large resistance from the material environment and acts in denser

medium like a stirrer inside- outside.

The peripheral vortex has a maximum accelerating angular velocity (wmax) generating a maximum radius (Rmax). That is the reason the periphery spiral to act as a mixer in a denser medium. According new Axioms and Laws every material particle and the bigger material body are made by transverse vortex. This is the reason (Law2) the longitudinal peripheral vortex to generate such transverse vortex. It pushes and expands the primary transverse vortices to outside. At the same time it rotates them as a mixer. Thus transverse vortex creates the material body.

**Conclusion:** The longitudinal decelerating Funnel transforms part of Energy (from the center) to matter (towards periphery), generating matter in vacuum.

## 4. Calm Generating in Minimal Action of Sun

Until now we have lived and known the calm phase of the Sun. Science has a lot of observations and knowledge about this regime of the solar corona and about the behavior of the Magnetic field of Sun.

## a) Generation of the Sun in Calm Phase

In the period of the calm Sun, the generation the body of the Sun takes place according to Law 2 of the new Axioms and Laws. But more accurately described, the body of the sun consists of 4 cylindrical volumetric resonators inserted into each other (there is not Figure). This corresponds to the forming of decelerating Funnel as the longitudinal spirals inserted into each other (Figure 3a).

Therefore the volume of the body of the Sun is generated in accordance with 4 steps (of Law 2), inserted into each other. The volume resonators are 4 what is the number of internal planets -Mercury, Venus, Earth, Mars. Generation of the inner planets occurs from the corresponding transverse vortices as exits of the Sun (Figure 3n). It should be noted that the generation of the outer planets occurs in a similar way, but from the longitudinal vortices, but emitted by each of the corresponding inner planets, and not from the Sun.

A very simplified similarity is the generation of the body of the proton. It has only one vortex (spiral). Or (according Law2) there is one longitudinal decelerating vortex outside -inn which generates one transverse accelerating vortex inside -out.



Figure 3: Magnetic Field of Sun in Calm Generation

This decelerating Funnel comes from Space and generates the body of the Sun. It is is complex and is composed of 5 longitudinal vortices inserted into each other according to the speed of movement (Figure 3a).

**In the center** there is one transit vortex (zero number) -the fastest, with maximum speed and very positive acceleration (Figure 3 c). It generates the central core of the Sun (Figure 3 d). The reason is that (according Law6) ths vortex with posutive acceleration absorbs energy and mass from the environment (Figure 3 c). Thus the core in center cools and is compacted (Figure 3 d). After this the zero vortex continues its transit path. Therefore the core of the Sun must be cold and dense.

**Result:** The core of the Sun is cold and dense.

On the outside is the first spiral (Figure3c). It still has a high linear speed (V) but a low angular speed (w) and low amplitude (W) of diameter of loops. It resonates in the first volumetric resonator (there is not Figure). It has a small diameter (small W) and a high height (high V). The first volumetric resonanor looks like a straight parallelepiped. This first volumetrical resonator has minimal volume [9]. It generates the first planet Mercury. Therefore, the first planet Mercury has a minimal mass (min. W of diameter), very high orbital speed (max.longitudinal speed V) and a minimal axial speed (min.angular speed w). This is the reason Mercury to be a smallest and the fastest planet and to rotate around the Sun like a moon (it turns the same side to the Sun) [8, 9].

**Result:** The planet Mercury is a small in mass, rotates fastest around Sun planet and rotate around its axis like a moon (it turns the same side to the Sun).

On the periphery of decelrating Funnel there is the third spiral. It has a lower linear speed (V) but a higher angular speed (w) and

bigger amplitude (W) of diameter of loops. It resonates in the third volumetric resonator, which has a bigger diameter (big W) and a lower height (low V) (not Figure). This third volumetrical resonator looks like a cube.

The third volumetrical resonator generates the third planet Earth. Obviously the cube inscribed in a sphere (for Earth) has maximum volume and respectively maximum mass and energy (not Figure). Therefore, the third planet Earth must have a maximum mass (max. Wof diameter), lower orbital speed (lower longitudinal speed V), and a higher axial speed (higher angular speed w) [9].

**Result:** The third longitudinal vortex resonates in third volometrical resonator in body of Sun which has appearance of cube, and this is the reason planet Earh to have a maximal mass, to rotate slower around the Sun (about 365 days) and to rotate faster around its axis (about 24 hours).

The outermost vortex in decelerating Funnel (Figure3a) is the fourth spiral.

It has a lower linear speed (V) but a higher angular speed (w) and bigger amplitude (W) of diameter of loops (rings). It resonates in the fourh volumetric resonator, which looks like a recumbent parallelopiped (not Figure). It has a bigger diameter (big W) and a lower height (low V). Or it has a bigger amplitude (W) of diameter of loops and a lower linear speed (V) but a higher angular speed (w) (there is not a Figure). This fourth resonator generates the fourth planet Mars. The previous description is thrue if we considered Mars with its 2 satellites [10].

But if we consider Mars without its 2 satellites, the correction for Mars is the less mass and a little lower (instead higher) axial speed (lower angular speed w). **Result:** The fourth longitudinal vortex resonates in fourth volometrical resonator with appearance of recumbent parallelepiped, and this is the reason planet Mars to have ( in comparison of Earth) a less mass, to rotate slowest around the Sun (about 687 days) and to rotate little slower around its axis (about 24,5 hours) [11].

