SYNERGETICS OF THE UNIVERSE AS A NATURAL SELF-SUPPORTED MECHANISM.
FIRST APPROXIMATION

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"This paper was written "at one go"; therefore it may contain minor non-critical errors, easily correctable and described with respective comments in future deliverables of the author".

"Matter, one might say, is merciless. It will not stop its movement even when a question of existence of Mankind as the highest form of its development arises. The Universe is equally merciless to Mankind's existence; it will sweep the latter away from the face of any planet.
No muscle will move in Nature's face in response to this omnicide.
Mankind and Space are antagonists.
Nature does not care a bit about anything concerning Mankind. And if Mankind ceases to exist Nature will not even know about it.
Nature's harmony is all for itself.
The above considerations suggest that there is nothing but Mankind to take care of itself, Nature would stay away from it, and human fates depend on nothing but Mankind.
Those might have been the thoughts of Konstantin Tsiolkovsky when he wrote that **"a rocket will save Mankind's seed"**
A. Chizhevsky. On shore of the Universe. Years of Friendship with Tsiolkovsky. Memoirs, "Mysl" Publishers, 1995

Introduction

Why did I write "First Approximation" in the title? Let me explain. My every new paper describes in terms of torus technologies and elastic mechanics mechanisms and a physical meaning of well known phenomena of Nature, that were not supported by proof in the past, includingh, for instance:
- four regular forms of working fluid medium existence in Nature, namely Foam[4], Bundle[4], VTortex, Foam[VTortex];
- real natural classification of galaxies;
- origination of fluid and solid planets;
- rings of fluid planets, "Maginot's lines" of solid planets;
- functioning of galaxies and tornadoes;

- the natural basis of "number Pi", the golden section", "number 7", etc.;
- atmosphere of planets and stars and its development;
- Ozone Depletion, etc.

Along with that, every new paper clarifies and supplements earlier published information; for instance, the four regular forms of working fluid medium existence have been supplemented with the 5-th form, the Coutte-Shikhirin Flow that forms the atmosphere of any planet including Earth, etc.

Moreover, the Ozone Depletion development in Earth's atmosphere is explained as an irreversible process caused by human activities.

The main thing here is to extend the time of Earth's atmosphere degradation and concentrate efforts, in parallel, on development of technologies making it possible for Mankind to emigrate to another planet; in other words, ***"… a rocket will save the Mankind's seed…".***

This is a natural evolutionary process taking a certain time and in the long run I see any phenomenon described in terms of torus technologies and elastic mechanics.

Perhaps, this is the way that used to and will be followed by thinking people - this is a law of Nature.

My investigations allow me to use torus technologies and elastic mechanics to reveal mechanisms of matter structurization in Nature and then come to development on this basis of free energy sources, transport vehicles and alike excluding the use of hydrocarbon and nuclear fuel.

I believe that in 2009 I will be able to update, supplement, combine and have all this knowledge published in one work - **"The Synergetics (Technology) of the Universe Existence" or "The Structurization Energy and Information as the Universe's Existence Technology"**.

The similar route was once taken, though not from positions of torus technologies and elastic mechanics, by outstanding practical people and engineers who developed workable self-supported natural technologies based on total putting things to order, namely, **automatic self-structurization (recovery) of regular natural fluid medium forms such as Foam[4], Bundle[4], VTortex, Foam[VTortex] and Coutte-Shikhirin flow after their targeted destructurization (destruction, balance shifting).**

Those "great" people who developed self-supported systems were John Worrell Keely (1827-1898), Nikola Tesla (1856-1943), Thomas Henry Moray, Victor Schauberger (1885-1958), Richard Clem, John R.R. Searl, Wilhelm Reich (1897-1957), Bruce de Palme, Viktor Grebennikov (1928-2001) and others.

One should also mention outstanding scientists being at the same time practical men and theorists who understood and described unknown natural technologies and natural small-scale and global phenomena as well as ways for Mankind to escape catastrophes programmed by Nature in a natural way.

Those people were Konstantin Tsiolkovskiy (1857-1935), Alexander Milovich (1874-1958), Vladimir Vernadskiy (1863-1945), Alexander Chizhevsky (1897 –1964), Anatoliy Barbarash (1929-2007), Anatoliy Akimov (1938-2007), Ruvim Kozhevnikov (1924-2007), Vladimir Smirnov (1884-1960), Nikolay Korovyakov (1937-2004), Vyacheslav Kasatkin and others.

Once at the beginning of the year 2008 one of world-known professors of a reputable institution said behind my back: "Why should he give his name to natural processes and phenomena no matter even if he discovered them? Names of discoverers are assigned to these phenomena and processes not earlier than in the future!"

There is a simple reply to it told me by just as a world-known professor of another reputable institution: many discoveries are "neatly, elegantly and delicately" picked up (stolen) by other persons or simply "forgotten".

Moreover, can we expect today whether an event like assigning my name to my discoveries, will ever occur in the future?

Therefore, I am very much concerned in advance about not leaving such things to the mercy of fate beyond my control in the future and determined to defend my priority, at least in this way, by leaving these "imprints" in different conference reports with multiple dubbing in the Internet.

Structurization and Interaction Energy and Information

Structurization Energy and Information

From viewpoints of torus technologies and elastic mechanics [1-5], getting into the insight of processes of working fluid medium regular forms structurization in Nature by example of a tornado [6] and conversion of the regular forms into amorphous or solid states (smoothing of angles and edges, a tendency to acquire an optimum shape, etc.) occurred, is occurring and will occur eternally with the help of **Structurization Energy&Information or InfEnergy) $\{E{\leftrightarrow}I\}_S$** [7,8] being the primary driving force in Nature.

What is "Free" Energy and Information?

In the history of our civilization the notion "free energy" was understood as a total entity without taking into account its "information" constituent, i.e. "free

information", which in fact makes a single whole with "free energy", namely **free energy and information or free information and energy existing in Time.**

Free energy and information is inexhaustible infinite natural matter-making perfect energy and information that one can produce under any conditions on Earth and in Space having only activators (accumulators) for their activation and subsequent use.

This omnipresent and all-permeating energy and information of nano-, micro-, macro- and mega worlds is structurization energy and information (energy and information of the form, form-making energy and information). The principle of the structurization energy and information activity is that should any natural form be damaged, e.g. a lizard's tail is torn away, the above energy instantly puts the things in order, that is huge energy and information are spent on a new tail recovery.

….. For instance, a tornado as a self-supported mechanism exists for 5 days on Earth while on Jupiter an equivalent tornado, the so called "Big Red Spot", has been observed, i.e. has been active through self-support, already for 350 years.

Interaction Energy and Information

The total **structurization energy and information** effect gives rise to **Interaction Energy&Information, or InfEnergy $\{E \leftrightarrow I\}_I$** activity that has received an energy-information impulse (impact) from the former.

The total structurization energy and information effect is manifested by:

1. Separation, ejection, holding up, blocking, pulling, etc.

Energy:

For instance, as spherical bubbles of Foam[4] naturally increase in size prior to their formation into dodecahedrons (from soap foam to Space Foam), i.e. packing into a tight pack, they push adjacent bubbles and foreign objects aside.

In every dodecahedron a pressure field (charge) with a concentrated pressure charge is generated, with the maximum charge pressure in its geometrical center.

In this case the so called Pascal's law of pressure equivalence in every point of a compressed fluid medium does not work. In other words, this law just does not exist in Nature.

A good example of structurization energy and information action and interaction is provided by a plant growing from a seed. In this situation the plant development (growth) disregards the environment: the plant simply "elbows" the environment aside destroying even the rock matter.

Information:

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Deformation of bodies occurs including their destruction or merging, phase states of matter or its coordinates in space change, new trajectories and types of motion appear, etc.

2. *Pulling in, sucking in, exhaustion, shrinking, diffusion, etc.*

Energy:

For instance, when a *Plato-Shikhirin Skeleton* of any size Foam[4] is formed foreign objects move (levitate) into Plato tetrahedron vortices as an area of the lowest pressure (vacuum).

In this way all active galaxies each of which has a huge weight about $4 \bullet 10^{50}$ tons concentrate and subsequently interact there.

Moreover, the whole stellar matter in the same galaxies concentrates in junction areas of three Color Cell[7] Bases (Shikhirin Cells[7]) {9-14}, etc.

In this situation the so-called law of universal gravitation either does not work or is ignored. In other words, it just does not exist in Nature.

Information: deformation of objects occurs including their destruction or merging, phase states of matter and space coordinates change, new trajectories and types of motion appear, etc.

3. *Twisting, turning over, eversion, envelopment, etc.*

Energy: For instance, a tornado rolls its "head" over the earth or water surface, captures part of it, twists and moves it by "double" rolling to the tornado's "tail" [6].

Information: deformation of objects occurs including their destruction or merging, phase states of matter and space coordinates change, new trajectories and types of motion appear, etc.

Technologically, the structurization energy and information activity and interaction of regular forms is a closed cycle:

$$\ldots \to \{E \leftrightarrow I\}_S \to \{E \leftrightarrow I\}_I \to \ldots \to \{E \leftrightarrow I\}_S \to \{E \leftrightarrow I\}_I \to \ldots,$$

assuming that,

$\{E \leftrightarrow I\}_S$ **is equivalent to** $\{I \leftrightarrow E\}_S$**, and** $\{E \leftrightarrow I\}_I$ **is equivalent to** $\{I \leftrightarrow E\}_I$

It should be noted that non-linear effect of Newton's laws is true only for planets that have conditions for development of atmosphere as an indicator of an active gravitation field (gravity force), with the gravitation center (super high vacuum), abnormally lower than 10^{-5} Pa, located in the center of any planet including Earth.

In other words,
- **the closer to Earth's center (depressions) the bigger the gravity force;**
- **the farther from Earth's center (mountain peaks, atmosphere) the smaller the gravity force;**
- the bigger is the mass of a body, the bigger is the kinetic energy of its fall, etc.

Assume the "famous" formula $V = \sqrt{2gH}$, where **V** is the velocity of a body that falls freely from a height **H** (Earth's radius) and **g** is the so called "free fall acceleration of a body in vacuum".
This formula is, possibly, untrue in general or needs to be corrected.
Nevertheless, the velocity

$$V \approx \sqrt{(2 \cdot 10 m/s^2 \cdot 6356\ km)} \approx \sqrt{(2 \cdot 10 m/s^2 \cdot 6356000\ m)} \approx$$
$$\sqrt{127120000 m^2/s^2} \approx 11274750,55\ m/s \approx 11275\ km/s$$

The above velocity is about thousand times more than the 2-nd space velocity.
Using another "famous" formula $E_к = mv^2/2$, where $E_к$ is kinetic energy and **m** is a body mass, we obtain the kinetic energy of a body with the mass **m** at the moment of falling (attraction by super-high vacuum) in Earth's center, which is

$$E_к = mv^2/2 \approx m \cdot (11275\ km/сек)^2 g \approx m \cdot 127\ km^2 s^2 ton$$

That is, the bigger is the mass of a body the greater is the kinetic energy developed during its fall (attraction by super-high vacuum).

Moreover, Newton's laws work only on Earth's surface with an accuracy of 0 to ±100%, and only at definite locations (see below "Solid" Single Bubble – Dodecahedron"), namely:
   - **in the direction towards 30 gravitation centers - from 0 to +100%, and**
   - **in the direction away from 20 levitation centers – from -100% to 0.**

The effect of structurization energies and information and their space-scale interaction may result in universal catastrophes including those that may occur on Earth, such as pre-programmed climate cooling, drifting and turning of Earth's axis [13,14].

The information presented in this paper and previous papers [7-14] provides, in the author's opinion, direct and/or indirect proof of existing "unknown" MAIN energy and information, i.e. **structurization (forming, form-making) energy and information based on** an energy-information, or "genetic", code of regular forms of any working fluid medium in Nature, which code activates and supports the existence of **5 regular forms of a three-phase (three-component) working fluid medium in Nature**, namely:
   1) **Foam**[4] –a tight pack of **spherical** dodecahedron shells or dodecahedron variation* shells;
   2) **Bundle**[4] –a tight pack of stretched **spherical** dodecahedron shells or dodecahedron variation* shells rotating respective their longitudinal axes;

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3) **VTortex** –a tight pack of double-vertex heptahedrons (Shikhirin Cells[7] or Color Cells[7]) with honeycomb-cell bases making the torus periphery. The cells are oriented by means of the (***3n_p*; {*n_q* + *[(n_q – 1)/2]*}**) torus knot line [9], and every two heptahedron vertexes connected in a pre-defined way make the torus string;

4) **Foam**^{**Vrortex**} - a tight pack of **torus-shaped** shells;

5) **Coutte-Shikhirin Flow -** a flat pack of eversible/enveloping liquid or/and gas toruses closed at the poles and open between them whose central body is formed by firm and flexible sphere-like shells filled with substance structured in a certain way. In other words, it is a *structured ball,* a dodecahedron or its combinations (stars and planets) produced by a helical rolling mill of any active galaxy [9].

In engineering practice, Coutte-Shikhirin flows are generated, for instance, inside (near the walls) cylindrical, conical and other surfaces rotating around their longitudinal axes, etc.

