Proceedings of 7-th International Scientific-Practical Conference "Tore Technologies", Irkutsk State University, Russia, October 27, 2010.

CREATION OF SELF-SUPPORTED VTORTEX-ENERGY SOURCES AND VTORTEX-PROPULSORS OF TRANSPORT VEHICLES

Valeriy Shikhirin

ELASTONEERING INC, and Independent Scientist, Inventor and Engineer,

Chicago, USA

"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".

Whatever word you say in frost remains frost-bound till the thaw sets in.
In the thaw the word melts, and one can hear what was once said and by who.
A fairy tale "Frosted Songs"
Stepan Pisakhov (1879-1960), a Russian fairy tale writer

Introduction

For better understanding of the contents of this paper please refer to video and animation materials [1] at **http://youtube.com/user/elastoneering.**
Self-supported information and energy (*also* energy and information) systems cannot be built on the existing electronics-mechanics basis. It is already the past time. The author analyzes the development process of self-supported energy and information sources as well as transport vehicles operating in Space environment, including Earth, based on natural structurization energy and information.

The mechanical part of such self-supported systems is based on principles of elastic mechanics and torus technologies eliminating, at least in critical units, rigid and "flat" elements, e.g. pinions, disks, ball bearings, etc.

Actually, the mechanics of self-supported systems does not include mechanisms described, for instance, in [I. Artobolevsky. Mechanisms in Modern Engineering. Reference Guide in 7 volumes, 2-nd rev. – Moscow, "Nauka" Publishers. Physics and Mechanics Literature Dept. 1979, 496 p.]

Instead, a combination of flexible elastic soft elements is used for this purpose enclosed in a flexible shell and made of smart composite materials [2-6, 24].

In [24] and [1, parts 1,2,8] functioning models of the simplest torus units or elastic mechanisms are described, in particular those that are suggested for blocking a damaged oil pipe, by an example of the Deepwater Horizon Incident in Mexican Gulf.

The mechanics of torus technologies is the mechanics of self-supported natural (tornadoes, galaxies, etc.) and engineered VTortex systems. This can be proved by works of:

- Nikola Tesla (1856-1943),
- Victor Schauberger (1885-1958),
- Viktor Grebennikov (1928-2001), or by
- flying saucers/forms of extra-terrestial more developed civilizations that once landed and remained on the Earth as a result of tragic events.

Self-supported systems are distinguished by their duality feature, that is, they can be concurrently:

- a "free" VTortex energy source secured on any surface, e.g. on the ground (to prevent its flying away);
- a vehicle propulsor unit not secured on the ground but fixed on the vehicle frame (a VTortex platform).

Natural (free) energy and information is the basis for the existence of the self-supported infinite Universe (Shikhirin Space) and all its elements from nano- and less, to micro-, macro-, mega- and greater worlds [7].

For instance, VTortex platforms move in Space or in the atmosphere of a planet in an aether fluid medium that flows in Plato-Shikhirin Channels, with regard for gravitation and levitation processes going on in them.

The movement of a VTortex platform is controlled by a difference between super-high pressure (the pressure cone) generated at the explosive end of the VTortex, and super-high vacuum (the vacuum cone) generated at the implosive VTortex end.

In the Earth environment, namely in air, under water and on the water surface, one should also take into account a force that keeps the planet from breaking apart, namely super-high vacuum, the epi-center of which is in the Earth center ("the gravity force" according to the old terminology, or "the law of universal gravitation" that does not work in Nature) [8].

Therefore, development by Man of self-supported energy and information sources as well as transport vehicles requires that natural structurization laws, under which natural (free) energy and information sources are generated, be strictly followed.

Any failure to follow these laws due to ignorance or neglect, i.e. the absence of appropriate mechano-electronic components, leads to creation of inadequate designs that need additional power from "mains", which puts these systems at a disadvantage.

 "Shit (old technologies) is not fit for making a candy (new technologies)".

Such a system is anything but self-supported. It is not fit for Space riding. In the best case, flights are possible only within the Sun system boundaries for a long time, e.g. by "autostop" on "sun sails".

It should be remembered that forms of matter existence in Nature which are produced by the structurization energy and information generate autonomous electrical, magnetic, *pressure*, thermal, torsion, color, audio, *smart* and other fields each of which:

- is a fluid medium;
- has identical type forms of fluid medium existence in nature;
- may exist in **liquid, gas, amorphous and solid states**, etc.

1. Gravitation and Levitation (Anti-Gravitation) Concepts by Example of a Tornado/Whirlwind

Gravitation processes originate at the Vortex "head", i.e. at its implosive enveloping end/black hole/centripetal radial sink, etc.

Levitation processes originate at the Vortex tail, i.e. at its explosive eversible end/white hole/centripetal radial source, etc.

Let us consider gravitation and levitation processes using an ideal natural testbench "Tornado" (Fig.1) which does not need various theories, hypotheses, glamorized allegedly physics laws "generally accepted" today and not functioning in Nature, etc., to be linked to it.

To facilitate the explanation,

- The mass of a tornado is disregarded
- Not taken into account is a force of the tornado and the weigh-scales attraction by high vacuum generated in the Earth center. According to the old terminology this is the "gravity force" with the attraction center that "the best scientists of Earth" have failed to explain thus far. The latter will never be able to explain it since they are not knowledgeable in torus technologies, elastic mechanics, natural structurization energy and information
- In case of a gravitation process the tornado is shown reversed by 180°.

- The notions of <u>attraction</u> (sucking in, gravitation, pulling in) or <u>repulsion</u> (ejection, levitation, evacuation) are not applicable to outer space. In every particular case the mechanics of attraction or repulsion forces will be different dependent on a standard type form of matter existence in Nature [9].

  In everyday life we observe all these processes without giving thought to the fact that similar processes also occur in nano- and less and in mega- and greater worlds.

  These are laws of Nature that nobody created. They are natural and eternal.

- The main and the only natural superform is the Universe - Schikhirin Space which is **a centerless sphere with an infinite radius** and respective functional features [8].

- The omnipresent structurization energy and information totally come to rescue to maintain a standard (generic) natural VTortex form. The description of this process is given in [10].
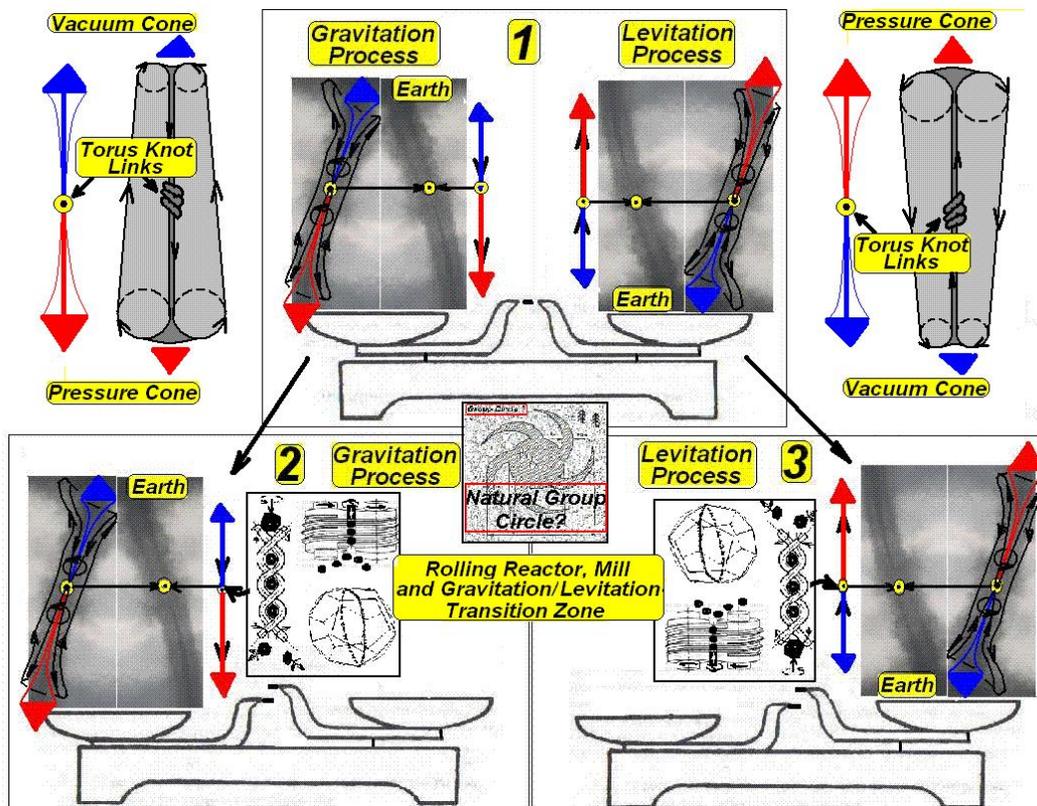

Fig 1. Processes of gravitation (attraction, pulling in, sucking in) and levitation (pushing out, ejection, evacuation).

Then:

- "1" - the pressure and vacuum cones are balanced, i.e. the tornado stays in the place, the scales are balanced, or the gravitation counterbalances the levitation.
- "2" – the explosive end of the tornado presses (pushes) the scale pan away from itself by the pressure cone.
- "3" – the implosive tornado end pulls the scale pan by the "vacuum cone" towards itself.

The zone of gravitation-to-levitation and vice versa process conversion is at the same time a supercold helical rolling mill (reactor) producing hailstone, snowflakes, water drops (particles).

The middle part of the picture shows the Earth surface being "milled" by the implosive tornado end (superhigh vacuum).

The visible consequence of this is the view of Natural Group Circles in fields.

