## Yuryi Badyin

# The mechanism of action of quantum gravity. 

Reviewer:<br>Doctor of Physical and Mathematical Sciences O.A. Malafeev (Saint-Petersburg),

Quantum gravity on stars, the Sun, Earth, and planets is created in the microworld system relic particles with a temperature $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$, which fill the world's environment, i.e. the entire universe, the entire interstellar space of the galaxy.
In the centers of galaxies, in the centers of stars, planets, atoms, in the cells of the living and plant worlds, there are areas of cold - refrigerators with temperature Tr , where relict particles $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$ come in a continuous stream, due to their quantum energy, with a temperature difference $g=T_{R} / \operatorname{Tr}$ equal to gravitational acceleration.
The fundamental cosmic particles of the world environment - Koroniy and Newtony, predicted by D. Mendeleev, form: particles of temperature fields ( $T=6000 \mathrm{~K}$ of the Sun, Earth $T=260 \mathrm{~K}$ ), photons, electrons, protons, atoms. Coronius particles, "solving the gravity problem" (as defined by Mendeleev), create gravity, therefore, it is the Coronium particles that have a relict temperature $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$.
The temperature fields formed by the particles create gravity - gravity from the warm zone to the cold region, are temperature-gravitational fields.
Newtonium "fast moving" particles create magnetic lines of force.
At the centers of galaxies, stars, planets, atoms, there are centers of cold through which magnetic lines of force pass that connect the entire starry world of the galaxy, the entire Universe, into a single whole space of the world environment. Magnetic lines of force carry out the task of transmitting electrical energy over distances at the speed of light.

Newton's law of gravity is the power law of the macro and microworld, acting in the temperature-gravitational fields. The ejected mass of the Sun's plasma is expended in creating the centripetal force of the Sun in orbit, and the centrifugal force of repulsion of the Earth and planets. The gas (comet) tails of the Earth and the planets create centripetal seeds for pushing the planets toward the Sun.
The discovery of the mechanism of action of quantum gravity makes it possible to create thermal and electrical energy sources operating on the gravitational principle, due to environmentally friendly cosmic energy.

Author Yuryi Badyin ©

$$
\text { St. Petersburg - Tolyatti } 2020
$$

## The mechanism of action of quantum gravity.

Elementary particles - Coronium and Newtonium, predicted and named by D. Mendeleev: "are elements of subtle matter - the world environment", which fills the entire Universe, all the interstellar space of galaxies. [17] The world environment of the Universe and the interstellar space of galaxies have a relic temperature $T=2.7 \mathrm{~K}$. The famous Van Goff law:
"If the temperature of the system in equilibrium changes, then, with increasing temperature - the equilibrium shifts toward the process going with heat absorption, and with decreasing temperature - towards the process going with heat». [7]
If the star is an equilibrium temperature system, then the process of increasing the temperature on the surface of the star, according to the Van Goff law, should shift towards the process of lowering the temperature inside the star.
So, inside - in the center of the Sun should be cold with a temperature of Tsr !
Then, the ejection of particles of the solar plasma from the surface of the Sun Ts into the
Solar system Tss should be compensated by particles of interstellar space with a temperature $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$, which should go into the cold center of the Sun.
If the processes go with the same ratio of temperature difference, then we obtain the formula:
$\mathrm{Ts} / \mathrm{Tss}=\mathrm{Tss}_{\mathrm{ss}} / \mathrm{T}_{\mathrm{R}} \quad\left(1^{*}\right)$
After conversion: $\mathrm{T}^{2} \mathrm{ss}=\mathrm{Ts}_{\mathrm{s}} \mathrm{T}_{\mathrm{R}} \quad\left(2^{*}\right)$. Using the cyclic system of temperature differential, using the formulas $(1 *)$ and $(2 *)$ it is possible to determine all the thermodynamic regimes of the Sun - an ideal thermal system in interstellar space:
$\mathrm{Tss} / \mathrm{T}_{\mathrm{R}}=\mathrm{Ts} / \mathrm{Tss}=\mathrm{T}_{\mathrm{R}} / \mathrm{Tcs}\left(3^{*}\right)$
.By the formula $\left(2^{*}\right)$ we determine the output temperature of the Sun in the solar system: $\mathrm{T}_{\mathrm{ss}}=\sqrt{\mathrm{Ts}_{\mathrm{s}} * \mathrm{~T}_{\mathrm{R}}}=\sqrt{6000 \mathrm{~K} * 2.7 \mathrm{~K}}=127,28 \mathrm{~K}$
We determine $\mathrm{T}_{\mathrm{sr}}$ - the temperature of the refrigerator in the center of the Sun, which makes it possible to use the inverse thermal process: how much heat the Sun gives out to $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$ - to the interstellar space of the Galaxy through the output temperature field T ss $=127.28 \mathrm{~K}$, how much should the sun receive heat in its refrigerator $\mathrm{T}_{\mathrm{cs}}$ from interstellar space:

$$
\mathrm{T}_{\mathrm{sr}}=\mathrm{T}_{\mathrm{R}}{ }^{2} / \mathrm{T}_{\mathrm{ss}}=(2.7 \mathrm{~K})^{2} / 127.28 \mathrm{~K}=0.057275 \mathrm{~K}=\sim 0.05728 \mathrm{~K}
$$