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* **"dodecahedron and its variations"** means *a polyhedron (A{B}), where A is a number of facets, B is a number of angles in the polyhedron ("B-angle"):*

- *Dodecahedron - 12{5},*
- *Icosahedron - 20{3},*
- *β (Beta)-tetrakaidecahedron - 4{6} + 8{5} + 2{4}*
- *Truncated Icosahedron - 20{6} + 12{5} и т.п.*

Working fluid medium has, in turn, three phases (three components) namely:

- **1-st phase** - a single-layer bulk framework formed by the Plato-Shikhirin channel system called a *Plato-Shikhirin Skeleton or Aether (Ether)* (Fig. 1,3) which consists of interconnected planes, tetrahedrons, hollow sculptured balls with hollow rings put on them (for the Coutte-Shikhirin Flow). All this is a super-rarefied (degenerated) working fluid medium enveloping all elements of nano-, micro-, macro- and megaworlds of the Universe;

  The 1-st phase contains all dislocations, surfactants and all "debris" squeezed out of the fluid medium into the *Plato-Shikhirin Skeleton.* The function of the press to create the super-rarefied fluid medium is performed by spherical polyhedral or toroidal shells (2-nd phase) located in niches (cavities) of the framework and filled with a working fluid medium under overpressure (3-rd phase);

- **2-nd phase** - thin soft/elastic "material" of spherical polyhedral or toroidal shells filled with a working fluid medium under overpressure;

- **3-rd phase** –working fluid medium under overpressure, the filler.
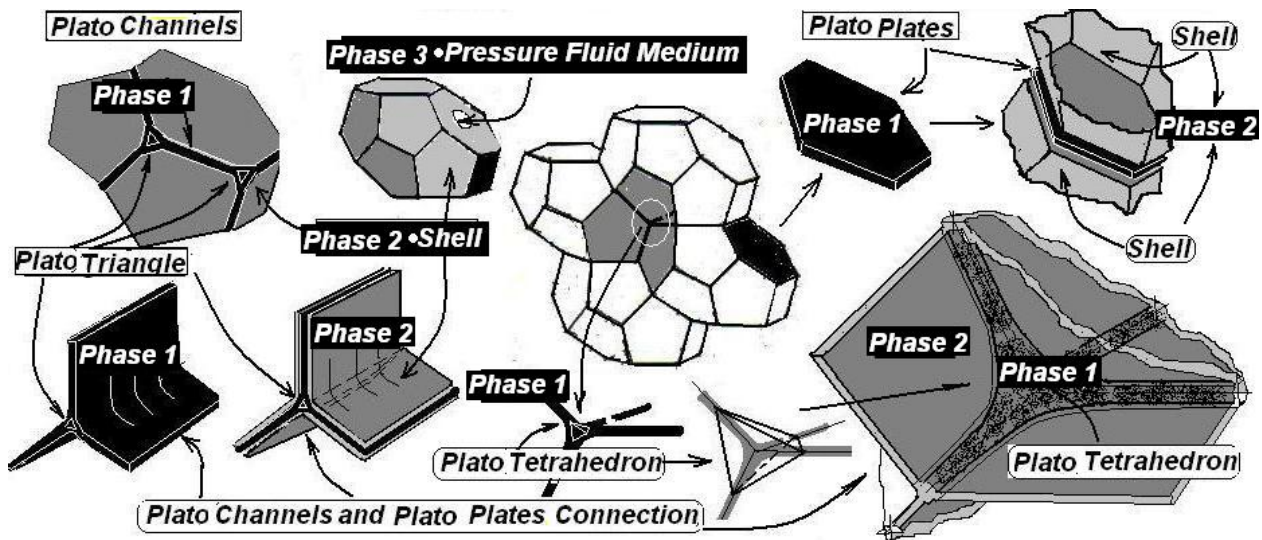
Fig. 1. The structure of a three-phase (three-component) working fluid medium.

The three-phase (three-component) working fluid medium may be of two types:

1-st type - liquid, where
- 1-st phase (Plato-Shikhirin Skeleton) is a rarefied gas working fluid medium with dislocations and surfactants making the Plato-Shikhirin Skeleton;
- 2-nd phase (Shell) is a thin soft/elastic "material" of spherical, polyhedral or toroidal shells or their tight pack. The material consists of compressed liquid;
- 3-rd phase (Filler) is liquid that serves as a working fluid medium under overpressure contained in a shell (phase 2)

2-nd type – gas, where:
- 1-st phase is a rarefied liquid-like working fluid medium with dislocations and surfactants making the Plato-Shikhirin Skeleton;
- 2-nd phase (Shell) is a thin/soft "material" of spherical, polyhedral or toroidal shells or of their tight pack. The material consists of compressed gas;
- 3-rd phase (Filler) is gas that serves as working fluid medium under overpressure contained in a shell (phase 2)

In terms of design, the "three-phase (three-component) working fluid medium" is represented by the 3-rd phase (Filler) of a working fluid medium which is contained under overpressure in a spherical, polyhedral or toroidal shell made of thin soft/elastic material that represents the 2-nd phase of a working fluid medium (Shell), while the 1-st phase (Plato-Shikhirin Skeleton) being under low pressure (high vacuum) fills the space between shells and is represented by **Plato channels, planes, triangles and tetrahedrons.**

Table 1 shows averaged basic parameters and the physical meaning of a 3-phase fluid medium by an example of *Color Cell*[1,2,3,4,5,6,7] (Fig. 2)

Table 1

Averaged basic parameters and physical meaning of a 3-phase fluid medium by example of *Color Cell*[1,2,3,4,5,6,7]

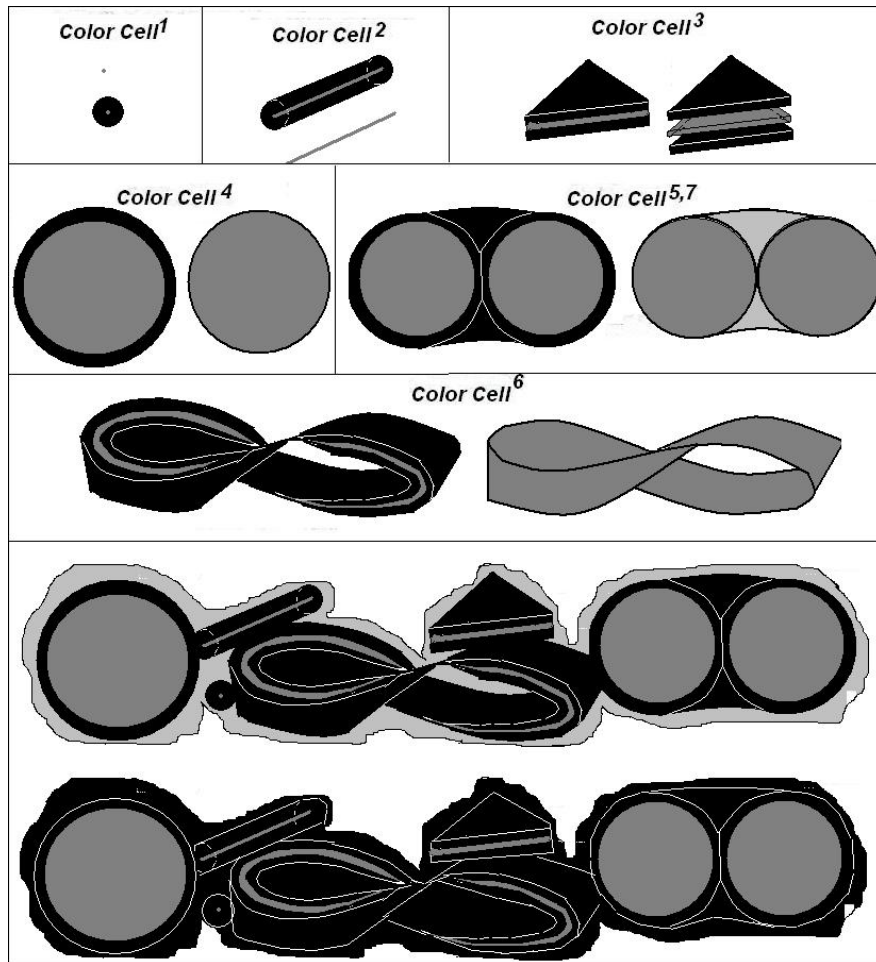| Phases	Phase 1 **Plato-Shikhirin Skeleton, or Aether**	Phase 2 **Shell (Light gas [14])**	Phase 3 **Filler (Heavy gas [14])**
Physical meaning of phases	Universal working fluid medium embracing shells/forms	Shell material, m	Compressed working fluid medium
Color Cell[1,2,3,4,5,6,7]	Total area (S) Length (l)*, Layer thickness (h)**, Half-perimeter (p)***, Width (t)****, Volume (V), Specific density	Area (S_m), Thickness (h_m), Volume (V), Specific density	Overpressure (unit pressure) (P_0), Volume (V), Specific density
Point[1] - Sphere	$S = 4\,\pi_{sp}\,R^2$ $V = 4/3\,\pi_{sp}\,R^3$	-	-
Line[2] - Cylinder*	$S = l\,2\pi_{sp}\,R + 2\,\pi_{sp}\,R^2 = 2\pi_{sp}\,R\,(l+R)$ $V = l\,\pi_{sp}\,R^2$	-	$V = l$
Plane - Triangle[3] - Triangular prism**,***	$S = 2[\sqrt{p(p-a)(p-b)(p-c)}] + h(a+b+c)$ $V = h\sqrt{p(p-a)(p-b)(p-c)}$	$S = \sqrt{p(p-a)(p-b)(p-c))}$ $V = h_m\sqrt{p(p-a)(p-b)(p-c)}$	$V = h\sqrt{p(p-a)(p-b)(p-c)}$
Sphere4 - Hollow ball**	$S = 4\,\pi sp\,R2 + 4\,\pi sp\,(R-h)2 = 4\,\pi sp(2R2 - 2Rh + h2)$ $V = 4/3\,\pi sp\,R3 - 4/3\,\pi sp\,(R-h)3 = 4/3\,\pi sp[R3-(R-h)3]$	$S = 4\,\pi sp\,R2 + 4\,\pi sp\,(R-hm)2 = 4\,\pi sp(2R2 - 2Rhm + hm2)$ $V = 4/3\,\pi sp\,R3 - 4/3\,\pi sp\,(R-hm)3 = 4/3\,\pi sp[R3 - (R-hm)3]$	$V = 4/3\,\pi sp\,(R-hm)3$
Closed torus5,7 – Hollow torus**	$S = 4\,\pi t\,\pi spR2$ $V = 2\,\pi t\,\pi spR3 - 2\,\pi t\,\pi sp(R-h)3 = 2\,\pi t\,\pi sp[R3-(R-h)3]$	$S = 4\,\pi t\,\pi spR2$ $V = 2\,\pi t\,\pi spR3 - 2\,\pi t\,\pi sp(R-hm)3 = 2\,\pi t\,\pi sp[R3-(R-hm)3]$	$V = 2\,\pi t\,\pi sp(R-hm)3$
Mobius band6*,**,****	$S = 2lt$ $V = 2lth$	$S = 2lt$ $V = 2lthm$	$V = lt$

Fig. 2 Color Cell[1,2,3,4,5,6,7], cloaked (enveloped, wrapped up, surrounded, washed) by a Plato-Shikhirin Skeleton (Phase 1 - Plato-Shikhirin Skeleton, or Aether, black color)

Fig. 2 shows Color Cell[1,2,3,4,5,6,7], cloaked (enveloped, wrapped up, surrounded, washed) locally (theoretically) and in reality by a Plato-Shikhirin Skeleton (Phase 1) interconnecting these cells.
One could say that Phase 1 is an imprint or a mirrored material image of all elements of nano-, micro-, macro- and megaworlds of the Universe.

Aether
The author is confident that the *Plato-Shikhirin Skeleton is just what we call the Aether.*

And here we are approaching the solution to one of the most important mysteries of Nature that **great practical men** of Mankind had taken pains to solve, for instance, Nikola Tesla (1856-1943) who felt and understood the physical meaning of the Aether by intuition since he developed in reality natural power systems that produced

and transmitted electrical power just via the Plato-Shikhirin Skeleton, i.e. via the Aether, rather than by electrical wires.

Moreover, the **man-made** (by Tesla) target energy and information charge looked like a lightning which is a transmitted **natural** energy and information charge.

So, from [http://ru.wikipedia.org] it follows that:

*The Aether **(world Aether, luminiferous Aether**) from the XVII-th century through 1930-ies was understood by physicists as an **interim all-permeating physical medium filling all Space and spaces between particles of normal substances and producing oscillations considered to be electromagnetic waves**.*

This theory was suggested by the physicist N. Tesla

*Also prior to the discovery of Mendeleev's periodic law some physicists and chemists believed **the Aether** to be one of the basic chemical elements.*

*The terms "Aether" and "quintessence" were sometimes used in physics up to 1970 - 90-ies as a synonym of **vacuum** in general or in relation to its **structuredness**, in particular.*

The synonym of the "Aether" called the "physical vacuum" was popularized and used in his investigations by my friend and fellow thinker Anatoly Akimov [15] (1938-2007), an outstanding physicist and a practical man who I cooperated with from 1989 (Moscow-Zelenograd) actually up to his death within the framework of the Interindustry R&D Center of Venture Non-Traditional Technologies (Russian acronym "MNTTs VENT").

The purpose of MNTTs VENT was *development and introduction of industrial, agricultural, medical, environmental and other torsion technologies* based on a targeted influence of the torsion energy onto an object "to be corrected and controlled" to which torsion energy/information was applied via aether channels. The torsion energy/information was generated by an RF electronic device (a generator) or a **natural** (not chosen by anybody but rather self-appointed) generator, in other words, by an extrasensory individual.

People with extra-sensory capabilities (perceptive to abnormal phenomena) possess the "backlight" technology and can "develop" the aura of vegetable and animal world elements, e.g. the human aura.

One of outstanding natural practical extrasensory men being at the same time an engineer (without a college degree) is my friend and fellow thinker Nikolai Karpov, a leading expert in communications with objects of extra-terrestrial origin and psychotronics, who created different from Akimov's generators, a system of

principally new torsion field generators and sensors for use in our joint research work (1900-1995, Moscow-Zelenograd) to develop, for instance,
- software-structured materials to achieve pre-defined properties;
- equipment for software structuring of combustive lubricating materials to obtain pre-defined properties of such materials;
- a set of medical technologies based on magneto-dynamic integral resonance immunotherapy;
- assessment of oil functional characteristics;
- control devices for rheological water-emulsion systems and biochemical water activity, etc.

Small part of his investigations is described in a [16].