2. Functions of a VTortex Energy Source and/or a VTortex-Vehicle Propulsor (a VTortex-Platform)

Any VTortex energy source or a VTortex propulsor of a transport vehicle consists of blocks capable of simulation of natural VTortex processes and implementing the following functions:

- Control of phase energy and information transfers/skips (Fig. 4);
- Separation and control of force fields such as electrical, magnetic, torsion, pressure, color, audio, smart, etc. fields. Remember that these fields have a different structure not subject to physical integration in Nature and existing in the **gas, liquid, solid and amorphous states**.

  On the other hand, these incompatible autonomous fields are concurrently generated in a process of, for instance, a VTortex form development (a tornado, a galaxy, etc.);

- Control of the "bloating" process (Fig. 4);

- Activation and de-activation of a VTortex structure, to prevent its "eternal" operation (life processes) or runaway;

- Pulling together 4 "colors" as the bases of 4 tetrahedrons, which leads to tetrahedron shrinking practically to a point enabling electrical energy concentration and transfer to measured distances without conductors. In the core of this process is creation by Nikola Tesla of an electrical energy transmitter, and concurrently a demo model, in the form of a glass ball (Plasma Ball). At present this Plasma Ball is represented by multiple toys and test benches – Lighting Ball, Magic Ball, etc. [10];

- In creation of system components, elements and parts a "Form Complexity Factor" (the term invented by V. Shikhirin) [10, 11, 25] must be taken into consideration as the ratio of the volume of a form (figure) to its surface area. Physically it means the *energy and information intensity* value.

The torus has the highest Form Complexity Factor in Nature equal to 0.5, to be compared with 0.33 for the sphere. For instance, Platonic bodies have the following Form Complexity Factors: 0.068 for the tetrahedron; 0.167 for the cube; 0.136 for the octahedron; 0.317 for the dodecahedron; and 0.252 for the icosahedron. See [7] for more details.

3. Formation of Color Torus Knots

Let us consider one of the principal VTortex functions, namely formation of color torust knots.

The lines of this type torus knots are guides for formation of 7 "colors-honeycomb cells" which in turn are the bases of **Shikhirin Cells[7] [9]** that make the 35-th heptahedron (6, 4, 4, 4, 4, 3, 3) **in the system of topologically distinct artificial heptahedrons** - http://en.wikipedia.org/wiki/Heptahedron**.**

A torus consists of at least 7 Shikhirin cells or is a multiple of 7. For the torus structure, namely the torus assembly and disassembly please refer to

http://youtube.com/user/elastoneering, part 6.

All versions of color torus knots are shown in [9].

A VTortex structure is known to be a cone torus eversible in the direction of the larger diameter; hence the torus is constantly increasing in size.

This process is called "The Law of Bloating" (authored by V. Shikhirin [12].

The torus knot used in the design of a VTortex energy source or a VTortex propulsor of a vehicle is expressed by the formula *(3n$_p$; n$_q$)*,

where:

$p = \mathbf{3n_p}$ is the number of turns around the VTortex (torus/toroid) meridian; $\mathbf{n_p}$ are positive integers.

In other words, $\mathbf{3n_p}$ is a number series 3, 6, 9, 12, …, consisting of number 3 and multiples of 3.

q is the number of turns around the VTortex (torus/toroid) longitude and *may be of two types* (Fig. 2):

1-st type (left)

$q_1 = \mathbf{n_q} = 1, 2, 4, 5, 7, 8, \ldots$ or $q = \{\mathbf{n_q} + [(\mathbf{n_q} - 1)/2]\}$ is a number series 1,2,4,5,7,8,10, ...; consisting of positive integers; operation [X] is the operation of taking the integer part (integer division) except number 3 and multiples of 3.

Furthermore, the torus knot is a closed curve while the knot lines in the central part of the torus are linked. In other words, the torus is closed. The linking prevents the closed torus from transformation to an open one.

2-nd type (right) - Shikhirin torus knot system

$q_2 = \mathbf{n_q} = 3, 6, 9, 12 \ldots$, etc. is a number series consisting of number 3 and multiples of 3.

The torus knot $(\mathbf{3n_p; n_{q2}})$ closed curve splits into several torus knots, being also closed lines <u>sliding respective one another</u>, e.g.

$$\mathbf{(3; 3) \leftrightarrow 3(1; 1), (3; 6) \leftrightarrow 3(1; 2), (3; 9) \leftrightarrow 3(1; 3) \ or}$$
$$\mathbf{(3n_p; 3) \leftrightarrow 3(n_p; 1), (3n_p; 6) \leftrightarrow 3(n_p; 2), (3n_p; 9) \leftrightarrow 3(n_p; 3), \ldots (3n_p; n_{q2}) \leftrightarrow 3(n_p; n_{q2}).}$$

There is no torus knot linking in the central part of the torus.

In appearance the knots look like closed-end springs wound onto the torus.

In other words, the closed torus transforms into an open one, and

- breaks apart if its power is not sufficient.

    For example, in a tornado of the highest power knotted with *(3n$_p$;5)* torus knot the weak place is the transfer from the *(3n$_p$;3)* to the *(3n$_p$;4)* torus knot, which is one of the ways of its destructuring.

- and, on the contrary, changes into a qualitatively new energy-information state which means increase in power when q_2 transforms into *(q$_1$+ 1)*. For example, the *(3n$_p$;3)* torus knot of the tornado ↔ *(3n$_p$;4)* ↔ *(3n$_p$;5,* etc.

1st Tipe | D_2 | 1/2D_2 | $D_2 > D_0 > D_1$ | Pressure Cone | Links | Siphon Process | Vacuum Cone | Central Body

2nd Tipe | D_2 | <1/2D_2 | $D_2 > D_0 > D_1$ | D_0 | 1/2D_0 | No Links | D_2 | $D_2 > D_0 > D_1$ | D_0 | Links | No Links | D_1
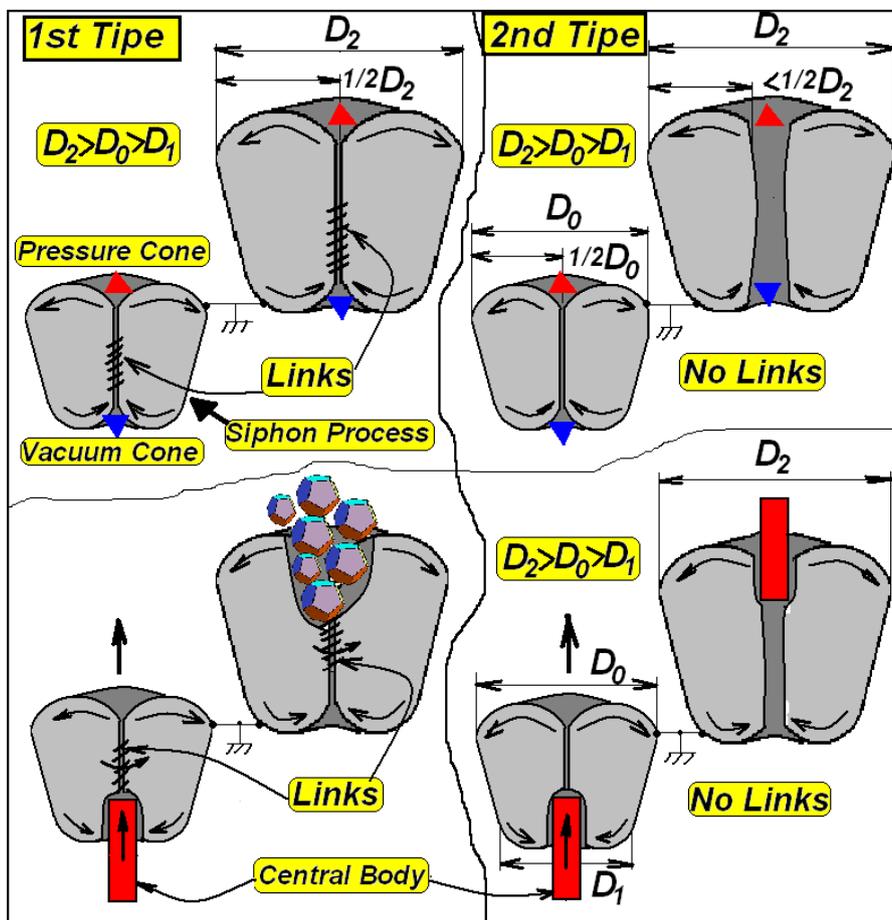
Fig. 2. Two VTortex types having a different q-number of turns around the VTortex longitude.

The bottom part of Fig.2 shows the central body movement in both VTortex types.

- left view: the central body is transformed by the super-cold helical rolling mill into regular or semi-regular polyhedrons (planets, snow-flakes, hale-stones, etc.)
- right view: the central body does not undergo any changes except being pressed with the bulk central part of the VTortex-structure like with a press.