1. The beginning of the quantum theory of gravity.

All processes on the Sun, including gravity, are related to temperature.
In the microworld system, the process of changing the frequency of particle oscillations, therefore, the temperature of the fields created by the particles, is constantly ongoing. [11]
The constants with the frequency and temperature indicators created by the particles are included in the energy equations: $\mathrm{E}_{\mathrm{v}}=\mathrm{h} v$, where $\mathrm{h}=6.62607015 * 10^{-34}$ J.s - Planck constant; $\mathrm{E}_{\mathrm{T}}=\mathrm{kT}$, where $\mathrm{k}=1.380649 * 10^{-23} \mathrm{~J} / \mathrm{K}$ - Boltzmann constant. [18]
With the equality of energy $\mathrm{E}_{\mathrm{v}}=\mathrm{E}_{\mathrm{T}}$, we get: $\mathrm{h} \nu=\mathrm{kT}$, then: $\chi=\mathrm{h} / \mathrm{k}=\mathrm{T} / v$

$$
\chi=6.6260715 * 10^{-34} \mathrm{~J} . \mathrm{s} / 1.38065 * 10^{-23} \mathrm{~J} / \mathrm{K}=4,799243 \cdot 10^{-11} \mathrm{Ks} ;
$$

$\chi=4.799243 * 10^{-11} \mathrm{Ks}-$ temperature field constant.
Radiation temperature: $\mathrm{T}=\mathrm{mC}^{2} / \mathrm{k}$, where C longitudinal speed and C transverse speed of light Particle mass: $\mathrm{m}=\mathrm{hv} / \mathrm{C}^{2}=\mathrm{h} / \lambda \mathrm{C}=\mathrm{Tk} / \mathrm{C}^{2}$; wavelength $\lambda=\mathrm{h} / \mathrm{mC}$ [24]

Particle frequency $\quad v=T / \chi$, where $T=v \chi$ - field temperature.
Using the formulas, we determine the parameters of the particles: proton, electron, photon, Sun $T=6000 \mathrm{~K}$, Earth $\mathrm{T}=260 \mathrm{~K}$; Relict. The parameters of a particle of magnetic field lines are determined from the ratio of the electric and gravitational forces of an electron: $\mathrm{F}_{\mathrm{e}} / \mathrm{F}_{\mathrm{g}}=5.78 * 10^{42}$ $\mathrm{F}_{\mathrm{e}} / \mathrm{F}_{\mathrm{g}}=5.78 * 10^{42}=\left(\mathrm{T}_{\mathrm{e}} / \mathrm{T}_{\mathrm{g}}\right)^{2}=\left(\mathrm{m}_{\mathrm{e}} / \mathrm{m}_{\mathrm{g}}\right)^{2} \quad[20]$

| Particle | Weight kg | frequency $1 / \mathrm{s}$ | for. the waves m | temperature |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| proton | $1.672 * 10^{-27}$ | $2.27 * 10^{23}$ | $1.32 * 10^{-15}$ | $1.088 * 10^{13} \mathrm{~K}$ | dark zone x-ray radiation |
| electron | $9.109 * 10^{-31}$ | $1.23 * 10^{20}$ | $2.43 * 10^{-12}$ | $5.93 * 10^{9} \mathrm{~K}$ |  |
| photon red | $3.367 * 10^{-36}$ | $4.56 * 10^{14}$ | $6.56 * 10^{-7}$ | $2.19 * 10^{4} \mathrm{~K}$ | Visible <br> Radiation Area |
| Sun | $9.217 * 10^{-37}$ | $1.25 * 10^{14}$ | $2.4 * 10^{-6}$ | 6000K |  |
| Earth | $3.99 * 10^{-38}$ | $5.42 * 10^{12}$ | $5.53 * 10^{-5}$ | 260K |  |
| Relict | $4.147 * 10^{-40}$ | $5.62 * 10^{10}$ | $5.33 * 10^{-3}$ | 2.7K |  |
| Magnet-power | $3.8 * 10^{-52}$ | $5.14 * 10^{-2}$ | $5.83 * 10^{9}$ | $2.47 * 10^{-12} \mathrm{~K}$ |  |