Instantly, I worked in cooperation with the author of this monograph Valentina Sokolova, a **practical** researcher and biologist, in 1990-2003 (Moscow-Zelenograd, Russia), on development of systems for water purification, recovery and structuring with pre-determined properties as well as on acceleration of south-growing plant (e.g. corn) vegetation period under northern conditions (Moscow Area).

Fig. 3 A fragment of an article written by the author (black and white image prior to scanning) that was published in a regional newspaper "41", Zelenograd (Moscow), No. 7 (1285), February 10, 2001, p.3

(http://www.alt-tech.org/index.php?module=content&func=folder_view&id=46)

On the picture one can clearly see the development of the "seven-color spectrum" on toroids fabricated by the author: by the left torus knot ~ (4.6) in the center, and by the right torus knot ~ (3.14) to the right and left, respectively.

This is color structurization in the static mode, i.e. the toroid is not everting inside out, it looks "frozen".
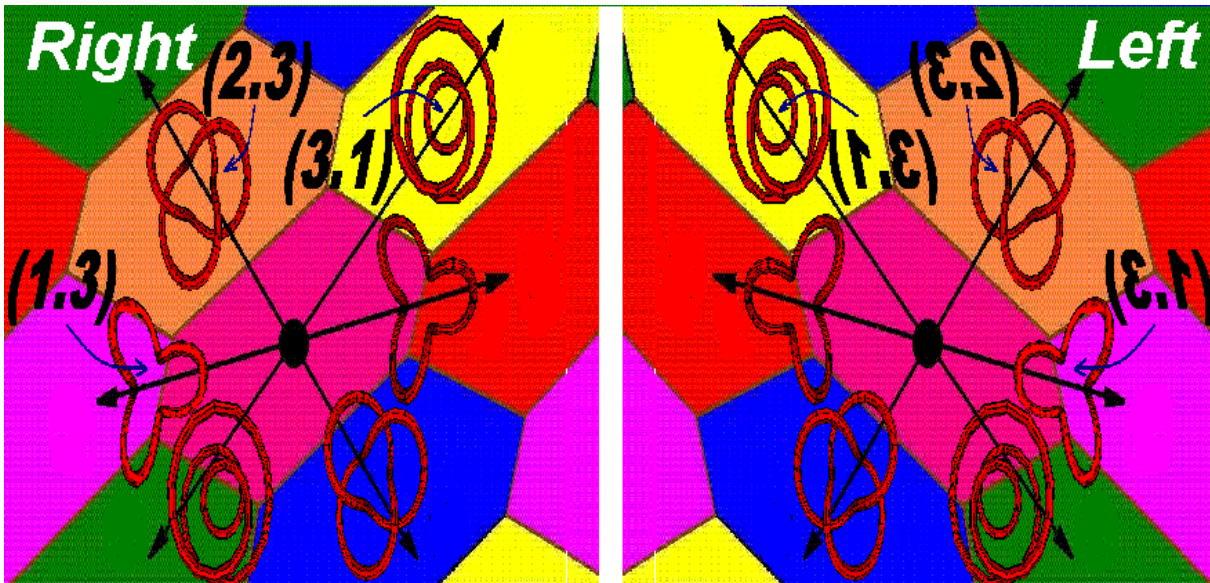
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Fig. 4 Universal "seven-color" ("septicolored") torus knot options

Moreover, the "septicoloredness" or the "color" aura of toruses appears on all pages of the newspaper where they overlap each other.

In other words, if, for instance, torus pictures are inserted into any objects, then the "septicoloredness" will penetrate into these objects, remain there for some indefinite time and manifest itself at certain" backlighting" of these objects.

People with extra-sensory capabilities (perceptive to abnormal phenomena) possess the "backlight" technology and can "develop" the aura of vegetable and animal world elements, e.g. the human aura.

Conclusion: any (every) nano-to-megaworld object possesses a "color" field, i.e. is one of the fields generated by the structurization energy and information.

In the dynamic mode, i.e. its eversion at high angular velocities along with its rotation around the longitudinal axis, the 7 colors are merged into the so called "Blue Glow", or the real white color.

The "Blue Glow" is inverse to the process of the white color decomposition into 7 colors.

According to people who happened to eye-witness an UFO, who I trust, at the moment of UFO hovering, i.e. when the motive vortex-based self-supported unit is in the idle mode, the UFO body seems to be coated with the same color picture moving at a low speed in the bottom-up direction.

As soon as the UFO starts its movement the color picture begins to move at a high speed gradually converting to a blue glow around the UFO (multiple color merging) The same blue glow picture accompanies natural vortex machines such as a tornado, a ball lightning, a small comet and alike, as well as man-made systems, e.g. Victor Schauberger's system.

Table 2

Universal "seven-color" (information) energetic (energy) torus knot or "Ternary system of "seven-color" ("septicolored") energetic torus knots

Type of torus knot	Right (→) and Left (←) (Directions)
Basic **(7 Colors)**	**Number of options** **(7pq/3 Colors)**
(1.3)	$_\rightarrow(\{n_p + [(n_p - 1)/2]\} \, ; \, 3n_q)^\rightarrow$ $_\leftarrow(\{n_p + [(n_p - 1)/2]\} \, ; \, 3n_q)^\leftarrow$ $\{n_p + [(n_p - 1)/2]\}$ is *the number of turns around the torus meridian*, i.e. a number sequence 1,2,4,5,7,8,10, ... consisting of positive integers except number 3 and multiples of 3, where n_p are positive integers, while operation [X] is an operation of taking an integer (integer division). $3n_q$ is the number of turns around the torus longitude, where n_q are positive integers.
(2.3) **The Trefoil Knot**	**The Big Trefoil Knot** $_\rightarrow(2n_p \, ; \, 3n_q)^\rightarrow$ $_\leftarrow(2n_p \, ; \, 3n_q)^\leftarrow$ *$2n_p$ is the number of turns around the torus meridian, where n_p are positive integers* *$3n_q$ is the number of turns around the torus meridian, where n_q are positive integers*
(3.1)	$_\rightarrow(3n_p \, ; \, \{n_q + [(n_q - 1)/2]\})^\rightarrow$ $_\leftarrow(3n_p \, ; \, \{n_q + [(n_q - 1)/2]\})^\leftarrow$ $3n_p$ is the number of turns around the torus meridian, where n_p are positive integers, $\{n_q + [(n_q - 1)/2]\}$ is *the number of turns around the torus longitude, i.e.* a number sequence 1,2,4,5,7,8,10, ... consisting of positive integers except number 3 and multiples of 3, where n_q are positive integers, while operation [X] is an operation of taking an integer (integer division).

Moreover, a type of a propulsive vortex-based self-supported unit may be visually identified by a number of 7-color blocks reinforced by a universal "seven-color" torus knot (Shikhirin's Soliton) (Table) [], and vice versa, in case of an uncovered unit, e.g. Schauberger's Domestic Power Station [], the author quite easily identified the torus knot in compliance with which Victor Schauberger created this System though he was unfamiliar with torus knots at that time **[14, Fig. 14].**

Universal "seven-color" (information) energetic (energy) torus knot or "Ternary system of "seven-color" ("septicolored") energetic torus knots is the principal functional feature of any power unit irrespective of its functional purpose, e.g. transportation vehicle, power source, etc.

The below conclusion, possibly, describes one of the laws of Nature discovered (possibly) by the author:

Any surface (a mathematical term) or regular forms of the three-phase state of matter in Nature, e.g. of a working fluid medium under overpressure, automatically generates a "color" field (color beams, or an aura) as part of the structurization energy and information field which under certain conditions, circumstances or by a "God's will" becomes visible (is manifested) like, e.g. a rainbow.

In other words, with a certain backlight (known to the author) not only 4, 7 (torus), 6 (Mobius) "colors" will be visualized on/over their surfaces but also their internal structure (the framework).

It should be noted that torsion (vortex) energy and information is an integral part of structurization energy and information or derived from structurization elements

The author suggests his own definition of the Aether that will be subsequently refined, namely:

The Aether is the **Plato-Shikhirin Skeleton, or the 1-st phase of the three-phase state of a working fluid medium,** *for self-supported and mutually convertible regular forms of the working fluid medium in Nature such as* Foam[4], Bundle[4], VTortex, Foam[VTortex] and Coutte-Shikhirin Flow.

These regular forms are systems of thin spherical and toroidal shells, with the 2-nd phase (Shell) being their material, and the 3-rd phase (Filler) being the working fluid medium that fills the shells under overpressure.

The Aether is characterized by the following functional features:

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- it is an integral inseparable **rarefied** fluid working medium (gas and/or liquid) which envelops every element of nano-, micro-, macro and megaworld matter, e.g. our planet, and exists according to channel process laws (regular forms of fluid medium existence in Nature)

  Nano-, micro-, macro- and megaworlds mean all Nature from giant space structures and more to animal and vegetable cells and less which is a system of nested spherical and toroidal shells separating different media and simultaneously ensuring continuity and intermittency of a topologically congruous single medium [13];

- in terms of design, the Plato-Shikhirin Skeleton, or the Aether, looks like an infinite "nested doll" system of nano-, micro-, macro and megaworlds, where each "nested doll" has a hole drilled once and for all with a purpose of creation of integral space made of a working fluid medium, i.e. the Aether, enveloping all "nested dolls" from inside and outside.

  The infinite "nested doll" system consists of "nested dolls" placed 1) coaxially inside each other, 2) between their walls, and 3) in conjugation against each other, etc. (Fig.5);

- under certain conditions (phase transfer) the Aether may be converted to solid ($Foam^4$), amorphous ($Bundle^4$) and smart (VTortex, $Foam^{VTortex}$ and Coutte-Shikhirin Flow) states and back;

- it accompanies "inseparably" and continually all possible single and/or batch energy-information phase transfers:

  $Foam^4 \leftrightarrow Bundle^4 \leftrightarrow VTortex \leftrightarrow Foam^{VTortex} \leftrightarrow$ Coutte-Shikhirin Flow;

- during its existence as self-supported (self-corrected) state and during energy-information phase transfers from one regular form of working fluid medium into another, the Aether simultaneously conducts energy and information (translates it through itself as a conducting medium), including electromagnetic or vortex energy with a respective information component;

- all events of energy-information conversions in the three-phase state of a working fluid medium and in the solid and amorphous states generated therefrom "are known" to any point of the Aether space, etc.
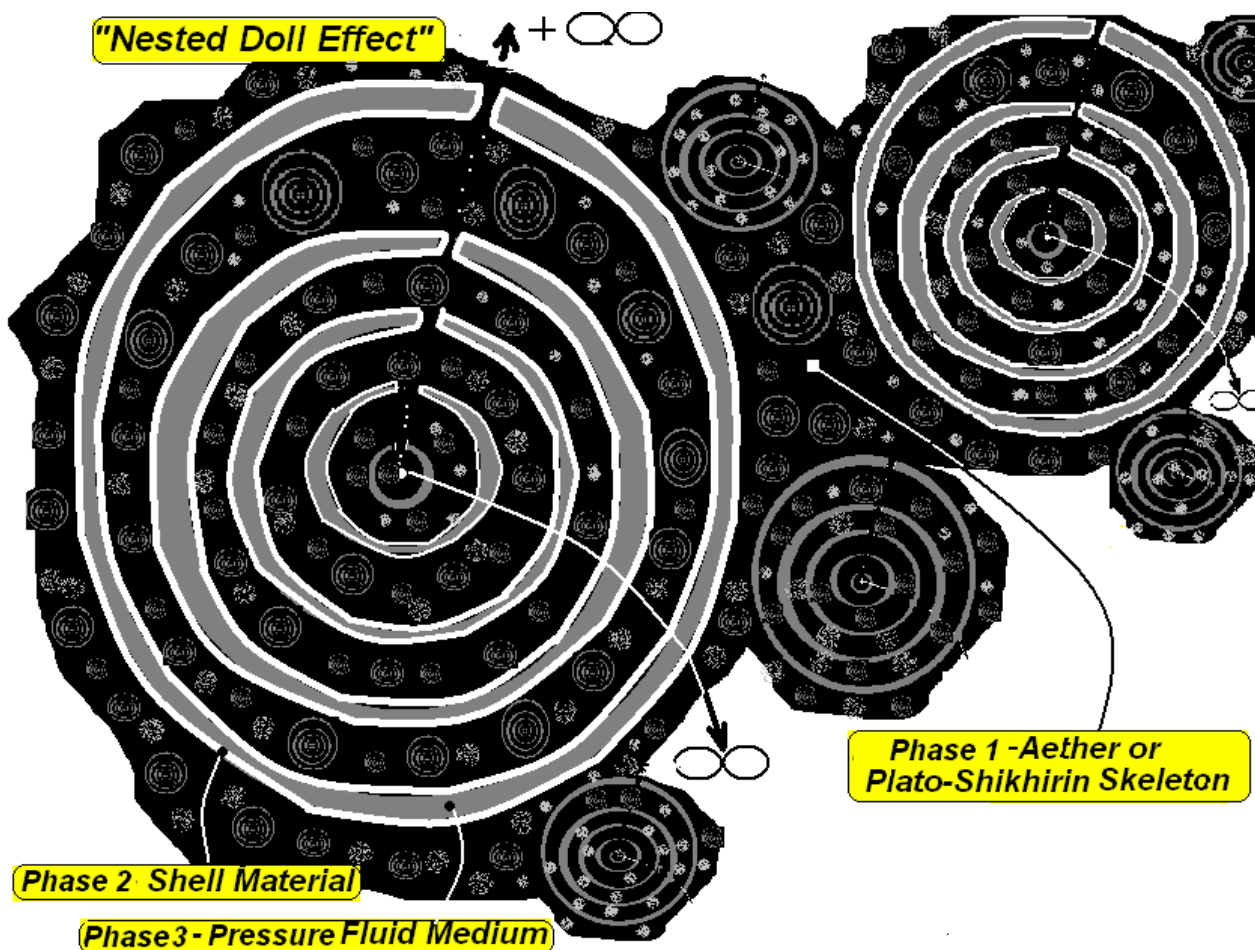
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Fig. 5 "Nested Doll" effect.