4. VTortex Engine and VTortex Transmission

Since the engine and the transmission are packaged in a respective shell (Fig. 3), self-development of a VTortex structure similar to tornado development is impossible.
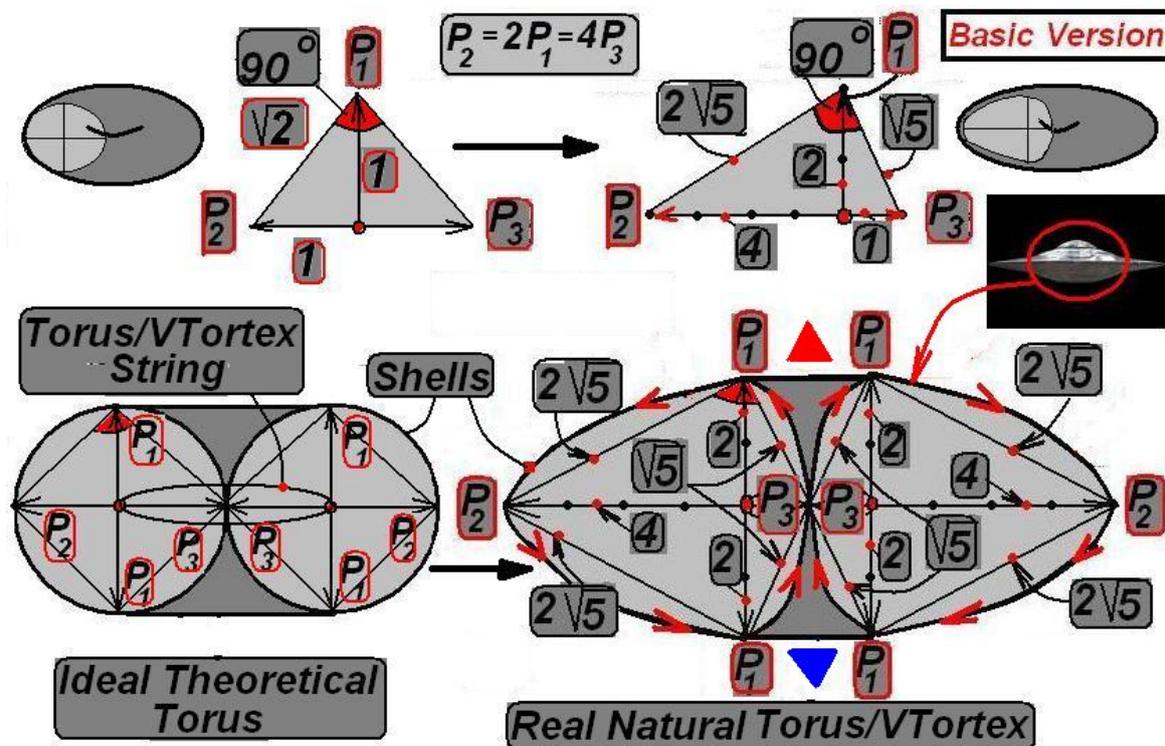

Fig. 3 The body of a flying saucer, or a VTortex platform, based on self-supported VTortex movement.

We are all accustomed to thinking of an ideal theoretic torus as a doughnut, a life ring buoy, etc.

In Nature there is a real natural working torus/VTortex-structure characterized by the following features:

- At the ends of the torus (P_1) the tension of its shell material is twice as week as that **at the external part** of its periphery (P_2);
- The tension of the shell material at the torus ends (P_1) is twice as strong as that **at the internal part** of its periphery (P_3)

That is, $P_2 = 2P_1 = 4P_3$.

Since the VTortex platform cannot have an elastic body, such natural and practical characteristics are quite acceptable for its formation.

According to simple calculations, elements of the Golden Section √5 are present in a real natural torus, while the Golden Section itself is derived from the relations between geometrical elements of a sphere inscribed into a torus [9, 25].

In other words, the geometrical proportions of the VTortex-platform body correspond to natural laws of the structurization energy and information.

The VTortex engine will be activated and work in a "combustor" installed in the body of the VTortex platform.

The control over processes of higher or lower power taking from the VTortex engine with an appropriate transmission will make it possible to control processes of inflow from and outflow to the external environment of energy and information via Plato-Shikhirin channels through the aether fluid medium moving in them. **Actually, the control system, the engine and the transmission are based on the VTortex structure, the structurization energy and information and such "prompts" as works of Victor Schauberger, Nikola Tesla, Viktor Grebennikov and flying saucers that happened to fall on Earth as a result of tragic events, but at a new technological level**.

So, in development of a color torus knots, two types of phase energy-information states are formed (similar to a car), see the table below:

Table

Technically feasible *transmission states* of a VTortex energy source or/and a VTortex vehicle (VTortex platform) propulsor (Fig. 4)

Vehicle propulsor:	1	2	3	4	5	6	7	8	9	10	11	12	...
- "unlimited" power and motion speed	→	→		→	→		→	→		→	→		→
- Type and size range, e.g. "Noah's Arc"			↔			↔			↔			↔	
	+	+		+	+		+	+		+	+		...
- Closed torus, linking present													
Energy source:													
- "unlimited" power			3			6			9			12	...
- type and size range			↔			↔			↔			↔	
- Open torus, no linking			+			+			+			+	

1 –st state

" Twin" ***closed*** (closed torus) ***transmission states***:

A group of numbers (*1,2), (4,5), (7,8), (10,11),* etc., belonging to a sequence $\{n_q + [(n_q - 1)/2]\}$, where n_q are positive integers; operation [X] is an integer taking operation (integer division) except number 3 and multiples of 3

One transmission state changes into another through incrementation of the number of turns of the 1-*st type* torus knot by one turn around the torus longitude, and vice versa, e.g. $4 \leftrightarrow 5$.

In this event the VTortex power increases or drops depending on the inflow of the structurization energy and information from the environment via Plato-Shikhirin channels, which is sufficient or insufficient, resp., to sustain a VTortex standard natural type form.

If the incoming structurization energy and information are sufficient:

- the number of turns increases, e.g. $4 \rightarrow 5$, or
- the 1-st state changes to the 2-nd state and vice versa.

The VTortex power increases with the increasing number of turns, and the knot lines in the central part of the torus are linked.

The above "twin" transmission states are typical for the VTortex propulsor of a vehicle gradually (two speed switches) gaining power and, accordingly, its movement velocity.

2-nd state

One open (open torus) ***transmission state***:

A number series 3, 6, 9, 12, etc., consisting of number 3 and multiples of 3.

In this case the VTortex power increases or drops depending on sufficient or, respectively, insufficient inflow of the structurization energy and information via Plato-Shikhirin channels required for total sustaining of a VTortex standard natural form.

If the inflow of the structurization energy and information is sufficient the number of turns increases and the 2-nd state changes to the 1-st state and vice versa.

The 2-nd type torus knots have no links in the central part of the torus.

This transmission state corresponds to stable operation of a VTortex vehicle engine producing enough power to ensure its constant movement velocity (Cruise mode)
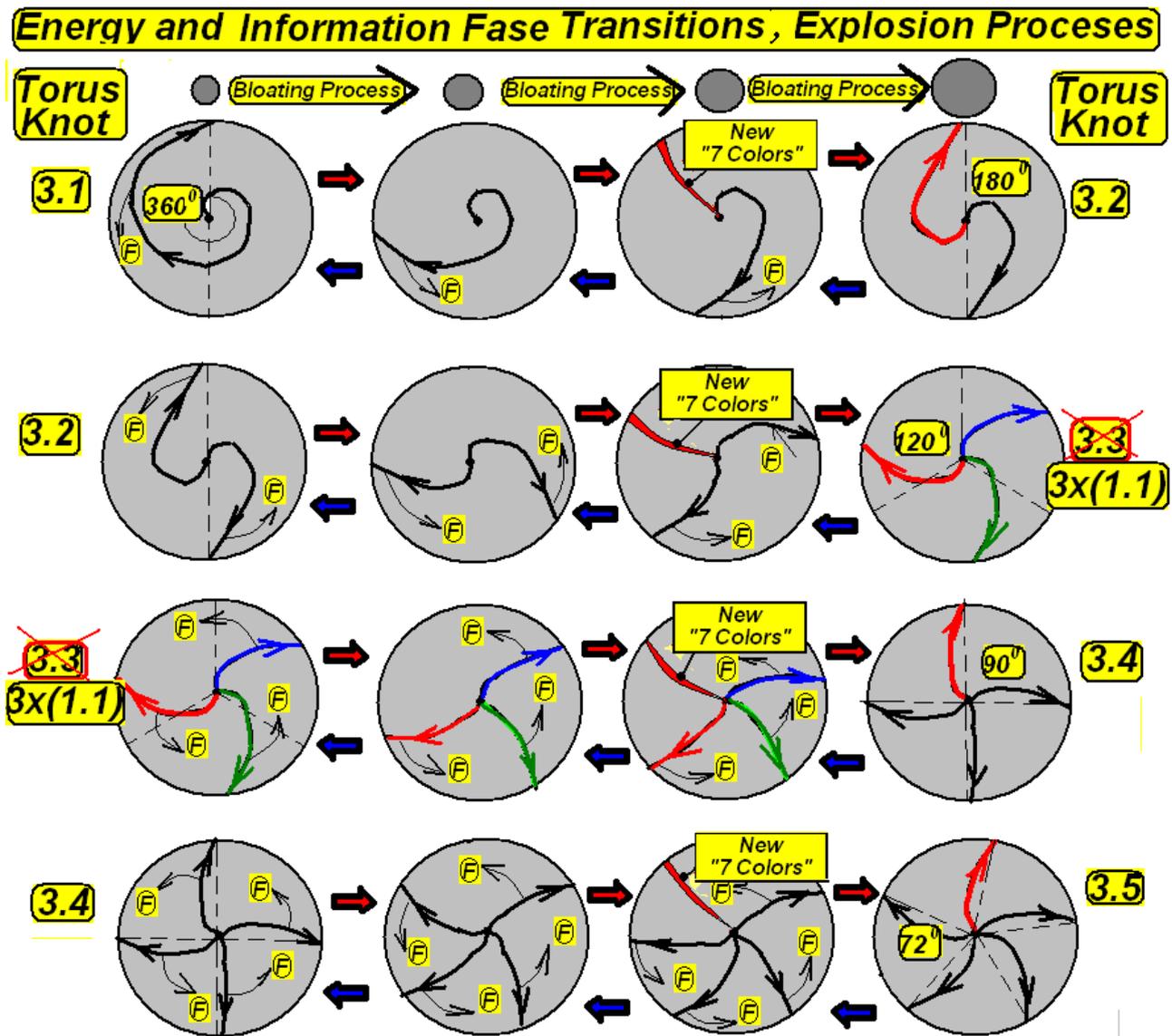

Fig. 4. Development (the law of "bloating") and depression of a VTortex knot structure.