"The law of gravity $\mathrm{F}=\mathrm{GMm} / \mathrm{r}^{2}$ is not exact $\ldots$ because they have not yet connected it with quantum theory"». [20] It is known that a quantum - is the smallest amount of energy given or absorbed by a physical quantity \{particle, microparticle\}. [7]
But the particle has: mass $\mathrm{m}(\mathrm{kg})$, which emits in limited portions energy (quantum energy) with a frequency $v(1 / \mathrm{s})$, with a wavelength $\lambda(\mathrm{m})$, create a force action from particle to particle in a quantum temperature field.
Therefore, the numerical value of the constant in a quantum temperature field
$\chi=4.799243 * 10^{-11} \mathrm{Ks}$ also has force units - gravitational $G\left(\mathrm{~nm}^{2} / \mathrm{kg}^{2}\right)$.
$\mathrm{G}=4.799243 * 10^{-11} \mathrm{~nm}^{2} / \mathrm{kg}^{2}-$ is the gravitational constant in a quantum temperature field.
Using the experience of Cavendish and the formula of Newton's law of gravity, we determined the gravitational constant $\mathrm{G}=6.672 * 10^{-11} \mathrm{~nm}^{2} / \mathrm{kg}^{2} \quad$ [24]
A light rod is suspended on a thin quartz thread, at the ends of which there are two lead balls with a mass $\mathbf{m}$ each. Two symmetrically located lead balls with large masses $\mathbf{M}$ are brought to them. [25]
But around each ball a temperature (magnet-power) field is formed - from the outside it is rarefied, and inside it is denser. The presence of a dense layer of the temperature (magnetic field lines of the gravitational) field does not make it possible to determine the exact force $\mathbf{F}$ of the gravitational interaction. It turns out that the gravitational constant $G=4.799243 * 10^{-11} \mathrm{~nm}^{2} / \mathrm{kg}^{2}$ is more accurate $(\sim 30 \%)$ than the gravitational constant from the Cavendish experiment.
A particle of the surface of the Sun has a frequency $v=1.25 * 10^{14} 1 / s$ (table №1),
then, using the formula $\mathrm{T}=\chi \vee$, we can determine the temperature of the surface of the Sun:
$\mathrm{T}=\chi \nu=4.799243 * 10^{-11} \mathrm{Ks} \cdot 1.25 * 10^{14} 1 / \mathrm{s}=\sim 6000 \mathrm{~K}$.
It turns out that the temperature field constant $\quad \chi=4.799243 * 10^{-11} \mathrm{Ks}$, like the gravitational constant $G=4.799243 * 10^{-11} \mathrm{~nm}^{2} / \mathrm{kg}^{2}$, are universal for all temperature fields; have a single basis - a pulsating quantum - the energy of particles with a certain frequency.
This is the foundation of the quantum theory of gravity:

- Particles create temperature - quantum gravitational fields: Solna, planets.
- The mechanism of action of quantum gravity occurs during the transition of particles \{due to its pulsating quantum energy\} from a warm temperature field $\mathrm{T}_{1}$ to a cold temperature field $\mathrm{T}_{2}$. The temperature difference creates a quantum gravitational acceleration of particles $g=T_{1} / T_{2}$ in the microworld system.


## 2. The mechanism of quantum gravity on the Sun.

Due to the quantum energy, the particles pass from a warm to a cold field (2nd law of thermodynamics) - thereby regulating the heat exchange processes between temperature fields. The mechanism of action of quantum gravity is carried out by cosmic particles with temperature $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$, moving in a temperature field $\mathrm{Tsr}=0.05728 \mathrm{~K}-$ a refrigerator in the center of the Sun, with acceleration: $\mathrm{g}=\mathrm{T}_{\mathrm{R}} / \mathrm{Tsr}=2.7 \mathrm{~K} / 0.05728 \mathrm{~K}=47.14\left(\mathrm{~m} / \mathrm{s}^{2}\right)$
Cosmic particles with a temperature of $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$, when moving into the solar refrigerator
$\mathrm{Tsr}=0.05728 \mathrm{~K}$, pass through the output temperature field of $\mathrm{Tss}=127.28 \mathrm{~K}$ of the Sun into the Solar system.