Fig. 5 shows a cross-section of "nested dolls" united by the common system of the Plato-Shikhirin Skeleton, or the Aether.

The common space of the Aether is achieved by "drilling" holes in every "nested doll" whose sizes stretch from - ∞ to + ∞, i.e. from the nano- and abnormally lesser world to the mega- and abnormally greater world.

Foam[4] and VTortex Structurization and Destructurization

Let us consider Foam[4] structurization (structuring, form-making) and destructurization processes for nano-, micro-, macro- and megaworlds by an example of a single soap bubble and then the following processes:

- VTortex structurization;
- structurization of a "solid" structured dodecahedron ball obtained by helical rolling in the VTortex central part;
- development of a **levitation and gravitation centers system** in/on a single "soap bubble", Foam[4], VTortex;

- development of a **levitation and gravitation centers system** in/on a solid structured dodecahedron ball (Earth).
  Instantly, this is how the atmosphere of planets, stars and alike gets structured.

A soap bubble is the primary element of soap foam, i.e. a tight pack of solitary bubble spheres (Spherical Foam) automatically convertible into a tight pack of solitary dodecahedrons or their combinations (Polyhedral Foam) [17-22].

Soap Foam[4] is an ideal working model of nano-, micro-, macro- and megaworld structures including the Universe Foam[4] [14], while a tornado (VTortex) is an ideal working model of VTortex system structures of nano-, micro-, macro- and megaworlds including active galaxies in the Universe.

In Nature there exists a variety of design options of plural (Foam[4]) and single "soap bubbles" (elements of Foam[4]) differing from each other in principle (Fig. 6).
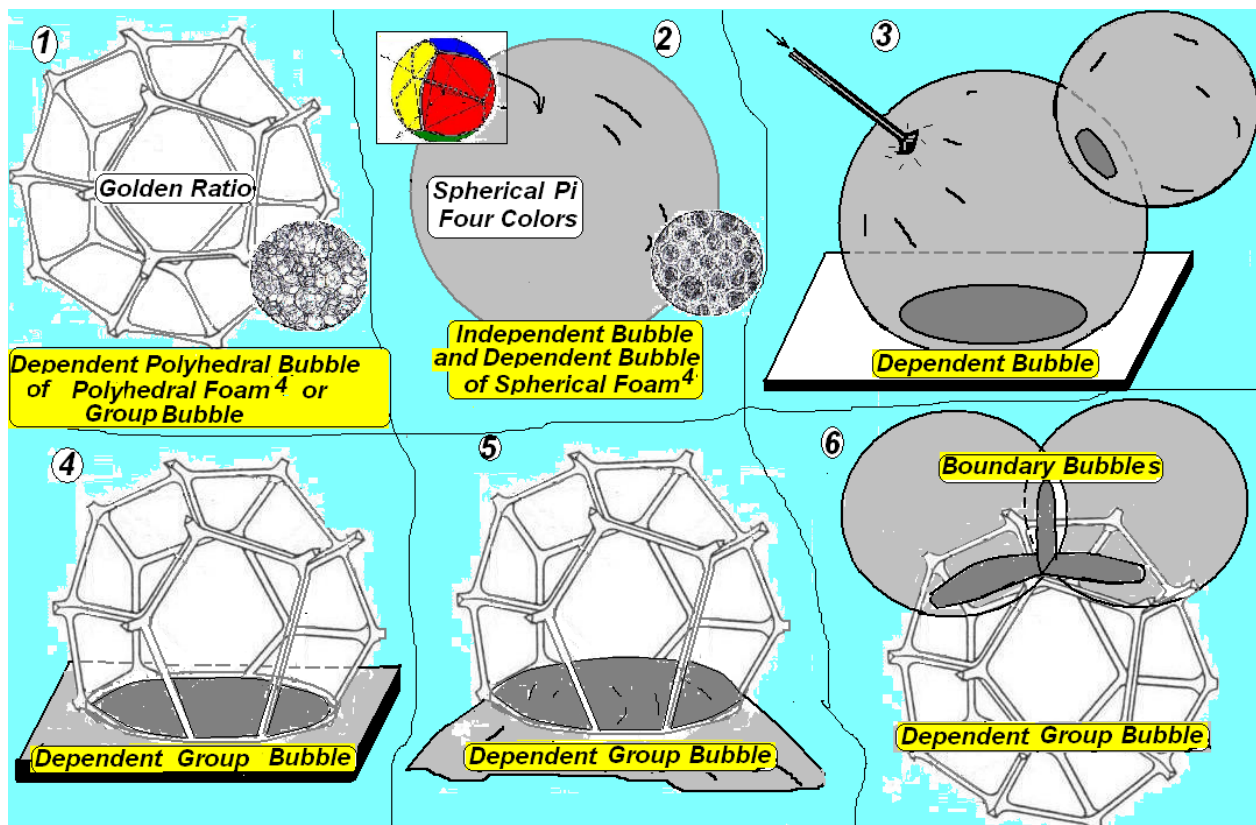

Fig. 6 Design-and-engineering options of "soap bubbles" creating Foam[4] of nano-, micro-, macro- and megaworlds. The Plato-Shikhirin Skeleton, or the Aether, is not shown.

Fig. 6 shows design options of single and plural "soap bubbles" that create Foam[4], namely (given in brackets are subfigures of Fig. 6):

- (2) a single independent bubble sphere and grouped bubble spheres constituting spherical foam[4] (a comprehensive definition is given in [17]);
- (1) bubble dodecahedrons constituting polyhedral foam[4];
- (3-6) boundary, dependent bubbles, semi-spheres/semi-dodecahedrons, that constitute a closed spherical soft/elastic shell framing or enclosing the tight pack of "internal" bubble spheres and/or bubble dodecahedrons.

This "bubble" enclosure may boarder any fluid medium or/and solid surface.

Single bubbles may be of two types:

- independent (free) bubble freely moving or hanging in gas medium without touching any objects;
- dependent (not free, a hemisphere) bubble coming into contact with any closed or/and open surfaces of solid, liquid or gas media. Contacted surfaces may be convex, concave or reproducing the profile of contacting surfaces.

  The number of "colors" on such a hemispherical bubble remains equal to four (4) depending on the contact surface, namely: three, two or one "color" interface junctions move(s) to the boundary between the hemisphere and the contact surface while one, two or three interface junctions remain at the upper part of the hemisphere, respectively.

Structurization and Destructurizationof a Single Soap Bubble Sphere

It is known [5] that a single soap bubble is a soft/elastic spherical shell filled or fillable with a working fluid medium (gas) under overpressure.

A "bubble sphere" originates from a "π_{sp}- point" in which 4 spherical tetrahedrons constituting the bubble sphere are preset genetically. Its surface area represents 4 colors, or tetrahedron bases, that make the bubble sphere and, namely, the shell material (phase 2) (Fig. 7).
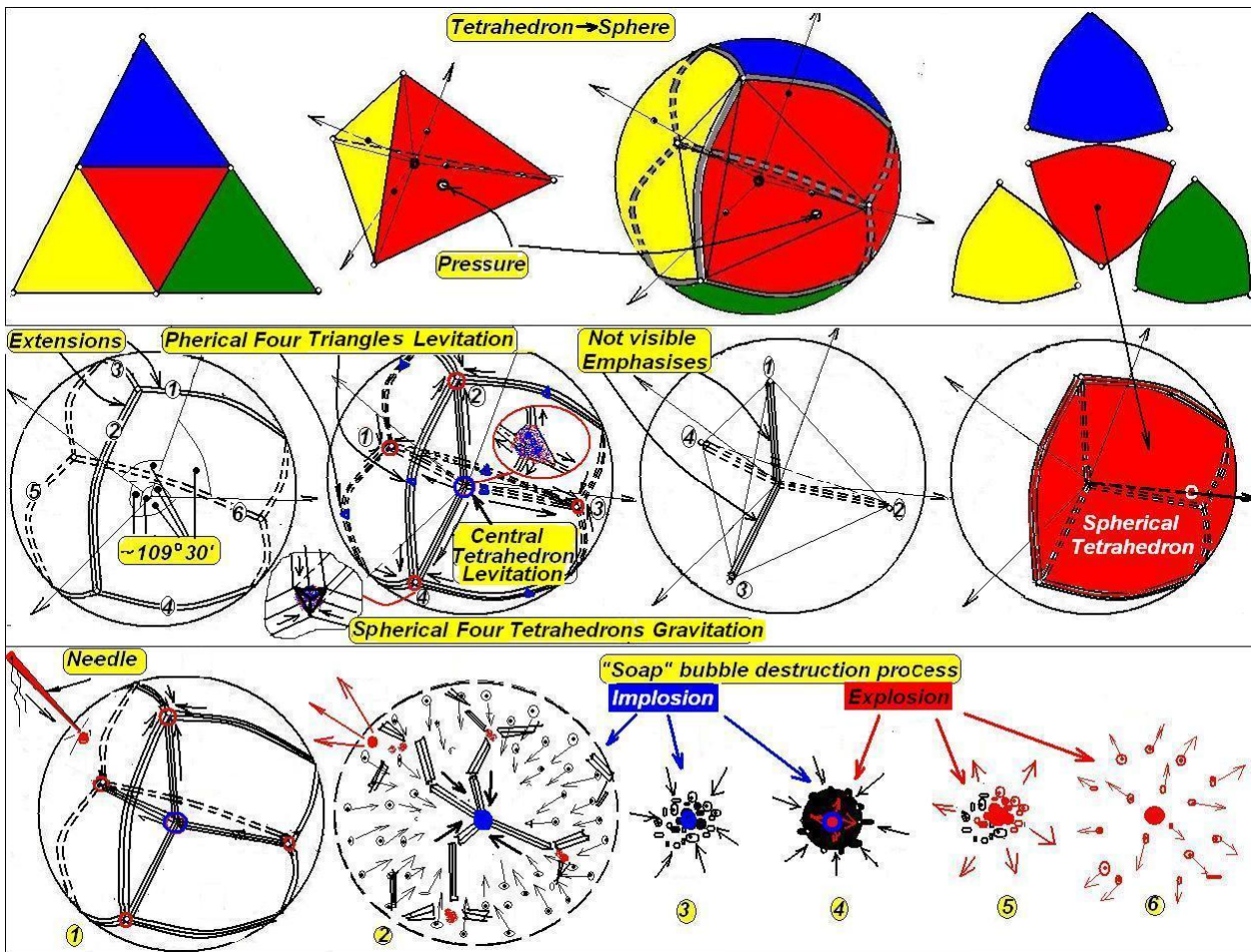
Fig. 7 Structurization and destructurization of a single soap bubble sphere. The Plato-Shikhirin Skeleton is not shown.

Fig. 7 shows a load-bearing structure of a "soap bubble" sphere including:
- **Stops, couplers:** 4 internal tetrahedron faces united in the bubble center produce 4 axes of a 4-dimensional natural space and are placed at an angle of 109^030^1 against one another.

  Each axis represents 3 internal common edges of 3 tetrahedrons. Therefore the axes are like tubes having a variable triangular cross-section.

  The center of the "tube" connection which is located in the geometrical center of the bubble is a regular central tetrahedron.
- **Extensions:** 4 common peripheral edges – boarders of the "4 colors" - are located at the bubble surface and combined into 4 centers

  Since each peripheral center combines 3 peripheral edges the shape of these edges is a tube with a variable triangular cross-section.

  Moreover, one of the axes is extended to each peripheral center from the common bubble center which axis also has a variable triangular cross-section.

  Therefore, each of the 4 peripheral centers is an "irregular" spherical tetrahedron.

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Stops and extensions make the framework supporting the strained condition of the bubble shell material.

As soon as the shell material loses its impermeability (1) the bubble is destroyed in the following sequence:

- the compressed working fluid medium spills out (explosive process) creating a rarefied zone in the center of the already non-existing bubble (2);
- the extensions are destroyed (2);
- the stops are destroyed (2);
- the remains of the bubble shell material and elements of the already non-existing escaped compressed working fluid medium ("drops") rush to the center of the rarefied zone (implosive process) (3)
- in the center of the rarefied zone such "drops" collide (implosive burst) (4) resulting in particles escaping away from this center (explosive process) (5,6).

Gravitation and Levitation and Their Generation Centers

Levitation and Gravitation are a result of the structurization energy and information activity in processes of:

- generation of regular forms of working fluid medium existence in Nature;
- conversion of one form into another;
- conversion of such forms into a solid and/or an amorphous state and back.

Gravitation is a process of forward and rotational (vortical, envelopment process) pulling (sucking in) of matter (substance) into implosion sink centers by super-high vacuum forces originating in such centers.
For instance, for Earth this is super-high vacuum abnormally higher than 10-5 Pa contained in its center.

Levitation is a process of forward and rotational (vortical, eversion process) pushing of matter (substance) out of explosion source centers by high-pressure forces originating in such centers.

According to a topological criterion of n-dimensional space, a sphere is a solitary bubble, a tight pack of spheres and/or dodecahedrons (spherical and polyhedral Foam[4]), or a solid solitary bubble (Earth), or a torus (VTortex) and a tight pack of toruses (Foam^{VTortex}) that have their own structure of interconnected functional levels of the Plato-Shikhirin Skeleton (phase 1) or, in other words, of functional gravitation and levitation levels to perform such functions as:

- pipeline transportation;

-        load-bearing frame.

Plato-Shikhirin Skeleton channels are "tubes "with a variable triangular cross-section. Tube are connected by their ends and tube joints are gravitation and levitation centers. Such a center is mainly a tetrahedron, a cube and a dodecahedron.

Plato-Shikhirin channels may have the following cross-section shapes (Fig.8, a soap bubble example):
-        a Convex Triangle - this shape is characteristic of gravitation Plato channels filled with a working fluid medium under overpressure;
-        a Concave Triangle - this shape is characteristic of levitation Plato channels in which a working fluid medium is in a vacuum state.