# 5. Tense in Generation of Sun in Mode of Maximal Action of Sun

For a long time the scientists It is observed how the decelerating Funnel which comes from Space (Figure 3a) pulsates. This Funnel is invisible comes from Space and is emitted by an unknown source. Apparently, this source also pulsates. After the calm period of the Sun (of about 12 years) which we described in the previous point, there follows a tense phase, (Figure 4), which will described in this paragraph.

# a) Generating of Sun in Maximal Action of Decelerating Funnel

In the mode of tense generation of the Sun, the decelerating Funnel gets extra energy. Thus the power of the decelerating vortices (nested within each other) reaches its maximum. This is the main reason for the deformation of this decelerating Funnel in mode of tense generation of Sun. **Result:** The most important result of this deformation is that the diameter of the decelerating Funnel increases and the four longitudinal vortices shift and thicken towards the periphery of the Funnel (Figure 4a).

According to Law 2, each of the accelerating or decelerating longitudinal vortices generates an accelerating or decelerating transverse vortex from the inside or outside, In the case of the Sun, the Law 2 claims that each decelerating longitudinal vortex generates an accelerating transverse vortex from the from inside to out.

**In the former calm mode** of the Sun, this transverse vortex (Figure 3i) (according to Law 6 for accelerating vortices) sucked primary vortices (Figure 3j) both from the surface towards itself and from the interior towards itself (Figure 3h).

**In the next tense mode** of the Sun, it has maximum energy and power of longitudinal decelerating vortices in the decelerating Funnel. Therefore in tense mode of Sun this longitudinal decelerating vortices will be shifted from the center to the periphery of the volume of the Funnel (Figure 4b). According Law 2 longitudinal decelerating vortices in Funnel will generate transverse accelerating vortices in sphere of Sun.



Figure 4: Bloated Sun in Mode of Maximal Action

**Result:** The second result is that the transverse accelerating vortices in the body of Sun become very close to the surface of sphere of Sun. Thus they experience strong friction from the boundary surface (Figure 4b).

**Result:** So the external part of transverse accelerating vortex become lag and transform to decelerating vortex (Figure 4c). At the same time the internal primary vortices remains as before accelerating vortices which are sucked (Figure 4d).

According to Law 5 for decelerating vortex, during its movement it emits primary decelerating vortices from itselves outward. This is the reason why from the external surface of the Sun begins to emit (sporadically) many decelerated vortices from the surface of Sun to the environment of the Sun (Figure 4c)

**Result: From the external part** of transverse vortex and from external surface of the Sun emits sporadically decelerated vortices from the surface of Sun to the environment.

At the same time, on the inner side, the previous mode of suction remains (Figure 4d). According to Law 6 of the inner part of accelerating transverse vortex sucks a primary vortices from the outside - inward, i.e. from the internal body of the Sun to itself.

**Result: Of the inner part** the transverse vortex remains to be accelerating and sucks primary vortices from the internal body of the Sun to itself.

# b) Struccture of Magnetic Field in Active Period of Action of Sun

It is observed that during this active period of Sun it radiates sporadically highly decelerating primary vortices outside its body. Some of them are closed but some of them are open (Figure 4c). Both of them form holes in the body of the Sun less or bigger.

**Result:** The Sun radiates highly decelerating primary vortices (opened or closed) outside its body which form holes in the body of the Sun.

Transverse light waves are emitted from these places and besides them also streams of some elementary particles (neutrons) and some longitudinal waves of high speed energy (gamma beams).

**Result:** From these holes are emitted light beams ,neutrons and gamma rays.

These emitters of decelerating open or close vortices attract the Magnetic lines of force from inside to themselves in surface.

**Result:** These decelerating vortices are emitted outward to environment from surface of the Sun. But they act as receivers from inward and attract the Magnetic lines of force from inside to themselves to surface.

They deform and distort the original calm direction of the Magnetic lines. As in the phase of a calm Sun, they should move from the inside in the South-North direction (Figure 3e) and from the outside to close the external Magnetic lines in the direction North-South (Figure 3f).

Instead of moving in the manner described, the internal Magnetic field lines disperse, deform, fold and point in different directions (Figure 4f).

**Result:** In tense mode of the Sun the Magnetic lines haphazardy fold and point in random direction. as deform the ordinary previous direction of Magnetic lines in calm mode of the Sun.

#### 6. Conclusion

The reason is that in phase of active action of Sun the internal Magnetic field lines are random and accidently directed to outside. Tererefore they cannot be continued and closed on the outside of the Sun's body what was done in calm phase of action of Sun. This means that the external lines of Magnetic field almost absent. Thus they cannot hold the hot body of Sun. Or the body of Sun is not controlled, stowed and stuffed by external the Magnetic lines as it does during a quiescent phase of Sun (Figure 31). Instead to form package of Magnetic lines in direction South- North (Figure 3e) as it was in calm phase of Sun, the internal Magnetic lines have different and random directions from inside to surface (Figure 4f).

As result in case of active action of Sun, the external Magnetic field almost absent and cannot keep the hot body of the Sun in the shell. Therefore the Sun free to fire bundles of heat and light transverse waves and some streams of highly accelerated elementary particles, accompanied by streams of some accelerating longitudinal rays.

As a summary: In active phase of Sun the reason for its behavior is that the internal Magnetic field lines are random and accidentally directed to outside . and the result is that the external Magnetic lines (closing internal Magnetic lines) almost absent and there is not such shell that to hold and screens hot body of Sun.

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