The pressure of cosmic particles $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$ on particles with a temperature $\mathrm{T} \mathrm{ss}=127.28 \mathrm{~K}$. On the surface of the Sun $\mathrm{Ts}=6000 \mathrm{~K}$ quantum gravitational is exerted by a tandem of particles with a differential and acceleration:
$\mathrm{g}=\mathrm{Ts}_{\mathrm{s}} / \mathrm{T}_{\mathrm{ss}} / \mathbf{T}_{\mathrm{R}}=6000 \mathrm{~K} / \mathbf{1 2 7 . 2 8 K} / \mathbf{2 . 7 K}=47,14\left(\mathrm{~m} / \mathrm{s}^{2}\right)$
When moving toward the fundamental core of the Sun, the quantum gravitational pressure of cosmic particles remains constant. Gravitational acceleration in the fundamental core of the Sun goes to zero $g=0$, where cosmic particles $T_{R}=2.7 \mathrm{~K}$, entering the field $\mathrm{T}_{\mathrm{sr}}=0.05728 \mathrm{~K}$, are torn to microparticles $\mathrm{T}=0.05728 \mathrm{~K}$.
The pressure in the fundamental core rises; under the influence of pressure, particles are ejected through a shock wave with a temperature of $\mathrm{T}=2.7 \mathrm{~K}$ into the central core, from which, through a shock wave of $\mathrm{T}=127.28 \mathrm{~K}$, the particles exit into the outer core of the Sun with a proton shock wave of $\mathrm{T}=6000 \mathrm{~K}$. There is a convection zone between the proton shock wave and the surface of the Sun. Energy output from the surface of the Sun to the solar system and interstellar space:: $\quad \mathrm{g}=\mathrm{T}_{\mathrm{s}} / \mathrm{T}_{\mathrm{ss}} / \mathrm{T}_{\mathrm{R}}=6000 \mathrm{~K} / 127.28 \mathrm{~K} / 2.7 \mathrm{~K}=47.14\left(\mathrm{~m} / \mathrm{s}^{2}\right)$
The Sun receives as much energy as it gives to space: to the Galaxy, the Universe - it is a world environment with a constant temperature $\mathrm{T}=2.7 \mathrm{~K}$, created by Coronium particles.
According to the definition of D. Mendeleev: "The task of gravity and the tasks of the whole energy industry cannot be imagined really solved without a real understanding of the world environment that transfers energy over distances. The Coronium element is necessary in order to get close to the most important and fastest moving element "X", which I would like to call Newtonium. " [17]
In the Universe, in galaxies, in stars, planets, in atoms, in the cells of the living and plant worlds, there are cold centers through which magnetic lines of force consisting of microparticles pass - this is the microparticle Mendeleev called Newtony.
Magnetic lines of force connect the entire surrounding temperature world into a single whole.

## The structure of the Sun.

According to the formula $\mathrm{Ms}=\mathrm{a}^{2} / \mathrm{G}$, where $\mathrm{a}=5.932 * 10^{-3} \mathrm{~m} / \mathrm{s}^{2}$ - is the acceleration of the Earth around the Sun; R $=14.96 * 10^{10} \mathrm{~m}$ - is the distance from the Earth to the Sun; G - is the gravitational constant.
We determine $\mathrm{Ms}_{\mathrm{s}}$ - the mass of the proton shock wave of the Sun: $\mathrm{Ms}_{\mathrm{s}}=2.766 * 10^{30} \mathrm{Kg}$.
In a spherical proton shock wave, the following equality holds: the momentum of the entire mass of proton nuclei with the momentum of the proton, i.e. $\mathbf{M v n}=\mathbf{m}_{\mathbf{p}} \mathbf{C k}$ - the formula for the equality of macro and microworld [22], where $\mathbf{M}=\mathbf{M s}-$ is the mass of the proton shock wave ;
$\mathbf{v}$ - proton velocity in a shock proton wave with temperature $\mathrm{T}=6000 \mathrm{~K}$.
From the equality: $\mathrm{m}_{\mathrm{p}} \mathrm{v}=\mathrm{mC}$, we get: $\mathrm{m}_{\mathrm{p}} / \mathrm{m}=\mathrm{C} / \mathrm{v}$, where $\mathrm{m}=9.217 * 10^{-37} \mathrm{~kg}$ - is the mass of a particle on the surface of the Sun; $\mathrm{m}_{\mathrm{p}}=1.672 * 10^{-27} \mathrm{~kg}$ - proton mass (see table).
The proton velocity in the shock wave of the Sun at $T=6000 \mathrm{~K}$ is equal to:

$$
\mathrm{v}=\mathrm{m} \mathrm{C} / \mathrm{m}_{\mathrm{p}}=9.217 * 10^{-37} \mathrm{~kg} * 2.9979 * 10^{8} \mathrm{~m} / \mathrm{s} / 1.672 * 10^{-27} \mathrm{~kg}=1.65 * 10^{-1} \mathrm{~m} / \mathrm{s} ;
$$

$\mathrm{n}=\mathrm{g}=47.14 \mathrm{~m} / \mathrm{s}^{2}-$ acceleration of the exit of particles from the proton shock wave of the Sun; $\mathrm{k}=\mathrm{S} / \mathrm{s}_{\mathrm{p}}-$ coefficient of relations: the area of the sphere of the proton shock wave of the Sun $S=4 \pi R^{2}$ to the proton area $s_{p}=\pi r^{2}=1.39 * 10^{-31} \mathrm{~m}^{2}$, where, $\mathrm{r}=\lambda / 2 \pi=2.1 * 10^{-16} \mathrm{~m}-$ is the radius of the proton.
The area of the proton shock wave sphere is: $\quad \mathbf{S}=\mathbf{M s v n ~} \mathrm{s}_{\mathrm{p}} / \mathrm{m}_{\mathrm{p}} \mathrm{C}$ $S=596.3 * 10^{16} \mathrm{~m}^{2}$, because $\mathrm{S}=4 \pi \mathrm{R}^{2}$, then: $\mathrm{R}^{2}=\mathrm{S} / 4 \pi=47,48 \cdot 10^{16} \mathrm{~m}^{2}$;
The radius of the proton shock wave - the radius of the outer core of the Sun is:
$\mathrm{R}=6.89 * 10^{8} \mathrm{~m}$. Diameter: $\mathrm{D}=\sim 13.78 * 10^{5} \mathrm{~km}$
The volume of the outer core of the Sun in a proton shock wave: $\mathrm{V}=4 \pi \mathrm{R}^{3} / 3=13.7 * 10^{26} \mathrm{~m}^{3}$.
The radius of the Sun was determined by the photosphere and is: $\mathrm{Rs}=6.96 * 10^{8} \mathrm{~m}$.
Diameter $\mathrm{D}_{\mathrm{s}}=\sim 13.92 * 10^{5} \mathrm{~km}$; Volume of the Sun Vs $=14.11 * 10^{26} \mathrm{~m}^{3} \quad[6]$
It turns out that $\mathbf{9 7 \%}$ of the total volume of the Sun is a cold body!