Top view from the side of the explosive end – the tornado tail:

1-st transmission state: torus knots (3.1), (3.2), (3.4) and (3.5);

2-nd transmission state: torus knots 3(1.1).

At the beginning of links at the implosive VTortex end, so-called Pills are formed where under the effect of the structurization energy and information the overpressed fluid medium totally rushes to fill the VTortex shell thereby bringing to action the Law of Bloating.

As the VTortex development progresses, at the end of linking in both transmission states: (3.1) → (3.2) → (3.3) → (3.4) → (3.5), new 7 colors (Jalousies) will be created at the beginning of the VTortex explosive end.

Victor Schauberger used **the 2-nd transmission state** for creation of his Domestic Power Station configured with 6 copper cone tubes twisted in a specific manner around their longitudinal axes.

Then this tube cluster was twisted by 180°.

Since it was difficult to fabricate cone-shaped copper tubes of a required length, Victor Schauberger made a compound tube by connecting (welding) two tubes of different diameters, which did not affect the system operation. The structurization energy and information "ignored" this primitive technological trick.

This structure corresponds to 6 torus knots (1.1) or 6(1.1) (see the Table).

Subsequent more powerful versions of the Domestic Power Station had to be equipped with 9, 12, etc., copper tubes, which corresponds to 9, 12, etc. torus knots (1.1) or 9(1.1), 12(1.1), etc.

The lowest power Domestic Power Station should be equipped with 3 copper tubes, which corresponds to 3 torus knots (1.1) or 3(1.1).

Unfortunately, of nearly 2 dozens of Victor Schauberger's patents put to practice there are no descriptive information (stolen or classified) and working models to at least two designs hidden in archives of some countries.

These two technical solutions crown the end of the creative life of the inventor and are at the same time the highest technological achievement of Mankind in the past, present and future periods of its existence. They are embodied in:

- Flying Saucers (Repulsion),
- Domestic Power Stations.

The above solutions were and are the first working samples of rescue systems capable of saving Mankind from the use of killing hydrocarbon, hydrogen and atomic energies, natural climate cooling as well as providing a vehicle for emigration to another planet (The Forced Global Space Emigration Fund) [13]. Perhaps, it is already late for Mankind to bring these systems back to life since there may be not enough time to save its "seed".

Fortunately, the process of reproduction of essential and vital information for Mankind follows the structurization energy and information laws totally and automatically in any "human" society with a definite period of, e.g. 60, 40, 20 years, see below:

- Nikola Tesla (1856-1943): principal designs made in 1886-1928, the intellectual peak falls on ~ 1895 – 1900;
- Viktor Schauberger (1885-1958): principal designs made in 1928 – 1955, the intellectual peak falls on ~ 1943 – 1955,
- Viktor Grebennikov (1928-2001): principal designs and the intellectual peak fall on ~ 1995 – 1997,
- Other, so far "unrecognized" researchers, will reach their intellectual peak in ~ 2015 - 2020.

In other words, there is no escaping for Mankind; in any case VTortex systems are sure to be created!

5. Fluid Medium "Drops"

 "Single" drops of a fluid medium consist of liquid and/or gas, and are shaped as a spherical shell filled with a fluid medium under high pressure (a balloon)

Therefore, when effected by external and internal forces, a drop can acquire various shapes.

For instance, the World Ocean is also a drop spread in a specific way over the surface of a hollow ball (Earth), with processes-streams inside similar to a single drop seeking its optimum energy-information states.

To reduce extra energy consumption during activation and reaching the self-support mode, hard balls, rolls, etc. in ball-bearings, between parallel or other planes in a VTortex system have to be replaced with fluid medium drops that do not wet rubbing surfaces [14-16].

In other words, drops may be used:

- in ball-bearings instead of balls;

- when two and more flat surfaces rotate in different planes respective each other;

- at axial rotation of nested cylindrical surfaces. In this case the drops will transform into open tori – Coutte flows;

- at non-axial rotation of bulk objects nested into one another, e.g. a ball inside a hollow ball. In this case a drop-sphere may transform into a hollow ball composed of the fluid medium;

- during axial rotation of nested bulk objects, e.g. a ball in a hollow ball. In this case a drop-sphere transforms into tori – Coutte-Shikhirin flows [17, 18], as the 5-th natural standard (generic) type form of the fluid medium. In Nature the atmosphere of any star or a planet is composed of Coutte-Shikhirin flows, etc.

Drops roll down a sloping solid surface in much the same way as hard balls. The fact that a drop gets somewhat flattened under the effect of its own gravity does not in the least prevent its rolling down; on the contrary, it makes the latter possible." [14].

Elastic toroids filled with a fluid medium also roll down a sloping surface respective its longitudinal axis in the manner described above. These are "gravity containers"

which may be used for relocation of a fluid medium in a more cost-efficient way, as compared with other soft/elastic containers, e.g. spheroids.

Moreover,

- The reduction of friction force between surfaces rotating respective each other is orders of magnitude higher, as compared with the use of hard balls. Fluid-medium drops can be only of non-metal liquids. Liquids like mercury or Wood alloy are unacceptable.

- When one plate moves respective another, the centers of drops squeezed between them move with a speed twice as low as the speed of the plates (Fig. 5).

- The distance covered by the plate is twice as large as the distance covered by the drop.

This speed-and-distance effect is similar to one of the most important energy-information (or information-energy) characteristics of a VTortex structure [19, 20] or a toroid/torus (Fig. 5), namely:

- The distance covered by the central body located in the central part of the torus/toroid is twice as large as a distance covered by the torus/toroid moving by eversion/envelopment.

- The speed of the central body is twice as big as the speed of a torus/toroid moving forward by eversion/envelopment.
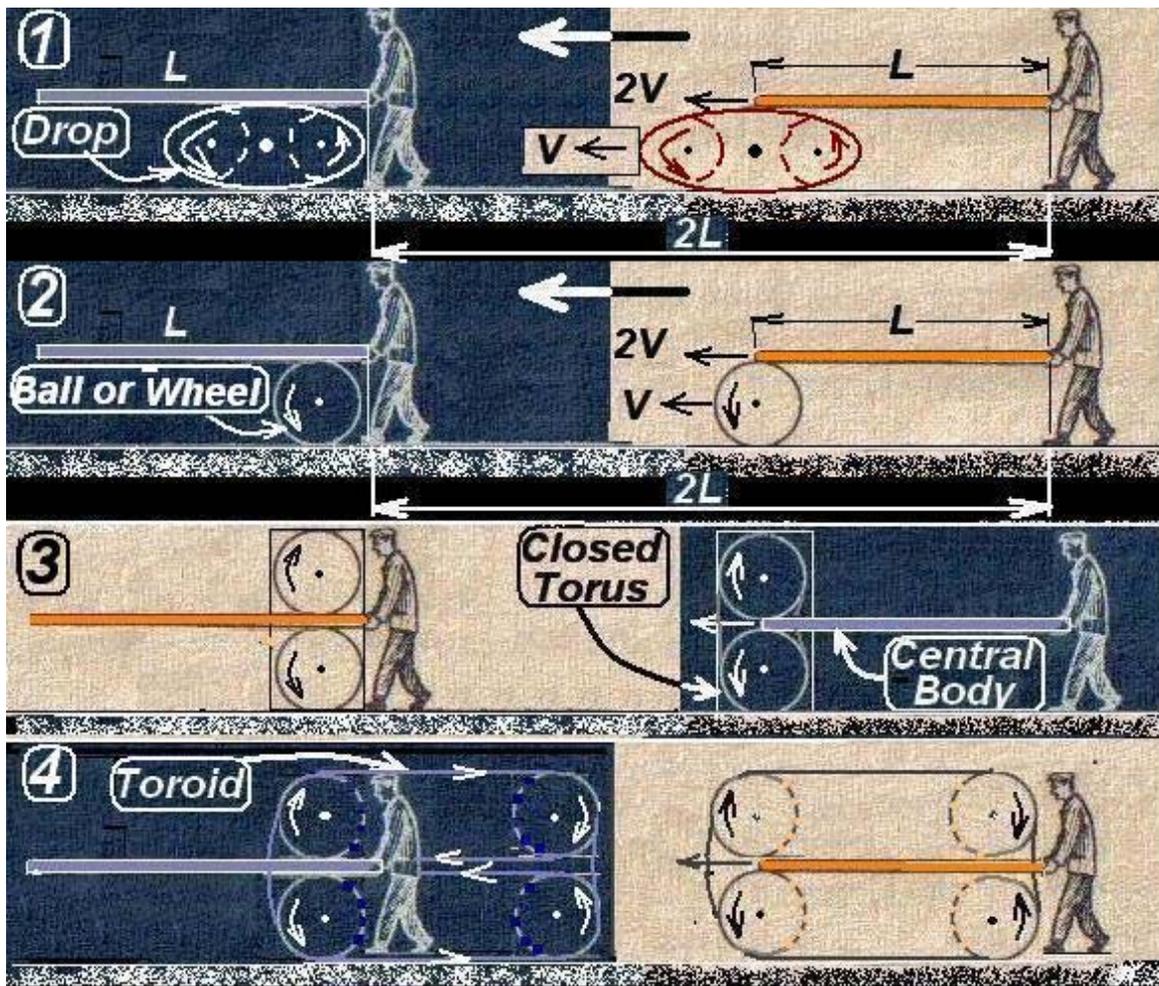
Fig. 5. The similarity of movement of a flat object (platform) placed on a drop (1), a wheel (2), an elastic /soft torus (3), and toroid (4).