Sphere (Figs. 8, 9): when a sphere consisting of a tight pack of 4 tetrahedrons is formed (inflated) the working fluid medium between the tetrahedrons as the shells **is squeezed out** in the following directions:
1-st level: from the space between the faces (walls) of the cells into "axes/edges". In this case the space between the faces "is emasculated, dries out, disappears" (high vacuum), and the walls become firm and flexible (functioning as "stiffening walls".
2-nd level: radially by edges/axes/tubes away from the center of the sphere towards the periphery into spherical tubes/edges of tetrahedrons - 6 boundaries of the 4 "colors"
In this case tubes "are emasculated, dry out" (high vacuum), their walls become firm and flexible acting as "internal stiffeners" (stops, couplers)
3-rd level: from the middle of edges/tubes towards interface junctions of "three colors", or tetrahedron bases.
In this case tubes/edges "are emasculated, dry out" (high vacuum), their walls become firm and flexible acting as "external stiffeners".
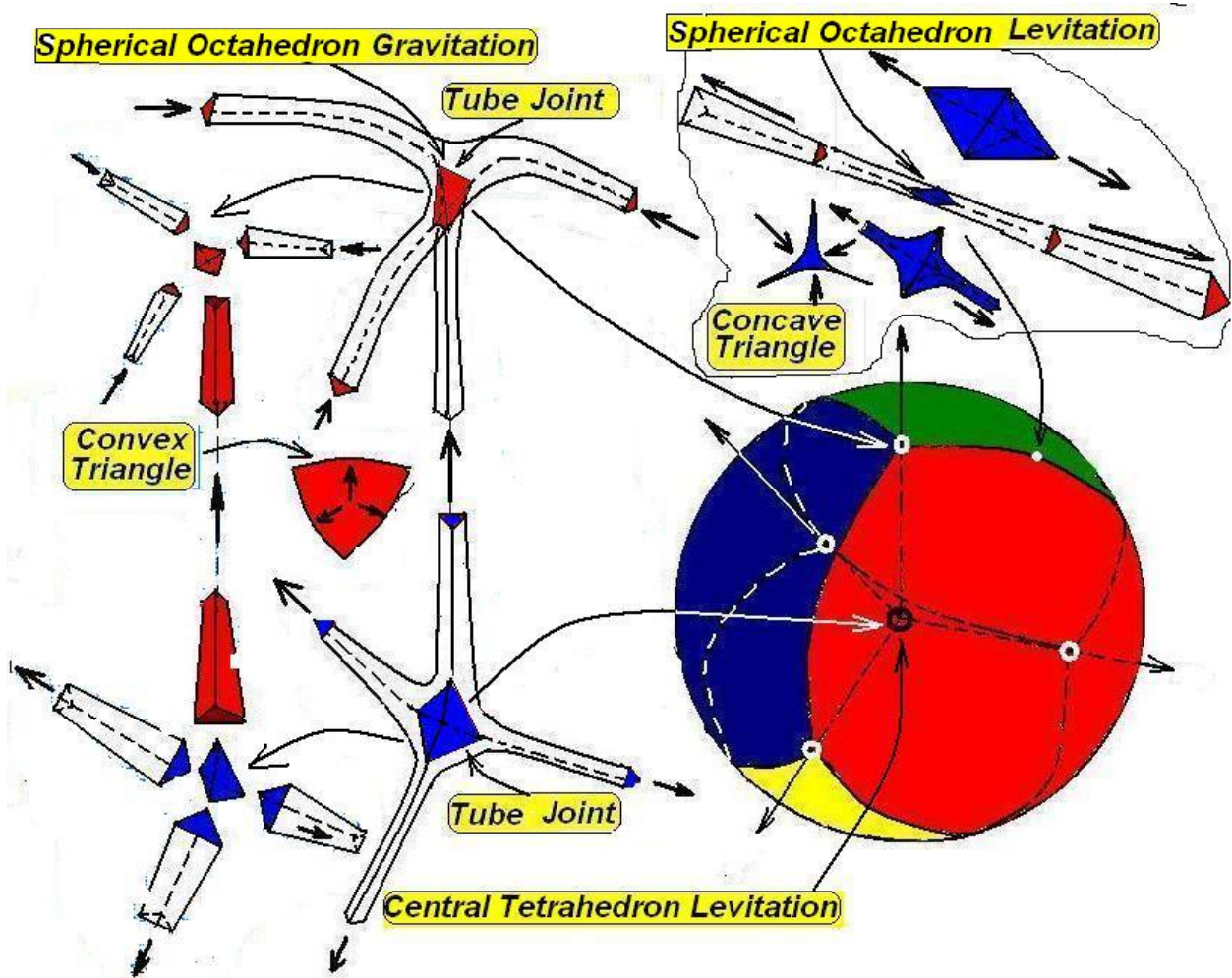
Fig. 8. Levitation and gravitation centers in/on a soap bubble or a sphere

Gravitation centers in a bubble sphere to which matter is pulled in are located in 4 interface junctions of the "four colors" on the bubble surface.

Levitation centers in a bubble sphere from which matter is pushed out are located in:
- its geometrical center that has a form of a deformed tetrahedron (Central Tetrahedron of Levitation);
- the middle part of each of 6 edges of the four tetrahedron bases that constitute a sphere having a deformed cube shape.

-

Therefore, a sphere has four gravitation centers (tetrahedrons) at the periphery and seven levitation centers, of which one (a dodecahedron) is in the center and six (cubes) are at the periphery. Both type centers are interconnected by the Plato-Shikhirin Skeleton, or the Aether.

Foam[4] (Fig. 9)

Two types of Foam[4] may be recognized: spherical and polyhedral (dodecahedral).
Spherical foam[4] is formed of spheres that have levitation and gravitation centers described in the previous passage.

Let us consider the polyhedral foam[4] consisting of dodecahedrons or their variations, further collectively called "dodecahedrons".
In the process of polyhedral foam formation (inflation) every sphere is transformed into a dodecahedron, i.e. 4 tetrahedrons that make the sphere are transformed into 12 pyramids making a dodecahedron.
To put it in another way, one tetrahedron is transformed into three pyramids with pentagon dodecahedron bases.
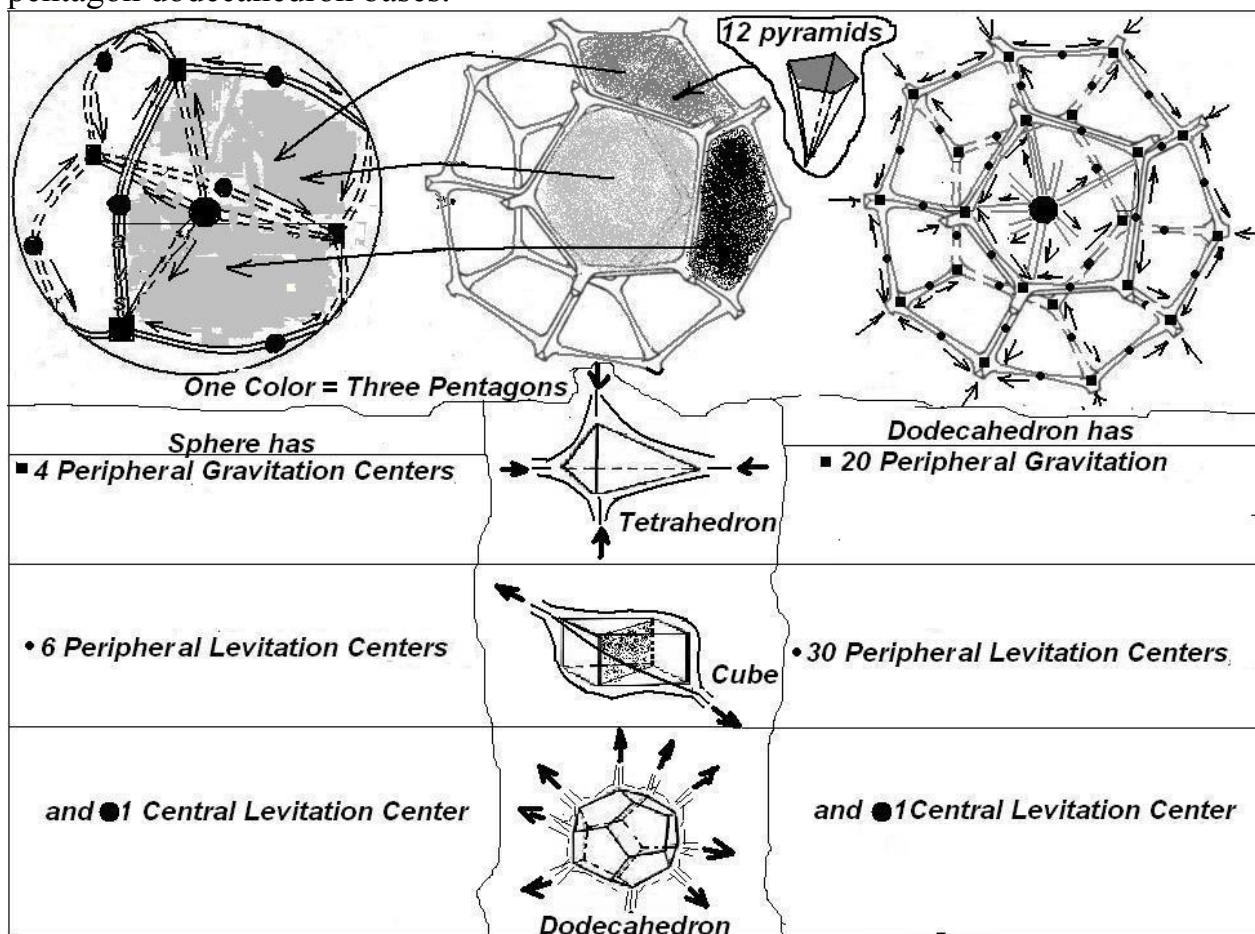

Sphere has		Dodecahedron has
■ 4 Peripheral Gravitation Centers	Tetrahedron	■ 20 Peripheral Gravitation
• 6 Peripheral Levitation Centers	Cube	• 30 Peripheral Levitation Centers
and ● 1 Central Levitation Center	Dodecahedron	and ● 1 Central Levitation Center

One Color = Three Pentagons

12 pyramids

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Fig. 9. Transformation of spherical foam[4] into dodecahedron foam[4].

Then the dodecahedron structure consists of:
- 12 pyramids with thirty common faces (thirty dodecahedron edges);
- pyramid bases – 12 pentagons that together constitute the dodecahedron surface;
- twenty common pyramid edges (twenty dodecahedron vertexes) abutting against the geometrical center of the dodecahedron.

When spheres are formed (inflated) into dodecahedrons comprised by a tight pack of 12 pyramids with pentagon bases the working fluid medium between them as the shells is **squeezed out** in the following directions:

1-st level - from the space between the 30 cell faces (walls) into 20 "edges/axes".
In this case the space between the edges "is emasculated, dries out, disappears" (high vacuum), and the walls become firm and flexible acting as "stiffener walls"

2-nd level - radially via 20 edges/axes/tubes (twenty dodecahedron vertexes) away from the center of the dodecahedron towards its periphery.
In this case the tube space "is emasculated, dries out, disappears" (high vacuum), the walls become firm and flexible acting as "internal stiffeners" (stops, couplers)

3-rd level: from the middle of the dodecahedron edges/tubes (the periphery) towards cross junctions of three pentagons of the dodecahedron.
In this case the tube space "is emasculated, dries out, disappears" (high vacuum), the walls become firm and flexible acting as "external stiffeners".

4-th level - towards cross junctions of three dodecahedron pentagons and other 12 edges/tubes of other dodecahedrons constituting their tight pack - dodecahedral module.
In this case the edges/tubes "are emasculated, dry out, disappear" (high vacuum), their walls become firm and flexible acting as "external stiffeners" already for the tight pack of 13 dodecahedrons, i.e. the dodecahedron module, etc.
Eventually, stable polyhedral foam[4] is settled.

Therefore, a dodecahedron as a forming element of polyhedral foam[4] has 20 gravitation (tetrahedron) centers at the periphery and 31 levitation centers of which 1 is in the center (dodecahedron) and 30 are at the periphery (cubes). All centers are interconnected by the Plato-Shikhirin Skeleton, or the Aether.

A "solid" solitary bubble – dodecahedron (see [14] for details).
A tight pack of 12 pyramids with pentagon bases is the core of any planet or star formation (pressing, compression) by a helical rolling mill of any active galaxy (say, Milky Way or Andromeda Nebula) (the same processes take place during formation of hailstones, raindrops and snowflakes).

A "solid" dodecahedron forming process consists of two phases:
- direct supercold formation of a dodecahedron by pressing and helical rolling, i.e. formation of 12 dodecahedral pyramids with vertexes abutting against the central gravitation center [9];
- final shaping of the dodecahedron, i.e. increase of its volume without its weight increase after leaving the helical rolling mill by means of:
  - heating by the Life Torch;
  - an "undersqueezed sponge" effect since the planet is nor absolutely solid and has a loose structure.

In this situation the central gravitation center enhances its super-high vacuum charge.

The super-high vacuum gravitation center prevents disintegration of the planet, the planet atmosphere and everything on its surface.

It should be only noted that:

A "solid" dodecahedron has 20 levitation centers at the periphery and 31 gravitation centers of which 1 is in the center (in the geometrical center of the planet) and 30 are at the periphery. All centers are interconnected by the Plato-Shikhirin Skeleton, or the Aether.

Moreover, the 30 gravitation centers and the 20 levitation centers at the periphery are geopathogenic zones on any planet, including Earth: 30 are negative and 20 are positive, respectively.