It is known that 450 years ago, the great astronomer Johannes Kepler believed that "the stars were frozen into a fixed firmament from ice"!
The greatest astronomer V. Herschel in 1795y. argued that "the Sun is a cold, solid, dark body surrounded by two cloud layers, of which the photosphere is extremely hot and bright. The inner layer of clouds, like a screen, protects the central core from the action of heat."
Gradually, a theory of the structure of the cold Sun began to be created with support: on the Van Goff law - temperature equilibrium in space; to the discovery of D. Mendeleev - the formation of atoms by the particles of Coronium and Newtonium, filling the world environment the Universe, interstellar space of the Galaxy.

Thermodynamics of the Sun


The modern theory, formed in 1925, claims that the sun has a core with a temperature
$\mathrm{T}=1.5 * 10^{7} \mathrm{~K}$ ( 15 mil. degrees) - and this is a powerful x-ray radiation.
Then, on the surface of the Sun - the photosphere, where the temperature is only $\mathrm{T}=6000 \mathrm{~K}$, a "dark core" with powerful x-ray radiation would certainly be highlighted. The radiation power of the "core" with $\mathrm{T}=1.5^{*} 10^{7} \mathrm{~K}$ per second:
$I_{c}=\mathrm{S} \sigma T^{4}$, where $\mathrm{S}-$ is the surface area of the "core" with a radius $\mathrm{R}_{\mathrm{c}}=2.3 * 10^{8}{ }_{\mathcal{M}} ;[6]$
$\mathrm{S}=4 \pi \mathrm{R}_{\mathrm{c}}{ }^{2}=4 \pi\left(2.3 * 10^{8} \mathrm{~m}\right)^{2} ; \quad \sigma=5.67 * 10^{-8} \mathrm{wt} /\left(\mathrm{m}^{2} \mathrm{~K}\right)$ - постоянная величина.

$$
I_{c}=\mathrm{S} \sigma T^{4}=4 \pi\left(2.3 * 10^{8} m\right)^{2 *}\left\{5.67 * 10^{-8} w t /\left(m^{2} K\right)\right\} *\left(1.5 * 10^{7} K\right)^{4}=1.9 * 10^{39} w t
$$

The sun radiates energy per second $I_{\mathscr{O}}=3.85 * 10^{26} w t[10], \quad 10^{13}$ times less...
Under the influence of such powerful x-ray radiation on Earth, everything would disappear, perhaps in the modern form, the solar system would cease to exist.


The effect of the "cold" Sun can be observed if you look at the setting, not bright Sun, when the atmosphere reflects the ultraviolet region of the spectrum, then literally after $40-50$ seconds the following phenomenon occurs: the Sun gradually begins to turn into a white "cold" disk, around which is shiny ring.

- The white disk is the "cold" Sun.
- Outer shiny ring (convection zone and photosphere).

Outgoing corona waves of a once-red color created by particles of the plasma of the Sun pulsate. In fact, gravitational waves emanating to the planets of the solar system are observed. Where is the red-hot core, $1 / 3$ of the diameter of the Sun. with powerful $X$-rav radiation?

## 3. The mechanism of action of quantum gravity on Earth.

The constant temperature of the Earth's surface is $\mathrm{T}_{\text {es }}=260 \mathrm{~K}$. [3]
Using the formula $\left(2^{*}\right)$, we determine the temperature of the output field of the Earth:

$$
\mathrm{T}_{\mathrm{eo}}^{2}=\mathrm{T}_{\mathrm{es}} * \mathrm{~T}_{\mathrm{R}} ; \quad \mathrm{T}_{\mathrm{eo}}^{2}=260 \mathrm{~K} * 2.7 \mathrm{~K} ; \quad \mathrm{T}_{\mathrm{eo}}=26.5 \mathrm{~K} .
$$

The process of the Earth's heat output into interstellar space proceeds with a coefficient:

$$
\mathrm{g}=\mathrm{T}_{\mathrm{es}} / \mathrm{T}_{\mathrm{eo}} / \mathrm{T}_{\mathrm{R}}=260 \mathrm{~K} / 26,5 \mathrm{~K} / 2,7 \mathrm{~K}=9,81 .
$$