Identical processes will occur during movement of nested bulk objects, etc.

6. Functional VTortex Mechano-Electronics, Materials, Basic Concept

Existing electronic and information systems are not fit for use in VTortex systems since the all-pervading structurization energy and information directed towards total support of a VTortex system may affect their performance at any time.

Modern ground-level, underground, overwater, submarine, air and space transport vehicles are equipped with motors or propulsors using the energy of hydrocarbon combustion, "atoms" or natural "auto stop", namely wind, streams, etc. on Earth and in Space.

Therefore, the natural structurization energy and information "overlooks" and ignores "aliens" like garbage since they are not involved in natural processes except befouling it and hence do not affect the functionality of their mechanical and electronic systems.

If VTortex systems are provided with old "mechanics and electronics" they will affect and physically damage electronic and mechanical components using the structurization energy and information.

No protection, shielding, etc. security means help in such irreversible processes.

To summarize the above, **functional VTortex mechano-electronics** must be developed, a physically unique structure of VTortex mechanics and VTortex electronics with built-in information communication channels, etc. In other words, various options of functionally "live" smart composite materials have to be developed integrating mechanical, electronic, information components in a single structure.

Moreover, an electronic and mechanical component means an absolutely different design principle of design since existing "modern" electronic and information systems were developed "blindly", the electrical, magnetic and other processes going on in them have not been explained until now.

7. Design Features of Functional VTortex Mechano-Electronics

1. The main feature of a functional VTortex mechano-electronic unit is its being physically independent of:

- impact of VTortex structurization energy and information spent on self-support of VTortex systems;
- internal effect of a working VTortex motor;
  force impact of processes taking place in the stream of aether moving in Plato-Shikhirin channels. These are the channels through which structurization energy and information exchange inside a VTortex structure and between VTortex structures is accomplished.

- physical pressure of Plato-Shikhirin channel walls, etc.

2. Design and technology options of functional "live" smart composite materials consisting of mechanical, electronic, information components integrated into a single structure should be used primarily in command control units of VTortex systems and agree with principles of elastic mechanics and torus technologies [2-5]:

1) The mechanical and the "electronic" systems are implemented as an integrated physical structure that performs mutually coordinated functions.

2) The conversion of energy and motion types is a one-stage mechanism that performs the same functions as a multi-stage mechanism in the traditional rigid mechanics.

3) The electronic and information systems are formed directly in the structure of smart elastic composite VTortex material, so that we have a "Smart Body" similar to an elastic soft crystal converted from a fluid medium.

For instance, a 3-phase structure of a "crystal" of water or another fluid consists of an elastic/soft shell with a fluid medium under overpressure inside, as well as of Plato-Shikhirin channels surrounding the shell in which the aether fluid medium flows. When the environmental temperature gets lower the crystal at first transforms into a "soft" crystal and then into an ice crystal retaining the 3-phase structure.

4) Functions of self-diagnostics and regeneration, etc.

3. Design features of some command control units of VTortex systems.

The design principles of some command control units include development of activators of foams[4,7], bundles[4,7], VTortex and foam[VTortex], inter-state conversion controls for standard states as well as phase transfer controls [21, 22]. For example:

- During formation (activation) of a VTortex structure, foam will be produced automatically (by structurization energy and information) from Shikhirin cells[7] in the VTortex toroidal shell, with its peripheral and central parts "marked" by honeycomb cells.

In this case Plato-Shikhirin channels (edges of Shikhirin cells[7]) serve as a multi-level "**short-term memory**".

For instance, the edges of Shikhirin honeycomb-cell[7] bases of any active galaxy are at the same time locations of stellar systems with definite and stable physical characteristics of suns, planets, comets (weight, volume, orbit parameter, etc.)

- **The long-term memory** (hard copy) and write and read processes are implemented by conversion of gas foam[4] through a phase transfer to liquid foam[4] that in turn converts through a phase transfer to a hard solid state – solid foam. The conversion process is reversible.

- **Transfer** – stream or amorphous state, like a gas or a liquid flowing copy, is provided by a gas or a liquid stream bundle[4], namely stretched gas or liquid foam[4] or dodecahedrons or their options stretched and rotating respective their longitudinal axes. Through a phase transfer a gas stream bundle[4] is converted to a liquid stream bundle[4] which is in turn converted through a phase transfer to a solid state (stretched crystals), or a hard bundle, and back.

   Dodecahedrons and their options (and not only they) when deformed, for instance by stretching or rotation, remain topologically unchanged, their quantitative information (number of faces, vertices, edges) does not change either.

   Control of artificially made gas or liquid VTortex system parameters makes it possible to use such a system for unlimited time for power and information taking.

8. Navigation Features of VTortex Platform Movement

A VTortex platform can move:

   1. *Over Earth or another planet*

   2. *In the interplanetary space of, e.g. the Solar System*

   3. *In the interstellar Space of one galaxy*

   4. *In the intergalactic space*

   5. *In Outer Space*

1. ***On Earth or another planet*** movement of a VTortex platform is possible:

- in air/gas space

- in a boundary zone between air/gas space and super-rarefied space

- under water or in fluid

1.1. Movement of a VTortex platform is senseless, dangerous and energy consuming on boundaries of:

- air/gas medium and water/fluid medium;

- air/gas medium and higher-density air/gas medium;

- air/gas medium and solid surface;

- water/fluid medium and higher-density water/fluid medium;

- water/fluid medium and hard bottom surface.

1.2. Landing is performed onto unprepared surface one time without additional approaches excluding special landing runways, provided there are special paw-like (insect-like) chassis optimized for every type of surface, such as:

- air/gas medium of higher density;

- water/fluid medium;

- ground/solid media;

- ground/solid medium or higher-density fluid medium on the bottom of a water reservoir/fluid medium.

1.3. Floating, hovering for infinite time at any altitude above an object or an area under study, etc.

This is one of the simplest operation modes of a VTortex platform propulsor, namely balancing pressure cones and super-high vacuum with account for the weight of the platform, the planet "gravitation force", etc.

2. In the Interplanetary Space of, e.g., the Solar System

Fig. 6-8 shows the formation process of any stellar system, including the Solar System, as well as of any stars and planets.
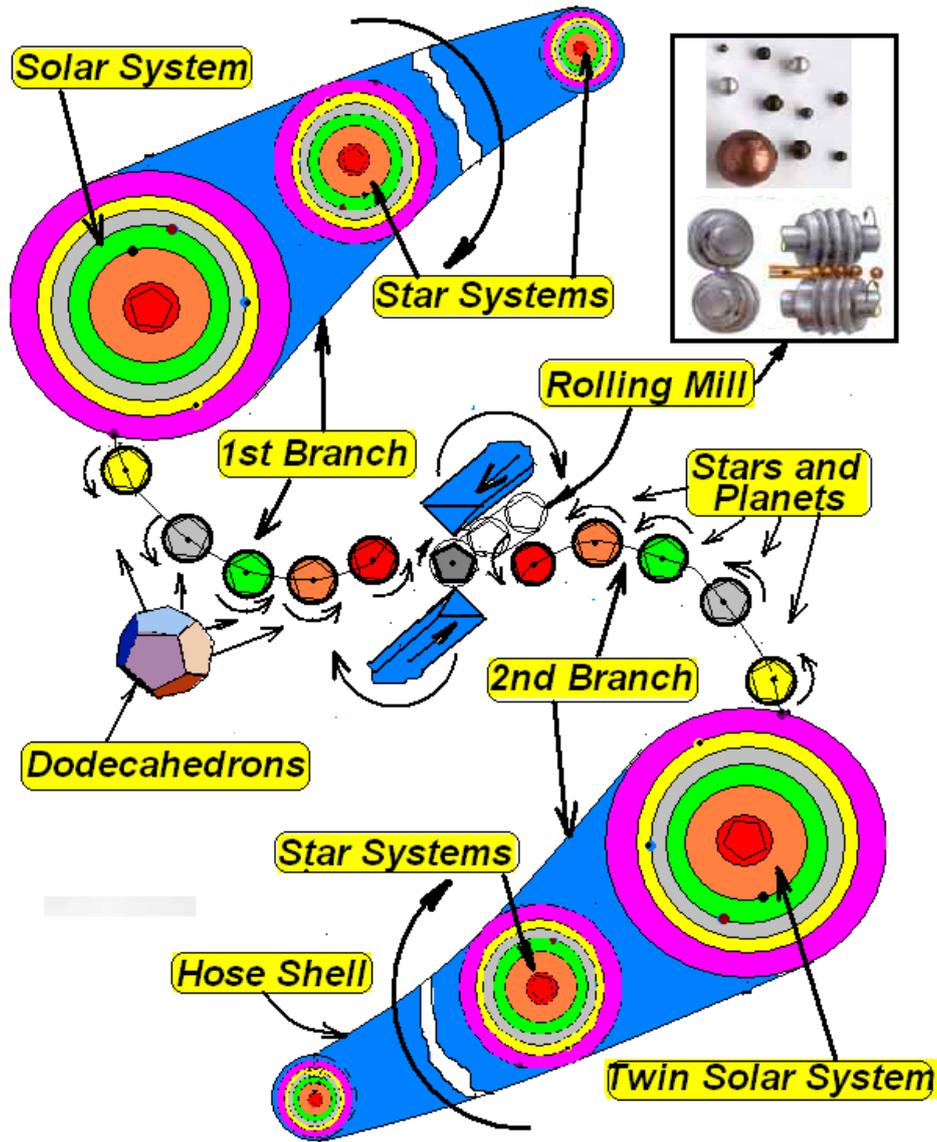

Fig. 6. A typical technological process for formation of stellar systems, including the Solar System.

The number of planets can total dozens and hundreds including their satellites. It may be said that all planets of the Solar System are its satellites.