Torus: In this paper we will refer only to the contents of Fig. 9 showing the system of gravitation and levitation centers of a torus and also mention that:

A torus, when filled-out by seven colors (Fig. 10), has 21 peripheral and 14 central (on the torus string) levitation centers as well as 14 peripheral gravitation centers interconnected by the Plato-Shikhirin Skeleton. Matter, e.g. all stellar matter in any active galaxy, concentrates in peripheral gravitation centers.
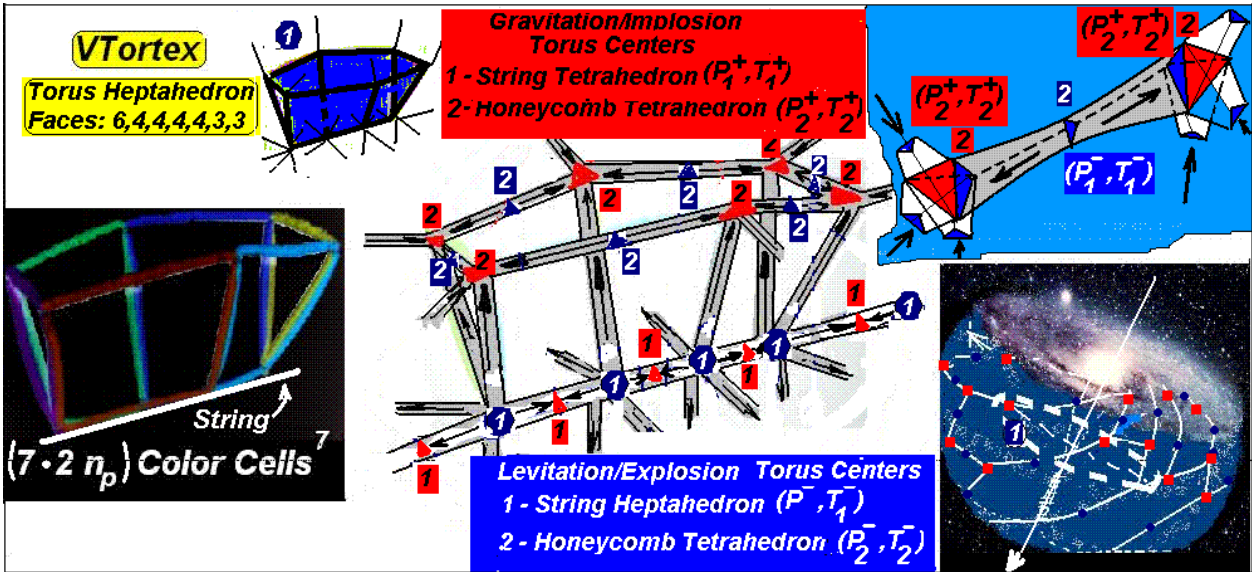
Fig. 10.   Gravitation and levitation centers of a torus.

Volume and Area Calculations of the Torus Central Part and the Periphery

Acronyms:
T – Torus, Cn – Cone, Cl – Cylinder.

The volume of a torus or its "cylindrical preform" is:
$$V_{Cl} = V_T = 2\pi^2 r_T^3,$$

R_T and r_T are radii of the torus,

H is the length of the central line (string) of the torus T:
$$H = 2\pi r_T,$$

the torus area is:

$$S_T = 4\pi^2 r_T^2.$$

The inflection curve is a line where the torus periphery becomes its central part and vice versa.

There are two inflection curves, their length is equal to that of the central line (string) of the torus, that is $2\pi r_T$.

Before we continue, the following assumptions should be made:
1. For the sake of simplicity we will consider a closed torus with $R_T = r_T$, and designate the "common" radius as r_T.
2. Since at the "seven-color" (one-time) filling of the torus there may be three filling options (directions), according to torus knots (3.1), (1.3) and (2.3), let us

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choose, for the sake of simplicity, the filling direction according to the (3.1) torus knot option.

3. The torus volume consists of at least 7 Shikhirin cells[7] and its surface area includes 7 Shikhirin cell[7] bases (honeycomb cells).

   The volume-to-area ratio for the central and the peripheral part does not change with the torus structure development, i.e. the increase of Shikhirin cells[7] number, as per the law of the torus filling in compliance with the universal "seven-color" torus (**Shikhirin's Soliton**) (**Table 2**)

Calculation of the Peripheral and the Central Parts of the Torus Volume

Let us draw a "cylindrical" (i.e. bulk) preform of the torus (Fig. 11), where volumes and surface areas of Shikhirin cells[7] are identical, that is:

$$V_1^{Cylinder} = V_2^{Cylinder} = ...V_6^{Cylinder} = V_7^{Cylinder} = 2\pi^2 r_T^3/7,$$

$$S_1^{Cylinder} = S_2^{Cylinder} = ...S_6^{Cylinder} = S_7^{Cylinder} = 4\pi^2 r_T^2/7, \textbf{ respectively.}$$

The "cylinder" halves cut along or across the length are the peripheral and the central parts of the torus, respectively.

When the "cylindrical" (bulk) preform is folded into a torus the volumes and the surface areas of the torus will be re-distributed with respect to the "conical" (bulk) preform (Fig. 12), that is:

$$V_1^{Cone} > V_2^{Cone} > ... > V_6^{Cone} > V_7^{Cone},$$

$$S_1^{Cone} > S_2^{Cone} > ... > S_6^{Cone} > S_7^{Cone}, \textit{ respectively.}$$

The volume and the surface area of the torus periphery are "inflated" while the volume and the surface area of its central part shrink.

Two halves (3.5 Shikhirin cells[7] each) of the "cone", similar to the "cylinder", represent the torus periphery and the central part, respectively.

The volumes of the cylinder and the cone are identical, i.e:

$$V_{Cl} = V_T = 2\pi^2 r_T^3$$

The cone volume, $V_{Cn,}$ in turn, is

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$$V_{Cn} = V_T = 1/3\pi \ r_{Cn}^2 2\pi r_T = 2/3\pi^2 \ r_{Cn}^2 r_T .$$

That is

$$V_{Cl} = V_{Cn}, \text{ и } 2\pi^2 r_T^3 = 2/3\pi^2 \ r_{Cn}^2 r_T.$$

Then the cone base radius will be

$$r_{Cn} = \sqrt{3} \ r_T .$$

The volume of the central part of the torus (the small cone) is calculated beginning with the middle part of the cone since both the cylinder and the cone contain 7 Shikhirin cells[7], and their halves have 3.5 cells, respectively.

$$V_{central\ part\ of\ Cn\ torus} = 1/3\pi(r_{Cn}/2)^2 \pi r_T = 1/3\pi(r_T\sqrt{3}/2)^2 \pi r_T = 1/4\pi^2 r_T^3$$

Then

$$V_{Cn\ torus\ periphery} = 2\pi^2 r_T^3 - 1/4\pi^2 r_T^3 = 7/4 \ \pi^2 r_T^3,$$

And their ratio will be

$$V_{central\ part\ of\ Cn\ torus} / V_{Cn\ torus\ periphery} = 1/7 \ \text{ or}$$

$$V_{Cn\ torus\ periphery} / V_{central\ part\ of\ Cn\ torus} = 7$$

In other words, the volume of the torus central part is 1/7 of the torus volume, and the second part occupies 6/7 of the torus volume, respectively.
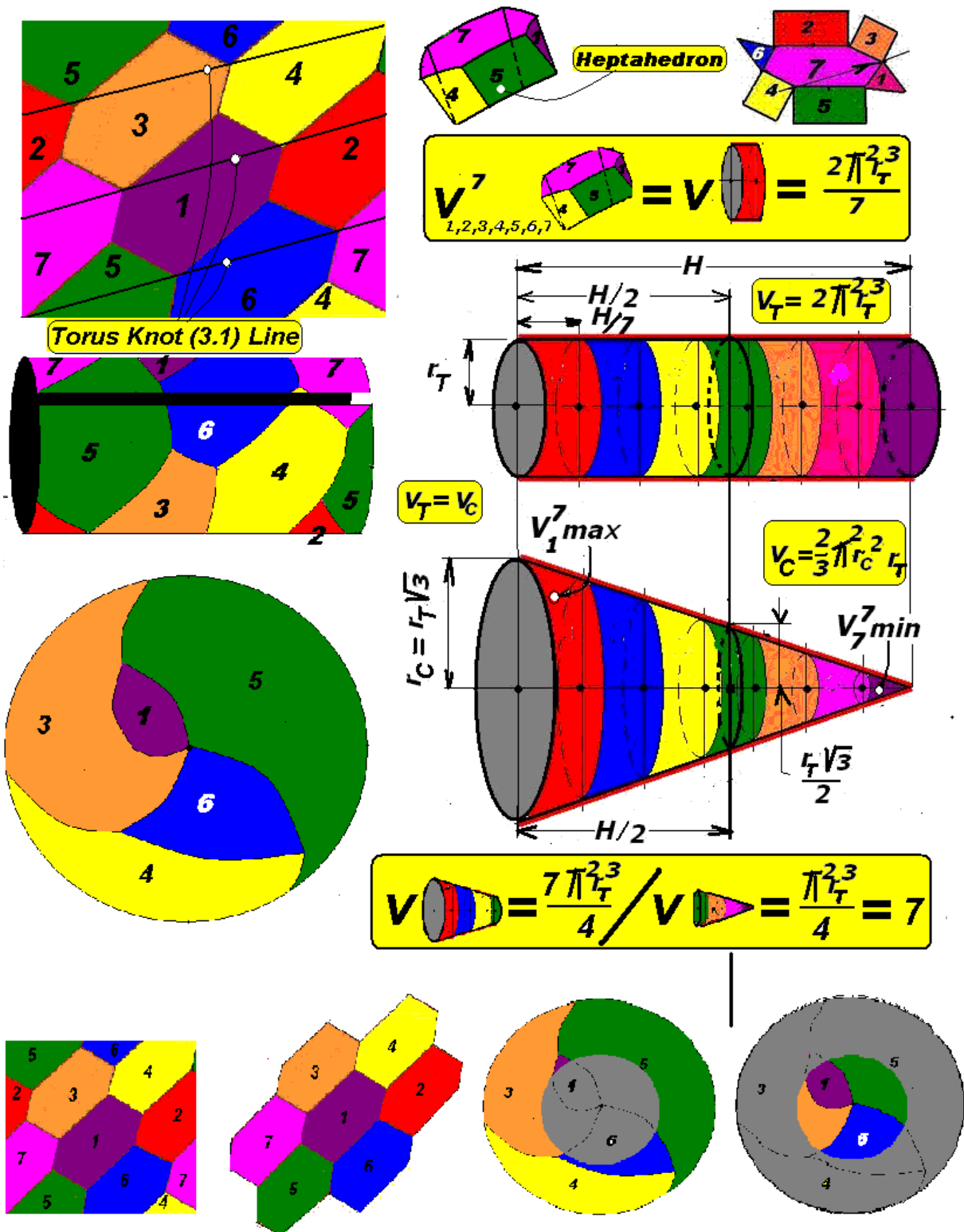
Fig. 11 Calculation of the central and the peripheral part volumes of the torus and their ratio.

Calculations of the Torus Periphery and Central Part Surface Areas

Let us transform a flat (a square) torus preform into a conical (a 45 grad right triangle) preform. Their surface areas are identical.
That is:

$$S_T = S_{Cn} = 4\pi^2 r_T^2.$$

Then the surface area of the torus central part is

$$S_{Cn\ torus\ central\ part} = \pi^2 r_T^2$$

Since the torus surface area is

$$S_T = S_{Cn\ torus\ central\ part} + S_{Cn\ torus\ periphery,,}$$

Then the surface area of the torus periphery will be

$$S_{Cn\ torus\ periphery} = S_T - S_{Cn\ torus\ central\ part} = 4\pi^2 r_T^2 - \pi^2 r_T^2$$
$$= 3\ \pi^2 r_T^2$$

Their ratio, i.e.

$$S_{Cn\ torus\ central\ part} / S_{Cn\ torus\ periphery} = 1/3, \text{ or}$$

$$S_{Cn\ torus\ periphery} / S_{Cn\ torus\ central\ part} = 3.$$

In other words, one-third of the torus surface area is in its central part while its periphery accounts for the remaining two-thirds.

Let us also calculate the "part complexity" of the torus [25], of its central and peripheral parts.
The torus "part complexity" is expressed by the following formula:

$$V_T / S_T = 2\pi^2 r_T^3 / 4\pi^2 r_T^2 = r_T/2$$

The torus "peripheral part complexity" is shown by the following expression:

$$V_{Cn\ torus\ periphery} / S_{Cn\ torus\ periphery} = 7/4\ \pi 2 r_T^3 / 3\ \pi^2 r_T^2 = 7/12\ r_T,$$