"It is believed that the temperature at the mantle-core boundary is in the range $\sim(4-5) 1.5 * 10^{3} \mathrm{~K}$, which means that the temperature in the center of the Earth $\sim 6^{*} 10^{3} \mathrm{~K} "$. [8]
So, in the center of the Earth, the core heat source is the "earthly sun", in which the center is cold. Cosmic particles $\mathrm{T}_{\mathrm{R}}=2,7 \mathrm{~K}$ go into the Earth's refrigerator $\mathrm{T}_{\text {er }}$, the numerical value of which is determined by the formula: $\mathrm{T}_{\mathrm{eo}} / \mathrm{T}_{\mathrm{R}}=\mathrm{T}_{\mathrm{R}} / \mathrm{T}_{\text {er }}$, we get:
$\mathrm{T}_{\mathrm{er}}=\left(\mathrm{T}_{\mathrm{R}}\right)^{2} / \mathrm{T}_{\mathrm{eo}}=(2,7 \mathrm{~K})^{2} / 26,5 \mathrm{~K}=0,275 \mathrm{~K}$.
Quantum gravity on Earth is carried out by cosmic particles with a temperature of $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$ during their transition, due to pulsating quantum energy, from interstellar space to a cold temperature field of $\mathrm{T}_{\mathrm{er}}=0.275 \mathrm{~K}$ of the core - into the refrigerator of the "terrestrial sun".
Cosmic particles $T_{R}=2.7 \mathrm{~K}$ on their way capture particles with $\mathrm{T}=26,5 \mathrm{~K}$ of the output field of the Earth and create with them a gravitational acceleration of $g=9.81 \mathrm{~m} / \mathrm{s}^{2}$ to the surface of the Earth with $T_{e s}=260 \mathrm{~K}$. Full range of temperature transitions:

$$
\mathrm{g}=\mathrm{T}_{\mathrm{es}} / \mathrm{T}_{\mathrm{eo}} / \mathrm{T}_{\mathrm{R}} / \mathrm{T}_{\mathrm{er}}=260 \mathrm{~K} / 26.6 \mathrm{~K} / 2.7 \mathrm{~K} / 0.275 \mathrm{~K}=9.81\left(\mathrm{~m} / \mathrm{s}^{2}\right)
$$

Cosmic quantum particles $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$ of the microworld create quantum gravity on Earth.


From radiation electron belts ( $2-4 \mathrm{P}$ ) along magnetic lines of force is the quantum movement of electrons to the surface of the Earth. In fact, a continuous stream from space to Earth is electric energy. Thousands of powerful lightning flare up in the sky daily.

## Determination of the temperature of the corona of the Sun.

Around the Earth, solar particles create radiation belts: proton with temperature $\mathrm{T}_{\mathrm{p}}=1250 \mathrm{~K}$ and electron with $\mathrm{T}_{\mathrm{e}}=127.28 \mathrm{~K}$, creating a coefficient of temperature difference with the fields of the Earth: $\mathrm{g}=127.28 \mathrm{~K} / 26.5 \mathrm{~K}=4.8$ and $\mathrm{g}=1250 \mathrm{~K} / 260 \mathrm{~K}=4.8$
With the same temperature difference, there is heat - a quantum transition of particles from the refrigerator of the Earth's core to the refrigerator of the fundamental core of the Sun:
$\mathrm{g}=\mathrm{T}_{\mathrm{x} 3} / \mathrm{T}_{\mathrm{xc}}=0.275 \mathrm{~K} / 0,05728 \mathrm{~K}=4.8$
Knowing the temperature of the planet's exit field, we determine the coefficient of the temperature difference with the temperature of the Sun's surface $\mathrm{Ts}=6000 \mathrm{~K}$ :

1. The temperature of the output field of the Earth is equal to $\mathrm{Teo}_{\mathrm{e}}=26.5 \mathrm{~K}$, which means that the heat that goes to the Earth from the surface of the Sun is $\mathrm{Ts}_{\mathrm{s}}=6000 \mathrm{~K}$, with a temperature difference: $\mathrm{g}=\mathrm{Ts} / \mathrm{Teo}=6000 \mathrm{~K} / 26.5 \mathrm{~K}=226.4$
We also get this result: $\mathrm{g}=47.14 * 4.8=\sim 226.4$, where $\mathrm{g} s=47.14$ - gravity on the Sun, g se $=4.8$ - is the coefficient of temperature interaction of the Sun and the Earth.
To disperse and deliver solar particles to the Earth, the temperature of the corona of the Sun is enough: Tsc $=$ Ts $g=6000 \mathrm{~K} * 226.4=1358400 \mathrm{~K}$.
Note: A). The temperature of the solar system around the Earth should not be higher than the output temperature of the planet $\mathrm{T}=26.5 \mathrm{~K}$, otherwise the exit of the Earth's heat into space will be blocked. B) The "earth sun" has a proton shock wave and pulsates with the same frequency as the Sun: $g=4.805 * 9,81=47.14$. The heat output from the shock wave $T=6000 \mathrm{~K}$ in the bowels of the Earth to the surface of the planet with a difference:
$\mathrm{g}=6000 \mathrm{~K} / 1250 \mathrm{~K} / 260 \mathrm{~K}=4.8$. But the frequency of the pulsation of the Earth $\mathrm{g}=9,81$ is created in the center of the nucleus, where cosmic energy enters: how much heat enters so much and the planet must give into space: $\mathrm{g}=260 \mathrm{~K} / 26.5 \mathrm{~K} / 2.7 \mathrm{~K}=9,81$
2. For Jupiter, where the temperature of the output field is $\mathrm{T}_{\mathrm{ju}}=19,44 \mathrm{~K}$, the coefficient of temperature difference: $\mathrm{g}=\mathrm{Ts} / \mathrm{T}_{\mathrm{ju}}=6000 \mathrm{~K} / 19.44 \mathrm{~K}=308,6$
The temperature of the corona of the Sun for the delivery of solar particles to Jupiter::
$\mathrm{Tsc}=\mathrm{Ts} \mathrm{g}=6000 \mathrm{~K} * 308.6=1851600 \mathrm{~K}$.