On a Simplified Structure of Any Planet by Example of Earth

1) Any planet is formed by the central part of the galaxy acting like a 2-roll helical rolling mill (producing balls).

2) Any planet has an icosahedron-dodecahedron structure.

3) In the center of any planet or a star which is a *hollow dodecahedron* → ball there is super-high vacuum that keeps the planet from breaking apart.

4) Every icosahedron vertex has a natural valve/plug inside consisting of gaseous methane, oil and water layers (Fig. 7)

5) If the plug hermeticity is damaged the whole atmosphere or part it will be sucked into the planet center and the latter will be broken apart as it happened to Phaeton. Now it is Kuiper Belt.

6) A good atmosphere of the planet is ensured by Coutte-Shikhirin Flows (Polar, Ferel and Hadley cells). While the atmosphere is being destroyed, ozone depletion holes at its poles are getting larger, hence the number of cells decreases. The polar cells are the first to be destroyed followed by Ferel and Hadley cells. That is, the atmosphere of Earth is now being destroyed in the manner similar to what happened to Mars.

7) It is not unlikely that the Doomsday "fixed" by Nature for 2012 is a coincidence of peaks of cycles formed at least by our Galaxy. The cycle peak "power" enhancement may be provoked and accelerated by "silly man", for instance, by drilling deep holes and extraction of hydrocarbons. We observe these processes today in the Mexican Gulf [24].

8) In the event of tornado origination and development "floods" of oil and gaseous methane may be used as a method of tornado destructuring.
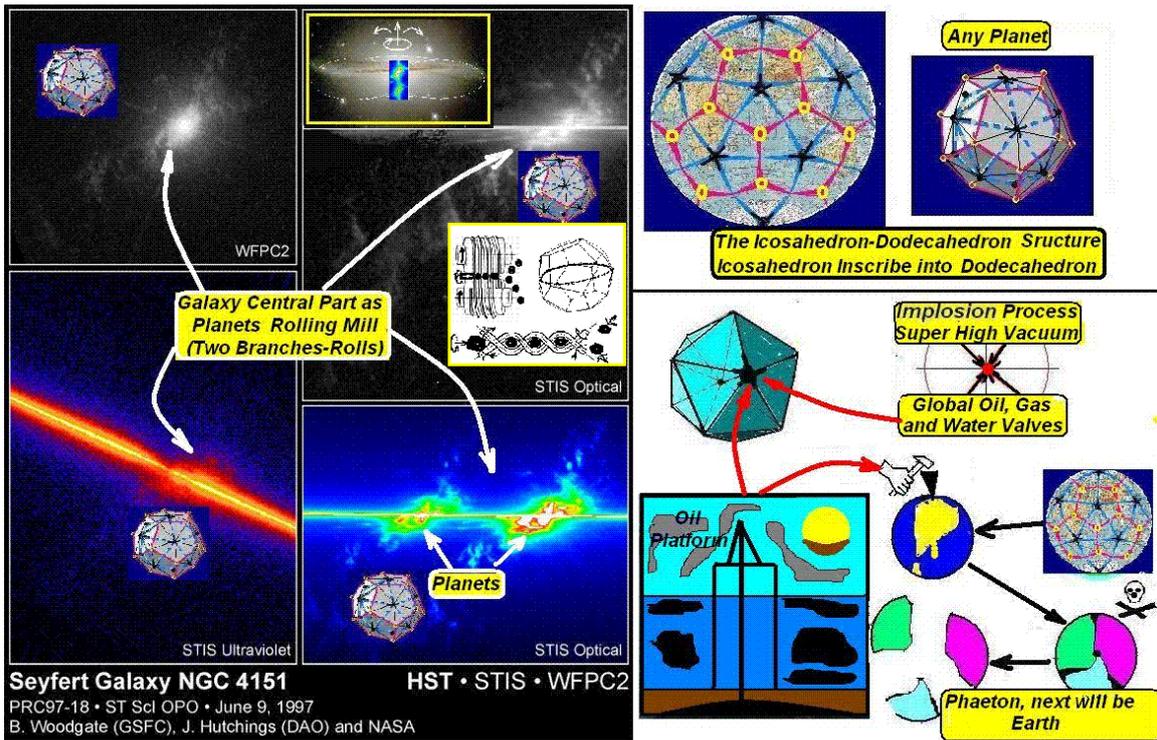
Fig. 7. Formation of stars and planets, their protection from breaking apart and "silly man" destroying his own planet [24].
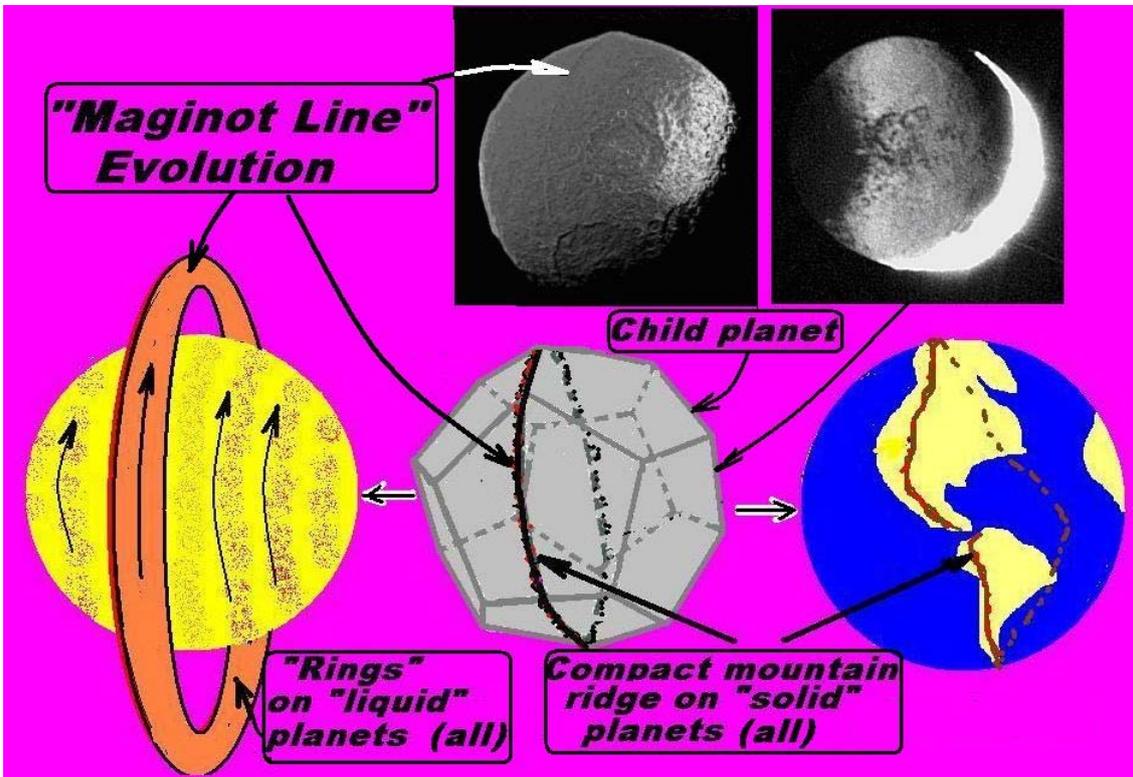

Fig. 8. A dodecahedron http://ciclops.org/view_media/2770/Seeing_in_the_Dark in the right upper corner and in the middle.

The Maginot Line as the interface area between two operating helical rolling mills – the central part of any galaxy – is shown in the upper middle part http://photojournal.jpl.nasa.gov/catalog/PIA06166 and in the left on "liquid" and solid planets.

Static Electricity Charge Generation

Generation of static electricity charges in the process of the Solar System or any stellar system **development** is intrinsic in the VTortex galaxy activity (Fig. 9). That is, a VTortex galaxy or another VTortex system, e.g. an atom, is an electric generator.

The figure contains labels: Hose Shell, L_{10}, L_9, q_{10}, q_9, Hose Shell, L_6, q_7, L_5, q_6, L_4, q_5, L_3, q_4, Planets, L_2, q_3, L_1, q_2, Sun, q_1