The torus "central part complexity" may be expressed as follows:

$$V_{Cn\ torus\ central\ part} / S_{Cn\ torus\ central\ part} = 1/4\pi^2 r_T^3 / \pi^2 r_T^2 = r_T/4$$
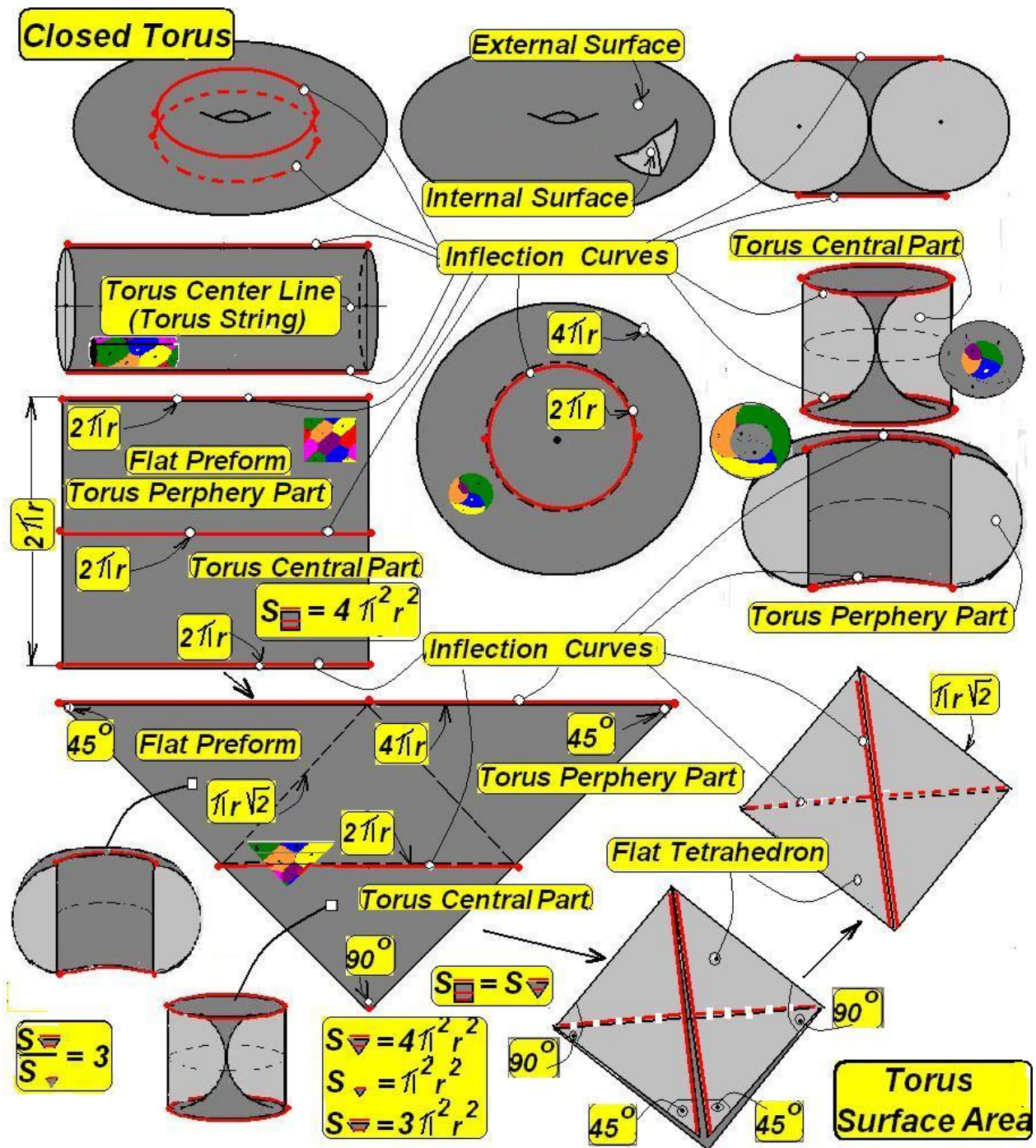
Fig. 12 Surface area calculations of the torus central part and its periphery and their ratio.

The bottom right-hand corner view of Fig. B is a view of the torus conical preform folded into a tetrahedron (four colors). The result of such folding is a flat polyhedron (tetrahedron).

Structurization of Star and Planet Atmosphere

The atmosphere of a planet or a star is structured by the **Coutte-Shikhirin Flow,** as the 5-th regular form of the 3-phase fluid medium existence, and characterized by the following:

- Atmospheric toruses as elements of the Coutte-Shikhirin Flow are held on the surface of a structured ball by forces of super-high vacuum, or gravitation, in the center of a star or a planet.
- The number of atmospheric toruses in the Coutte-Shikhirin Flow depends on the strength of the super-high vacuum forces, namely: the more toruses the stronger the gravitation field of the planet and the more developed is the atmosphere, and vice versa. (see Table).
- Earth's atmosphere is structured by Polar, Ferrell and Hadley cells or by a six-torus Coutte-Shikhirin Flow; Mars has a two-torus atmosphere in summer and a one-torus atmosphere in winter [23], (Fig.10).
- The more developed is the atmosphere the more is it saturated with the working fluid medium and the larger are its specific gravity and volume.
- At an odd number of toruses, the biggest torus is at the equator, like it is on Jupiter, and, on the contrary, given an even number of toruses, two similar biggest toruses are located symmetrically respective the equator, like Hadley Cells.
- The weak gravitation center of a planet or its absence is an indicator of the absence of a full-fledged atmosphere, the Coutte-Shikhirin Flow.
- Toruses that form the atmosphere of a planet/star are not always visible to a naked eye.

Therefore, it is necessary to design sensors based on new principles that could "feel" these soft/elastic toroidal shells filled with a working fluid medium under overpressure.

Should any organization or a company be interested in development of such sensors, the author knows how to make them and is ready to assist in developments with his knowledge.

With the following proportion one can obtain the number of toruses (X) that form a planet's atmosphere (Fig. 13, Table 3).

$$G_{Earth} \rightarrow 6$$
$$G_{planet/Sun} \rightarrow N$$

That is,

$$X = (G_{planet/Sun} \cdot N)/1 = G_{planet/Sun} \cdot N,$$

where G is the gravity force, $G_{Earth} = 1$; **6** is the number of Earth's atmosphere's toruses, and **N** is the number of toruses in the atmosphere of another planet or the Sun.

Table 3

Number of toruses (Coutte-Shikhirin Flow**) as a function of gravity force on the surface of a planet or a star by an example of the Sun system**

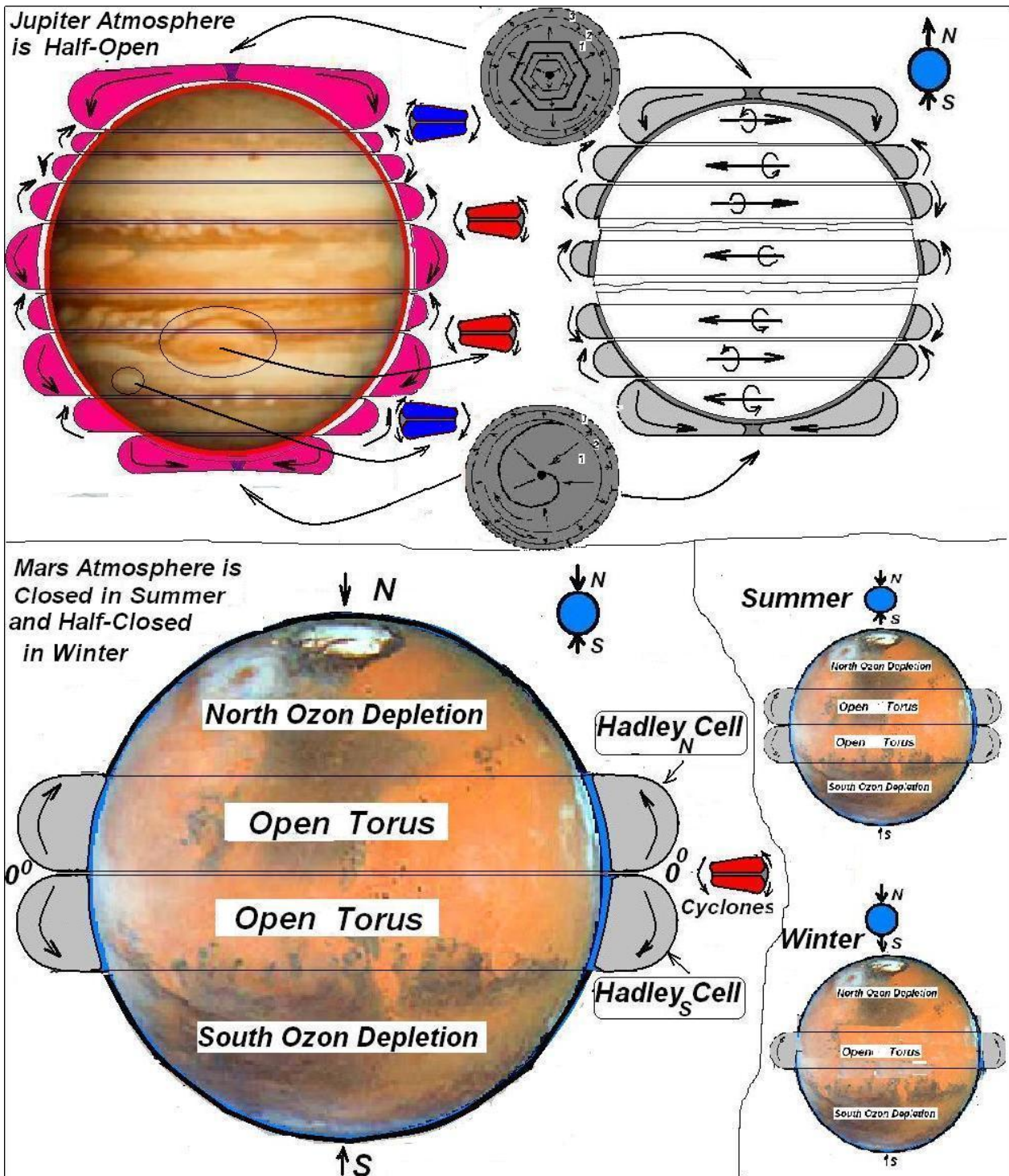| Planet or star	Gravity force, G, respective Earth	G_{planet} to G_{Earth} ratio	Number of toruses	Type of atmosphere
Sun	28	28/1	28X6 = 168	Closed (open)
Mercury				
Venus	1/4	1/4	1 - 2	Half-open (1) – closed (2)
Earth	1	1	6	Closed (6)
Mars	1/3	1/3	1 - 2	Half-open (1) – closed (2)
Jupiter	>1(1.2 – 1.5)	>1(1.2–1.5)	9	Half-open (9)
Saturn	<1(0.5 – 0.9)	<1	3 – 5	Half-closed (3) – open (5)
Uranus	<1(0.5 – 0.9)	<1	3 – 5	Half-closed - open
Neptune	>1(1.2 – 1.5)	>1(1.2–1.5)	7 - 9	Half-open (7) – open (9)
Pluto				
Moon	1/6	1/6	1	Half-open (1)

Fig. 13 The atmosphere of Jupiter and Mars.

The formation of Earth's atmosphere, its further existence and destructurization evidenced by appearance of the Ozone Depletion is described in detail in [6].

Fig. 13 shows an atmosphere unchangeable in time by an example of the atmosphere of Jupiter since there are no human activities there.

The pictures of Jupiter clearly show (http://en.wikipedia.org/wiki/Great_Red_Spot#Great_Red_Spot):

- brown/red "spots", the biggest of which has the name of the Great Red Spot.

  These spots are ""tails" of **cyclone tornadoes** similar to all tornadoes raging on the planet.

  The "heads" of Jupiter's tornadoes, acting as explosive radial sources (characterized by super-high vacuum and temperature as well as a smaller diameter of a conical VTortex tornado), "crawl over" the surface of Jupiter sucking in its surface layers ([6], *Fig.11. Function phases of a self-supported tornado, or a cone-shaped toroid, as a three-phase state of the 3-rd regular form of the working fluid medium in Nature (VTortex) taking into account the "Law of Bloating"*).

  Therefore the tails of Jupiter's tornadoes have a brown color.

  White "spots" are located paralelly to brown-red spots and have a smaller size as compared with the latter. These are the "heads" of **anticyclone tornadoes**, or implosive radial sinks (super-high vacuum and temperature as well as a smaller diameter of the VTortex conical toroid). Therefore, they have a clear snow-ice color since they suck in practically non-existent dust from Space.

The atmosphere of Jupiter like atmospheres of all planets where there are no human activities will cease its existence together with the planet itself when our Galaxy has "burst", according to the "Law of Bloating" [10], having exceeded its regular natural dimensions.

In such a situation all stellar and solar systems of our Galaxy, including our Sun system, will cease to exist.

I suppose, there is another global calamity threatening the life on Earth now that more developed civilizations have been through with their hydrocarbon and nuclear euphoria. To satisfy their needs they are beginning to use so-far intact ecological bioresources of "dead" planets, including our Earth from which they are stealing such bioresources as:

- environmentally clean upper layers of the planet soil from the ocean bottom so far not befouled by Mankind;
- ice and sweet water of Antarctic;
- ecologically clean "Mankind's seed" intended for improvement or purification of future generations of other superior civilizations.

Mankind's seed born under typical conditions of any planet fit for life and independent of time does not feel the past and develops like its contemporaries of a superior civilization.

For instance, a found wheat seed hundreds or thousands years of age (or, possibly, brought from another planet) may grow under certain conditions today without viruses or chemicals to produce a good ecologically clean crop.

A humanoid (Man) remains as such also in the Universe irrespective of a planet and time - this is manifestation of the structurization energy-information process.

Humanoids do everything described above in a very elegant and skilful way!

Of course, they export these resources using "sublimated" energy-information technologies so far unfamiliar to us.