3. The coefficient of transition of particles of the Sun to the conventional planet " X " in the Solar system is determined by the formula: $\mathrm{Ms}=\mathrm{gR}^{2} / \mathrm{G}$, then $\mathrm{g}=\mathrm{GMs} / \mathrm{R}_{\mathrm{c}}{ }^{2}$, where
Ms - is the mass of the proton shock wave - the pulsating proton energy of the Sun, ejected into the solar system.
Rs $=6.95 * 10^{8} \mathrm{~m}-$ - the radius of the surface of the Sun - the photosphere.
The acceleration coefficient of solar particles to the planet " X ":

$$
\mathrm{g}=4.7993 * 10^{-11} \mathrm{~nm}^{2} / \mathrm{kg}^{2} \cdot 2.766 * 10^{30} \mathrm{~kg} /\left(6.95 * 10^{8} \mathrm{~m}\right)^{2}=\sim 274 \mathrm{~m} / \mathrm{s}^{2}
$$

The temperature of the output field of the planet "X": $\mathrm{T} \alpha=\mathrm{Ts} / 274=6000 \mathrm{~K} / 274=21.89 \mathrm{~K}$.
A planet with an exit temperature field $\mathrm{T}_{\alpha}=21.89 \mathrm{~K}$, if it existed, it would be located between the orbits of Mars and Jupiter.
The average temperature of the corona of the Sun: $\mathrm{Tsc}=\mathrm{Ts} \mathrm{g}=6000 \mathrm{~K} \cdot 274=1644000 \mathrm{~K}$.

Earth from space from the North Pole.

/Photo of the spacecraft «ESSA - 7»(USA) 23.11.1968
This is the night at the Sovier Pole. Therefore, the ultraviolet and X-ray radiation of the Earth is observed.
The ratio of the diameter of the Earth to the diameter of the dark disk d in the center of the pole in size with a photo:: $\mathrm{D} / \mathrm{d}=5,3$.
This value is equal to the ratio of the real diameter of the Earth De to the diameter of the solid core $\mathrm{d}_{\mathrm{c}}$ in the center of the planet:
De $/ \mathrm{dc}=12.74 * 10^{3} \mathrm{~km} / 2.4 * 10^{3} \mathrm{~km}=5,3$. Therefore, the dark disk is the "earthly sun" against the background of the Earth.

## 4. Nton's law of gravity determines the force pushing of the planets toward the Sun.

In 1803 the scientist A. Humboldt, traveling through the southern countries, found in the night sky a dim oval glow opposite to the Sun - "antireflection. A distance of $\sim$ 20R (terrestrial radii) was determined for it - and came to the conclusion that it goes to antireflection from the Earth continuous gas flow.
So the Earth's gas tail was opened, directed, like comet tails, in the direction opposite to the Sun. The tail has a deviation of $3^{0}$ degrees in the direction of the Earth in orbit. [10]
The observed glow is a condensation of tail particles - a "gas body" with a shock wave. Based on the shock wave of the "gas body", the Earth is continuously pushed towards the Sun with centripetal force $\mathbf{F}_{E}$. But continuous streams of solar particles repel the Earth with equal force $\mathbf{F s}=\mathbf{F}_{\mathrm{E}}$, as a result the planet moves in its constant orbit