$$F_9 = \frac{q_9 q_{10}}{L_9}$$

$$F_{Sun}^{+} = \sum_{n=1..9} \frac{q_n q_{(n+1)}}{L_n}$$

$$F_1 = \frac{q_1 q_2}{L_1}$$
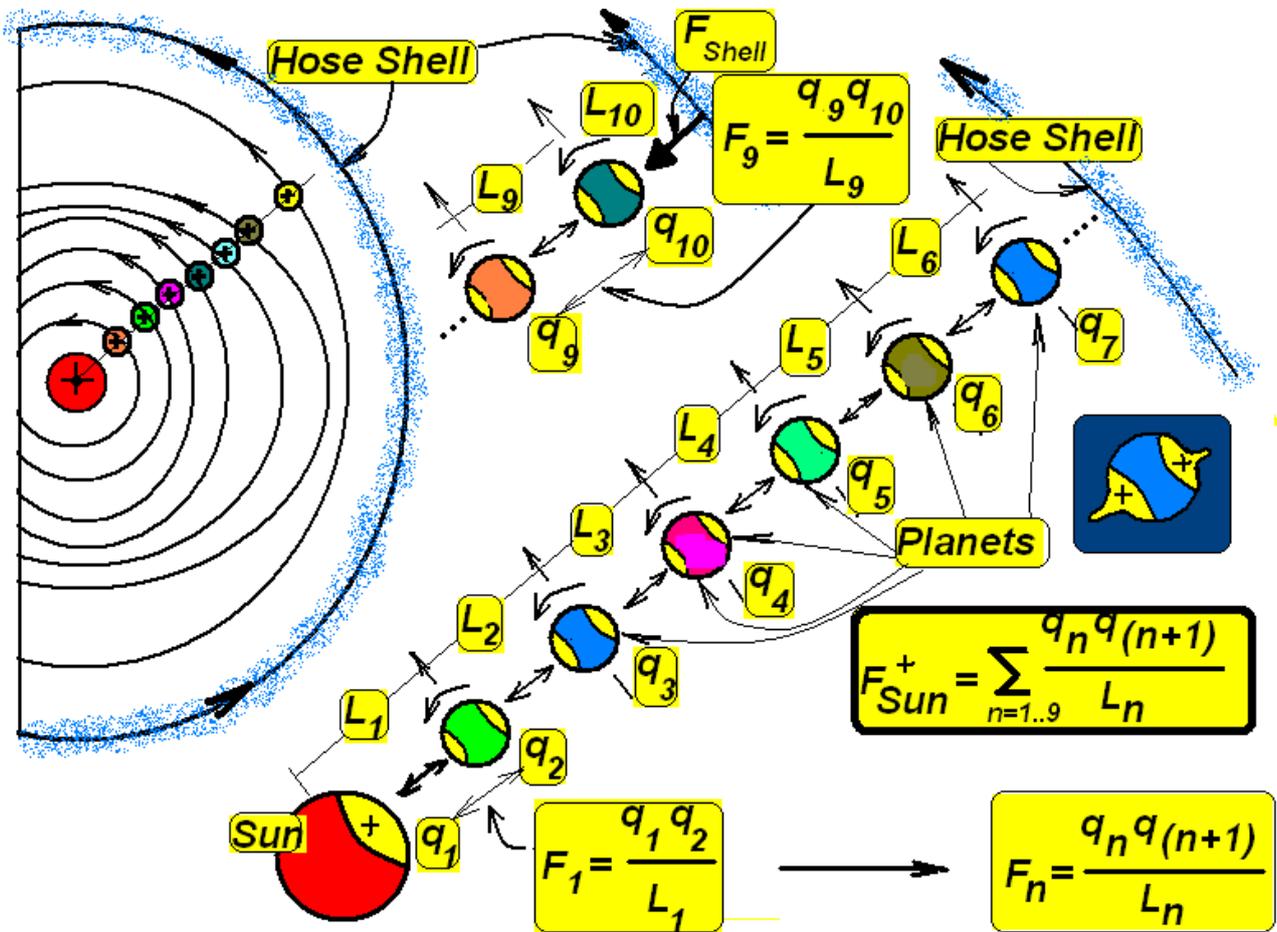
$$F_n = \frac{q_n q_{(n+1)}}{L_n}$$

Fig. 9. Static electricity charge generation in the Solar System or any other star system. Simplified Coulomb's formulas are given.

Between the central body acting as the rotor represented by old "bloated" stars and planets and the two-roll super-cold helical rolling mill an equal quantity of stars and planets is produced. Actually the process "reproduces" old stars and planets. Friction arises between the two rotating rolls as stators and stars/planets as rotors, hence, a static charge is generated and accumulates thereon, for instance, a positive charge *q*. The process of static electricity generation is demonstrated by tornado acting at the same time as an electrical generator. For pictures of the "tail", or the top "eye", of the tornado in a cyclone, made from Space, please refer to

http://www.enterprisemission.com/hurricane3.htm.

In the simplest and easy-to-understand configuration of stars and planets, namely in their full "parade" (Fig.7), all planets and the star are lined up on the same line. This is a purely theoretical configuration that cannot happen in reality.

In this case the star and the planets charged with identical charges will repel from one another until the last planet "bumps' into a roll or the hose shell material from the interior side.

Static charges in the form of a fluid medium will flow to the opposite sides of the planets and line up shaped as short icicles.

Subsequently, parameters of planet orbits are generated as a function of planet charge potentials and the star charge.

The charge on a planet is a surface charge; therefore its value depends on the surface area of the star and the planets.

In other words, the greater the surface area, the bigger the charge since static electricity accumulation during rotation occurs at the same circular speed of both the rotor and the stator, irrespective of the sizes of the star and planets.

Therefore, the static charge on the star (the Sun) surface is considerably higher than those on planets, which leads to "elastic" concentration of planets rotating around the star in concentric circumferences, ellipses, etc. provided the static charge of the star is equal to the sum of the static charges of planets.

To sum up the foregoing, the static charge of the star along with the material of the hose shell shape and keep a star system from breaking apart.

If flights in a stellar system, particularly, in the Solar System are expected to take place in non-parade or incomplete parade periods, all calculations for locating a current place of the charge and its potential may be carried out using conventional geometry techniques delegating this task to secondary school students or first-year university students

Conclusion: space vehicle flights in the interplanetary space of any stellar system are feasible in the following circumstances:

- use of VTortex platforms independent of functional specifics of the space;
- use of solar energy (solar sails), if any;
- **Use of static electricity of one planet, of two planets, of the star and planets, etc., as one of alternative energy types, so far unknown to Mankind.**

How is it possible to take off an electrostatic charge "from oneself" and convert it, for instance, to electricity?

In this case special converters for conversion of planetary and/or stellar static electricity should be developed. Remember that the electrostatic charge on any planet, Earth including, does not depend on the weather (clouds). Therefore, stand-alone or group electrostatic stations can be built on Earth surface in a certain curve line to provide conversion of electrostatic energy, e.g., to electrical energy.

It does not seem unlikely that Nikola Tesla while testing his free energy stations hit, by chance or by lack of knowledge, one of the two static electricity charges and short-circuited them thereby breaking the charge equilibrium, which caused the "Tunguska" phenomenon of 1908.

3. In the Interstellar Space of the Same Galaxy

It is known from [12] that any active VTortex galaxy is structured with the ($3n_p;2$) torus knot and consists of $7n_p \cdot 2 = 14n_p$ Shikhirin cells[7], where n_p is equal to hundreds, thousands.

Functionally, $3n_p$ turns are distributed over the surface of any eversible elastic toroid in the following manner: ~ $2,5 \cdot 2$ turns are distributed over the periphery of the VTortex galaxy (they are visible), and ($3n_p$ - 5) turns are concentrated in/ pulled into its central part, into the zone of the supper-cold helical rolling mill producing planets and stars.

To make the explanation easier, let us consider a "theoretical" galaxy consisting of 14 (7·2) Shikhirin cells[7] and structured with a (3.2) torus knot, respectively (Fig. 10).

Fig.10. A fragment taken from [1, Part 4] showing the functional features of the VTortex galaxy

A galaxy like this includes the following components interconnected by the Plato-Shikhirin channel system:

- 14·2 central (on the torus string) levitation centers;
- 21·2 peripheral levitation centers;
- 14·2 peripheral gravitation centers.

14·2 central levitation centers located on the torus string are purely technological and take part in molding ("bloating") a standard VTortex type form into 14 (2·7) Shikhirin cells[7](see [12, 17] for details).

In other words, the toroidal shell is filled with a fluid medium, mainly a mixture of hydrogen and helium, under overpressure eliminating penetration of stellar matter and any foreign objects, including VTortex platforms, into each of the 14 (2·7) Shikhirin cells[7].

Therefore, Plato-Shikhirin channels having a triangular cross-section, filled with moving aether and located at the periphery of the VTortex galaxy are the only elastic/soft/flexible tracks/tunnels/pipes/hoses, etc.

Natural stellar matter is squeezed (levitates) into them while artificially created objects, e.g. VTortex platforms, are prevented from getting inside. Their movement will be limited by walls of Plato-Shikhirin channels as well as, by the way, the movement of stellar matter.

Specifics of stellar matter and VTortex platform movement over the periphery of a VTortex galaxy (Fig. 11), simplified description:

1. Movement of stellar matter from each levitation center (21·2 in total) with about equal acceleration occurs only in reverse direction to two gravitation centers (14·2 in total) each of which represents a gravitation node, *namely a tetrahedron space with a four-tube connection.*

When 3 reverse aether streams twisted to one side and containing stellar systems, including the Solar System, get into it, cycles and calendars are formed.

2. With respect to goals and tasks posed by Man, artificial movement of a VTortex platform has the following specifics:

- the VTortex platform moves only from one tetrahedron node, or the four-tube connection, to another similar node;
- the route of movement consists of two parts:

1) <u>Distance 1</u>: moving from the gravitation node to the levitation center (about half the distance) the VTortex platform has to overcome gravitation forces resistance, therefore is movement speed is V_1:

$$V_1 = V_{\text{VTortex-Platform}} - V_{\text{Gravitation}} \ (> 0)$$

Otherwise the VTortex platform will be sucked back into the gravitation center.

$V_{\text{VTortex-Platform}}$ – cruise speed of the VTortex platform;

$V_{\text{Gravitation}}$ – speed (with acceleration) with which stellar mater residing in the aether fluid medium is sucked/pulled into the gravitation node.