Perhaps, "lucky birds" after escaping from the dying Earth and settling down on a new Earth will behave in the same way for their survival.
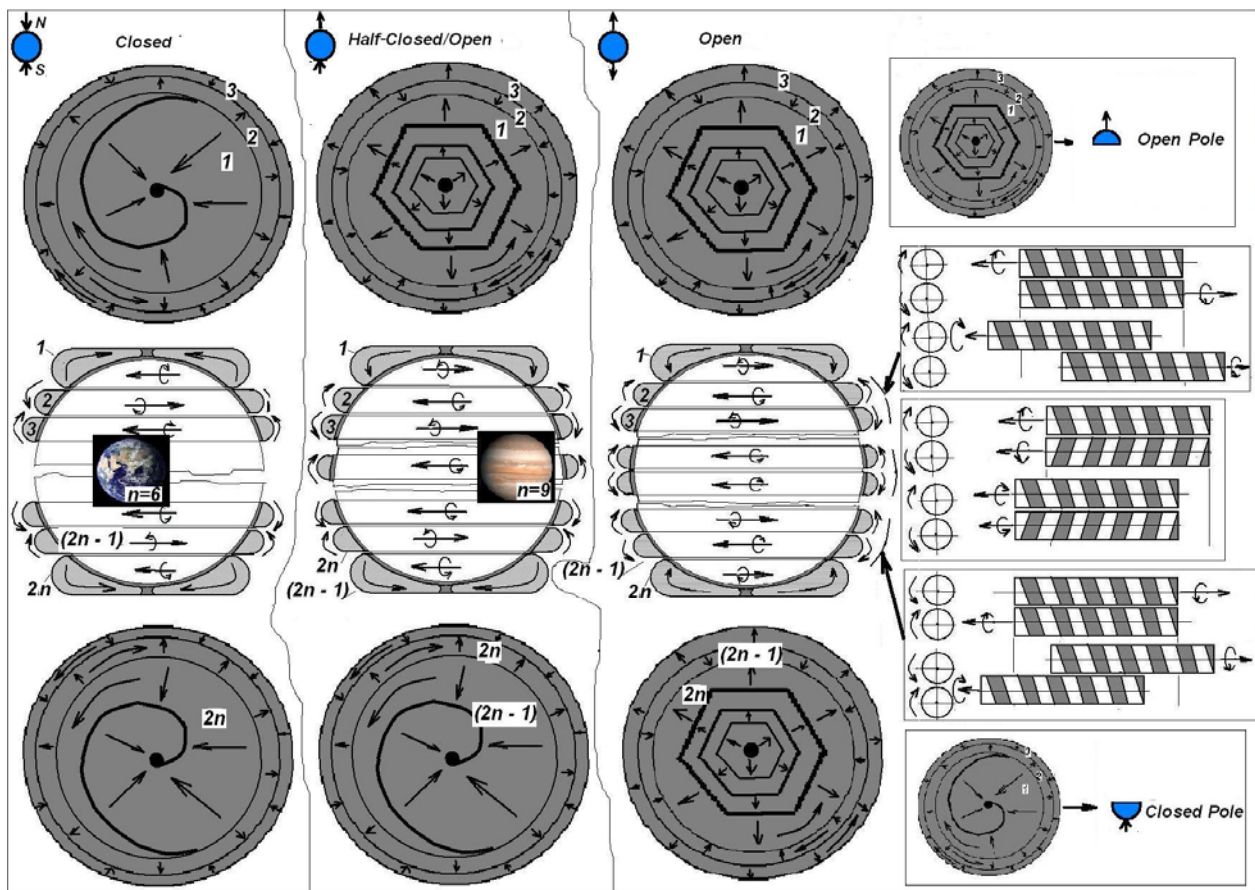

Fig. 14 Possible design options of planet atmosphere functioning.

Fig. 14 shows:
- three design options of planet atmosphere functioning, including:

- closed option,
- half-closed/open option,
- open option;

- top, side and bottom views of the three options of planet atmospheres including the atmosphere of Earth;

- to the right, by an example of two screws interaction, the interaction of two toruses enveloping or everting respective each other and aligned by their longitudinal axes is shown, namely: the upper part refers to the initial state, and the lower part – after the interaction – to the final state.

- see real pictures of the upper part associated with North pole of Saturn in http://en.wikipedia.org/wiki/File:Saturn_hexagonal_north_pole_feature.jpg, and the lower part associated with South pole of Saturn in http://www.jpl.nasa.gov/news/news.cfm?release=2006-137 , respectively.

The same gravitation center holds everything located on the surface of a planet or a star.

Earth's depressurization may occur due to the following factors:
- super-deep drilling;
- development of natural mineral resources;
- testing and use of nuclear, plasma weapons;
- crude oil and gas extraction;
- running the so called "hadron colliders", which may result in catastrophic consequences for Earth.

    Moreover, makers of these monsters do not understand at all for what reason they develop such "centaurs".

    The results of the Large Hadron Collider testing confirm the above in that unknown effects appear that were never expected.

    Of course, these "new effects" will be presented to public at large as super-discoveries in physics which the makers of the collider will not understand as usual. But it will be a "good" cover to justify giant sums spent on its development and "nourishing" of hundreds of standard mediocre "scientists".

As a result of the planet depressurization (decapsulation) unsecured and weakly secured objects located under, on and above the surface of the planet are pulled out or torn away and move to open space, after which, being already in another physical state, gradually "stick" to another gravitation center.

These objects include all animal and vegetation world, artificial and natural constructions, water, atmosphere, etc.

Such catastrophic disasters happened once to the following planets:

- Phaeton - broke to pieces and gradually transformed to Kuiper's belt.
- Mars – its atmosphere had previously six torus elements of the Coutte-Shikhirin Flow, like on Earth, but now it has only two toruses in summer and one torus in winter.

This rather gloomy picture is aggravated by Ozone Depletion Holes above Earth's poles discovered in 1958 but existing long before that event which are a consequence of emasculation and depletion of Earth's atmosphere.

These events were caused by human activities primarily by extraction and use of hydrocarbon products.

At present there is a growing tendency towards energy extraction by water disintegration using hydrocarbons.

Quite a number of disintegration methods have been developed, however, the old hydrocarbon basis has remained and is threatening by more disastrous consequences in the perspective, namely:
- water exists in great profusion, as once was said about gas and oil,
- oil and gas were never used for eating and drinking while water…;
- oil, gas and water are natural sealing valves for the dodecahedron-shaped Earth [14],
- sweet water will be processed in the first place since it is cheaper and easier to transmit via existing oil and gas pipelines.

Therefore, major sweet water sources on the planet that are located in the vicinity of oil- and gas pipelines are being bought up allegedly for the purpose of "drinking water" preservation; "auxiliary" lines are being built, etc.

All the above leads to the same result: excruciating death of 99% of Earth's population from hunger, water shortage, suffocation, fighting for water and zones of "working" Coutte-Shikhirin Flows still existing in Earth's atmosphere, while the remaining space of the dying atmosphere is occupied with giant ozone holes stretching from North and South Poles to 30° of South and North latitudes.

That is why people, irrespective of countries or religions, will start to emigrate quickly to these areas from North and South and clash in a deathly fight for air and water resources.

One percent of Mankind, the so called "Planet's elite", no matter what reliable shelters it has built for its survival, will die painfully after all their energy and food stocks have been exhausted since there will be no other sources to replenish the stocks.

In other words, the following physical processes will naturally occur:

- emasculation of water resources and hence the atmosphere since they both constitute a single whole;
- instead of six air-water toruses of the Coutte-Shikhirin Flow that make Earth's atmosphere there will be gradually 5, 4, 3 toruses and finally the conditions will be similar to those of Mars – two toruses in summer and one torus in winter [6].

I am confident that:

- destruction of Earth's atmosphere is a natural result of Man's activities, that is, ill use of natural resources of the planet with the purpose of its survival.
  A similar event will occur on Earth in a non-distant future unless active counter-measures are now undertaken (if it is not late already) by a clever (small) part of Mankind the author attributes himself to without modesty.
- Mankind's task is to stretch the atmosphere destructurization process in time and give Mankind an opportunity to get prepared for emigration to another planet as our ancestors did once in the past;
- our ancestors who had emigrated to planet Phaeton from another galaxy contributed greatly to its destruction later but they were fortunate to understand their "crime" in time, developed transportation vehicles based on vortex energy (flying saucer, UFO) and emigrated to Mars;
- then they destroyed the atmosphere of Mars but again understood in due time the damage they inflicted and emigrated to Earth (e.g. Maya tribe, etc.);
- we only need to repeat these emigration processes by choosing another solar system of our or another galaxy since it is not possible to emigrate to Venus which is unfit for life.
- these problems were once solved before us by a civilization that emigrated from another galaxy to Phaeton, and we must also solve this super-complicated task.

Conclusion

I am finishing this article in a non-traditional way, namely by citing the beginning of the article [24] -

 "Matter, one might say, is merciless. It will not stop its movement (structurization and interaction energy and information, *the author's remark*) *even when a question of existence of Mankind as the highest form of its development arises".*
Nature's harmony is all for itself (structurization and interaction energy and information, *the author's remark*).
The above considerations suggest that Mankind should take care of itself, Nature would stay away from it, and human fates depend on nothing but Mankind (structurization and interaction energy and information, *the author's remark*).

To rescue "Mankind's seed" (K. Tsiolkovsky), an action plan is needed which is partially described in [4] being in line with purposes of the Global Forced Space Emigration Fund currently being raised.

Tsiolkovsky thought that it would be a space rocket to rescue the "Mankind's seed"

However, he did not know that one can hardly cover a long distance in a "hydrocarbon" rocket. Today it is already clear; rocket engineering and its nuclear engineering kin have exhausted themselves.

Torus technologies and elastic mechanics make the basis for perfect natural power engineering and transport vehicles including vehicles for intergalaxy flights (rather than flights within the Sun system limits).

References:

1. Hose and Torus Converters. Prospects of Their Use in Broad-Spectrum Machines and Devices. A series of papers edited by V. Shikhirin and A. Korobov, VIMI, Moscow, 1995, pp.1-84.www.alt-tech.org, www.evgars.com.

2. Working Models, "Single-Component Toroids" (Part One), "Multy-Component Toroids" (Part Two), 2008, http://youtube.com/user/elastoneering

3. V. Shikhirin. Tore Technologies as the Basis for Elastic Mechanics. Proceedings of 1-st International Scientific-Practical Conference "Tore Technologies", 30 June – 2 July, 2004, Irkutsk State Technical University, pp.22-48. www.alt-tech.org, www.evgars.com.

4. V. Shikhirin. Toroidal Drivers of Transport Vehicles. Proceedings of 2-nd International Scientific-Practical Conference "Tore Technologies", 21-24 Sept., 2005, Irkutsk State Technical University, pp. 79-99. www.alt-tech.org, www.evgars.com.

5. V. Shikhirin, V. Ionova, O. Shalnev, V. Kotlyarenko. Elastic Mechanisms and Constructions. Monograph. Irkutsk State Technical University Publishers, 2006, 286 pages www.alt-tech.org, www.evgars.com.

6. V. Shikhirin. Synergetics of Atmosphere and Tornado as Natural Self-Supported Torus Mechanisms. Proceedings of 5-th International Scientific-Practical Conference "Tore Technologies", 23-34 Oct., 2004, Irkutsk State Technical University, www.alt-tech.org, www.evgars.com

7. V. Shikhirin. Natural "Elements" of Information and Energy as the Basis for XXI Century Engineering. **Structurization Information and Energy**. Proceedings of the 4-th Research & Engineering Conference "Machine Building in XXI Century. Science, Education and Production Integration". May, 2007. Izhevsk State Technical University, www.evgars.com, www.alt-tech.org.

8. V. Shikhirin. Natural "Elements" of Information and Energy as the Basis for XXI Century Engineering. **Natural and Mechanical Implementation**. Proceedings of the 4-th Research & Engineering Conference "Machine Building in XXI Century. Science, Education and Production Integration". May, 2007. Izhevsk State Technical University, www.evgars.com, www.alt-tech.org.

9. V. Shikhirin. Development Prospects of Tore Technologies, Elastic Mechanics and "Wonders" Created by Them in Nature. Proceedings of 2-nd International Scientific-Practical Conference "Tore Technologies", 21-24 Sept., 2005, Irkutsk State Technical University, pp.3-41, www.alt-tech.org, www.evgars.com.

10. V. Shikhirin. VTortex^{TM} as Superior Form of Fluid Medium Structurization in Nature. Proceedings of 3-rd International Scientific&Practical Conference "Tore Technologies", 23-24 Nov., 2006, Irkutsk State Technical University, pp. 158-179, www.alt-tech.org, www.evgars.com.

11. V. Shikhirin. VTortex Galaxy as Structurer of Stellar Systems and Time (Calendar) and Cause of the Earth Climate Change. Proceedings of 3-rd International Scientific-Practical Conference "Tore Technologies", 23-24 Nov., 2006, Irkutsk State Technical University, pp. 143-158, www.alt-tech.org, www.evgars.com.

12. V. Shikhirin. The Torus and Sphere, or Parents of PI, Phi and "7" as Elements of Matter Structurization in Nature. Proceedings of 3-rd International Scientific-Practical Conference "Tore Technologies", 23-24 Nov., 2006, Irkutsk State Technical University, pp. 131-143, www.alt-tech.org, www.evgars.com.

13. V. Shikhirin. Development of Perfect Architectural and Construction Technologies (by Example of Torus Technologies) for Survival of Mankind under Conditions of Global Climate Change on Earth. Proceedings of 4-th International Scientific-Practical Conference "Tore Technologies", 24 Oct., 2007, Irkutsk State Technical University, pp. 28-49, www.alt-tech.org, www.evgars.com.

14. V. Shikhirin. Development of Perfect Energy Sources for Survival of Mankind under Conditions of Global Climate Change on Earth − Space Phase of Cooling. Proceedings of 4-th International Scientific-Practical Conference "Tore Technologies", 24 Oct., 2007, Irkutsk State Technical University, pp. 3-28, www.alt-tech.org, www.evgars.com.

15. A. Akimov et al. Long-Range Spinory (*Torsion,* comment of the author) Fields. Physical Models. Preprint No.4, Ukrainian Academy of Science. Frantsevich Institute of Materials Technology. Kiev, IPM, 1989, www.alt-tech.org

16. V. Sokolova. The First Experimental Proof of Torsion Fields and Prospects of Their Use in National Economy. M.: Triada Plus Publishers, 2005, 52 pages (Phenomena of 21-st Century), www.alt-tech.org.

17. James Ober, Andrew Kraynik. Aqueous Foams, Scientific American, May 1986, Vol. 254, No. 5.

18. K. Perepyolkin, V. Matveyev. Gas Emulsions. Leningrad, 1979.

19. V. Tikhomirov. Foams. Theory and Practice of Their Production and Destruction. Publication. Moscow, 1983.

20. A. Merkni, P. Taube. Short-Lived Wonder. Moscow, 1983.

21. P. Kruglyakov, M. Eskerova. Foams and Foam Films. Moscow, 1990.

22. A. Zimon. Recreational Colloid Chemistry. A Peculiar World of Particles. Moscow, RADECON, 2000

23. Robert M. Haberle The Climate of Mars. Science American, 1986, Vol. 254, # 5, p.54-62.

24. A. Chizhevsky. On Shore of the Universe. Years of Friendship with K. Tsiolkovsky. Memoirs. Moscow, Mysl Publishers, 1995.

25. V.N. Shikhirin. Analysis of the Capabilities of Using Mathematical Methods for Die Molds Distribution in Casthouse of Izhevsk Machine Works. Diploma project. Izhevsk mechanical institute, 1971