Pic 6 The repulsive force $\mathbf{F}_{\text {S }}$ and the force of pushing $\mathbf{F}_{\mathrm{E}}$ the planet towards the Sun
$\mathbf{F}_{\mathrm{E}}=\mathrm{a} \mathrm{m}=5.932 * 10^{-3} \mathrm{~m} / \mathrm{s}^{2} * 8.31 * 10^{24} \mathrm{~kg}=4.93 * 10^{22} \mathrm{n} ; \mathrm{a}-$ acceleration; m - Earth mass ; According to the law of gravity $\mathbf{F}_{\mathrm{S}}=\mathrm{GM}_{\mathrm{c}} \mathrm{m} / \mathrm{R}^{2} ; \mathrm{R}$ - distance from the Earth to the Sun.
$\mathbf{F}_{\mathrm{S}}=4.79924 * 10^{-11} \mathrm{~nm}^{2} / \mathrm{kg}^{2} * 2.766 * 10^{30} \mathrm{~kg} * 8.31 * 10^{24} \mathrm{~kg} /\left(14.96 * 10^{10} \mathrm{~m}\right)^{2}=4.93 * 10^{22} \mathrm{H}$
We get the equality of forces $\mathbf{F}_{\mathrm{S}}=\mathbf{F}_{\mathrm{E}} \quad$ Using a jet tail, the planet are pushed towards the Sun with a force equal to the repulsive force of solar particles.
All the planets of the solar system have jet gas (comet) tails. The ejected mass of the plasma of the Sun, the planets is expended in creating a centripetal force and in orbit.
Newton's law of gravity is the power law of the macrocosm. "The law of gravity is not accurate
... But somewhere on the edge is always a mystery." [20]

Used Books:

1. Александров Е. В поисках пятой силы. Ж. «Наука и жизнь» №1, 1988г.
2. Бадьин Ю. Ударно-волновая термодинамика. Механизм гравитации. Изд.2009г.
3. Бялко А. Наша планета - Земля. Изд. «Наука». Москва, 1983г.
4. Вавилов С. Глаз и Солнце. Изд. «Наука», Москва, 1976г.
5. Вайнберг С. Открытие субатомных частиц, Изд. «Мир», Москва 1986г.
6. Воронцов-Вельяминов Б. Астрономия. Изд. «Дрофа», Москва, 2001г.
7. Глинка Н. Общая химия. Госхимиздат. Москва, 1956г.
8. Жарков В. Внутреннее строение Земли и планет. Изд. Наука, Москва, 1983г.
9. Зигель Ф. Астрономическая мозаика. Изд. «Наука», Москва, 1987г.
10. Климишин И. Открытие Вселенной. Изд. «Наука», Москва, 1987г.
11. Куликов К., Сидоренков Н. Планета Земля. Изд. «Наука», Москва, 1977г.
12. Левитан Е. Астрономия. Изд. «Просвещение». Москва, 1998г.
13. Лещинский А. Связь через электрон. Журнал ЧиП, стр.21, №10 , 2005г.
14. Мякишев Г. Буховцев Б. Физика. Изд. «Просвещение», Москва, 1998г.
15. Мендельсон К. На пути к абсолютному нулю. «Атомиздат». Москва, 1971г.
16. Нарликар Д. Гравитация без формул. Изд. «Мир». Москва, 1985г.
17. Родионов В. Место и роль мирового эфира в истинной таблице Д.И. Менделеева. Ж. Русского физического общества(ЖРФМ, 2001, 1-12, стр. 37-51)
18. Суорц Кл. Э. Необыкновенная физика обыкновенных явлений Изд. «Наука», 1987г.
19. Рёю Утияма. К чему пришла физика. Изд. «Знание». Москва, 1986г.
20. Фейнман Р. Характер физических законов. Изд. «Наука», Москва, 1987г.
21. Хайкин С. Физические основы механики. Изд. «Наука», Москва, 1987г.
22. Элиот Л., Уилкокс У. Физика. Изд. Наука. Москва 1975г.
23. Чаругин В. Дагаев М. Астрофизика. Изд. «Просвещение.» Москва. 1988г.
24. Ширкевич М., Кошкин Н. Справочник по элементарной физике. Изд. Наука, 1988г.
25. Яворский Б., Пинский А. Основы физики. Изд. «Наука», Москва, 1981г.
26. Яворский Б., Селезнев Ю. Справочное руководство по физике, М, Наука, 1989г.
27. www.nkj.ru Нейтрон рассказывает о Вселенной. Ж. «Наука и жизнь»,№ 5,2008.
28. www.badjin.tlt.ru Солнце - холодное тело с горячей фотосферой.

Механизм гравитации. С-Петербург, Тольятти, 2019г

## The mechanism of action of quantum gravity.

Quantum gravity is created by relict particles with a temperature $\mathrm{T}_{\mathrm{R}}=2.7 \mathrm{~K}$ of the world environment of the Universe, interstellar space of galaxies.
In the center of the galaxy, in the centers of stars, planets, atoms, in the cells of the living and plant worlds, there are cold regions - refrigerators with temperature Tr , where relic cosmic particles with a temperature difference $g=T_{R} / T r$ arrive in a continuous stream, creating quantum gravitational acceleration.
At the centers of galaxies, stars, planets, atoms, throughout the Universe there are centers of cold through which magnetic lines of force pass that connect the entire starry world of the galaxy, the entire Universe into a single whole space of the world environment.

Author Yuri Badyin ©

The article by Yuri Badin "The mechanism of action of quantum gravity" was published in the journal "Colloguium-journal" № 12 (64) 2020 in the section "Physics and Mathematics".