2) <u>Distance 2</u>: from the levitation center to the gravitation node (about half the distance) with a speed of:

$$V_2 = V_{\text{VTortex-Platform}} + V_{\text{Gravitation}},$$

That is, $V_{\text{Gravitation}}$ will assist in the VTortex platform movement. It may happen that the gravitation forces will be sufficient for the platform to "drift" with the switched off motor, i.e.
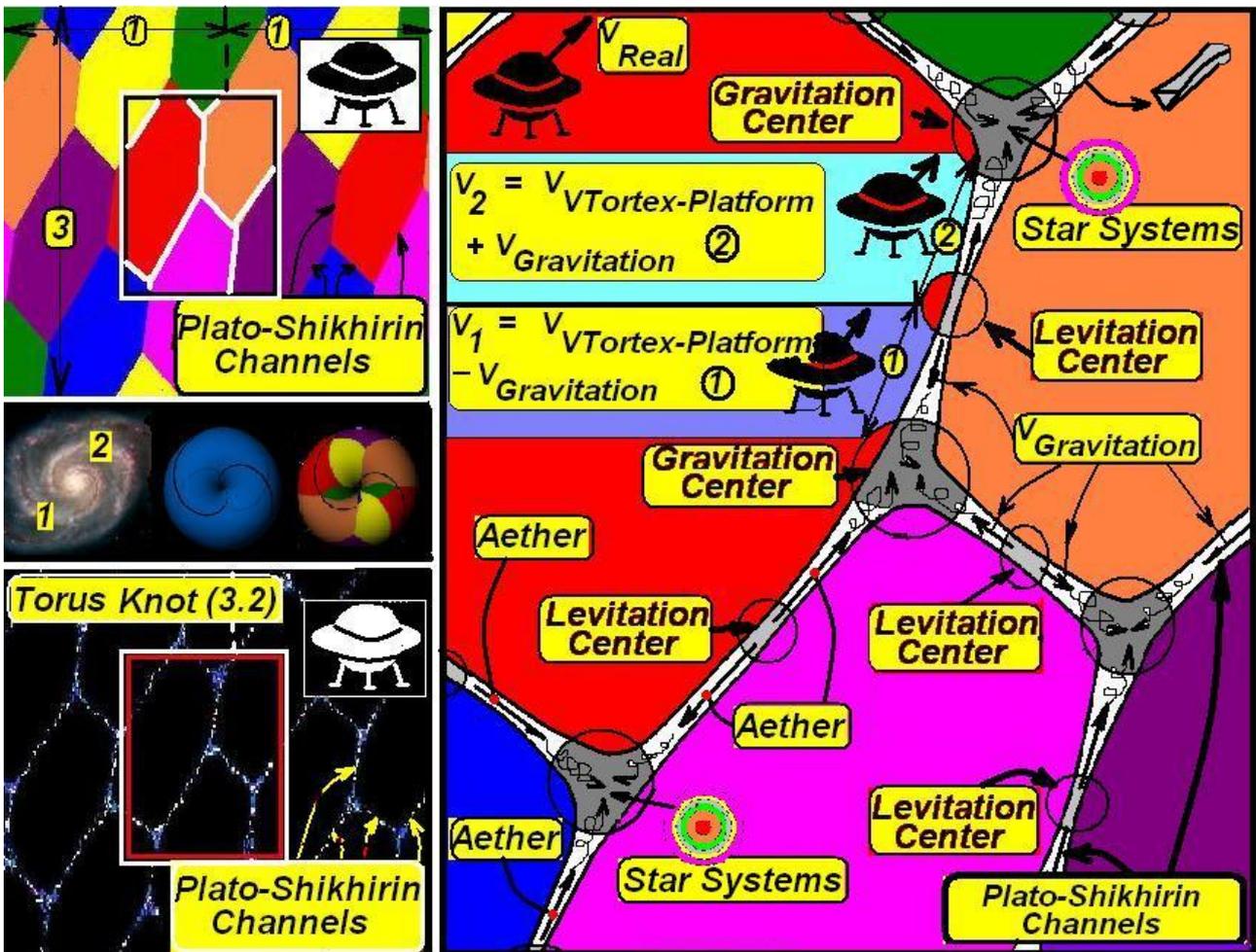
$$V_2 = V_{\text{Gravitation}}.$$

Fig. 11. Specifics of VTortex platform movement between connection nodes of 3 colors-honeycomb cells.

The left-hand view of Fig. 11 shows a colored and a real maps of any active VTortex galaxy, torus knot (3.2).

Each color-honeycomb cell (totaling $2 \cdot 7$) is the base of Shikhirin cells[7] that represent a heptahedron (6, 4, 4, 4, 4, 3, 3).

Heptahedrons (6, 4, 4, 4, 4, 3, 3) are formed as a result of their tight packing …..

Moreover, heptahedrons (6, 4, 4, 4, 4, 3, 3), or Shikhirin cells[7], are shells filled with a fluid medium under overpressure while the space between them is formed by Plato-Shikhirin channels, with aether moving/flowing therein (See [17]) for details.

The right-hand view is a fragment of a map showing the structure of Plato-Shikhirin channels located at the periphery of the VTortex galaxy. The map also shows:

- gravitation centers pulling in/sucking in all stellar matter;
- levitation centers out of which all stellar matter is evacuated/ejected/thrown out.

Levitation centers are located between two gravitation centers.

4. In the intergalaxy space

In Nature it makes no sense to move to an area of interacting VTortex galaxies or interacting VTortex vortices [18] since interaction of VTortex vortices leads to development of one powerful VTortex vortex or to their destruction.

These processes can be observed:

- in a swimming-pool lab by making VTortex vortices by means of a jet outgoing from a hose directed in various directions. The viewing screen to view and study these processes is formed by the bottom (horizontal VTortex projection) and the walls (two vertical VTortex projections) of the pool with special backlight;
- in the atmosphere of Earth during interaction of Coutte-Shikhirin flows as tornado and anti-tornado sources;
- In Outer Space at the interaction of galaxy groups.

5. In Outer Space

The Outer Space is known have been formed by a tight pack of dodecahedrons and their options [17, 20]. Therefore, VTortex platform vehicles can move only via Plato-Shikhirin channels in the aether fluid medium, i.e. in "edges" of 4 dodecahedron connections. The process of the VTortex platform movement is similar to the movement of stellar matter and VTortex platforms at the VTortex galaxy periphery (Fig.9).

From each levitation center (totaling $21 \cdot 2$) stellar matter moves with about equal acceleration in the reverse direction to two gravitation centers (totaling $14 \cdot 2$) each of which is a gravitation node, namely a tetrahedron space with 4 connection tubes.

When 4 reverse aether streams twisted to the same side and containing stellar matter get into this space vortices are developed which are partially converted to interacting and/or single VTortex galaxies (The Milky Way or Andromeda Nebula)

9. Who will be a Sponsor or a Donator in Creation of VTortex Systems? Conclusion

Since Mankind does not have its own VTortex platform put into practice, and all transport vehicles move mostly by using the "primeval fire" energy. i.e. hydrocarbon and atomic fuel, then we should confess that we a loser civilization capable of driving vehicles no father than in the vicinity of Earth or at least to as far as Mars by "hitch-hiking", i.e. using incidental natural vehicles.

Especially absurd seem such "global" projects as"

*- **Flight to Sun** to study the temperature difference on the exterior and the interior surface of the atmosphere.*

It is quite evident even without expensive flights, since the atmosphere of Sun as well as of another star or a planet of the Universe consists of Coutte-Shikhirin flows, namely, a tight pack of VTortex structures whose eversible upper ends have a higher temperature and pressure, as compared to enveloping lower ends that have a considerably lower temperature and super-high vacuum [12, 23].

*- **Flights to Mars**, e.g., in search of water. What sense does it make to fly to Mars, a planet ones exploited and abandoned by our ancestors who later destroyed its atmosphere: 1.5 Coutte-Shikhirin cells instead of 6 as on Earth?*

What can be other reasons? To find remains of power lines, pipelines, oil-extracting platforms, tankers, hydro- and atomic power stations, cities and alike?

The above is none other than a look into Space of a stone-age man who understands that help is to come from nowhere and he must make his own efforts to leave the planet. http://www.skepdic.com/faceonmars.html.

Incidentally, the appearance of ozone-depletion holes above the poles of Earth proves the tendency for such cells to decrease in number.

- Flights to other planets such as Saturn, Jupiter, etc., since similar process of "liquid" planets shaping, formation of their structures, chemical compositions, atmospheres, etc., occurred there too, though the above " liquid" planets as well as stars are "solid" and hollow like the Earth group planets, and their atmosphere (Couttee-Shikhirin flows) imitates their liquid state.

The history of donations in the USA (Russian examples) shows that:
- a Russian American, composer Sergei Rakhmaninov, 1873–1943, gave money to a Russian American , engineer Igor Sikorsky, 1889–1972, for helicopter development;
- a Russian American, businessman David Sarnoff, 1891-1969, founder of *Radio Corporation of America (RCA)*, gave money to a Russian American, engineer Vladimir Zworykin, 1888 – 1982, for development of television technologies (TV-set, microscope, etc.);
- Andy Bechtolsheim, vice-president of *Sun Microsystems Co., gave money to a Russian computer scientist Sergei Brin for development of Google information system, etc.*

One should know that:
- the natural crisis (the space cycles peak [23]) and, consequently, climate change (global cooling [8]) and "perturbations" in human society will continue for years to come;
- there no sense in holding debates by any government since this is a senseless and long-term process. The energy and climate problems need to be solved today, right now;
- capitalists are making a huge mistake because they take ready technologies for immediate introduction to get "quick" money and bigger benefits. They place productions in other countries, mostly in Asian Region, equipping them with new technologies, and thereby bring to the minimum high-skilled specialists destroying their own countries;

- VTortex systems are impossible to develop "on a desk or in a garage". This project is equivalent in its value to development of nuclear systems (armament, power stations) and requires millions of dollars of investments.
  In development of nuclear systems formulas were trusted rather than finished devices and various theories. Finances were allocated for implementation of these projects;
- Development of VTortex systems, even substantiated rumors thereof will "sweep away" automatically the use of hydrocarbon and atomic energies;
- Mankind who will not take advantage of these technologies will be "a loser and a suicide" and there are more proofs to it as time flies;
- A country or groups of people who will take possession of these technologies as did our ancestors (an effective, self-sufficient and independent group of people) who once appeared on this planet, will gain control of the whole World (not the Universe) now and forever. Who will be the first to create a laboratory for development of VTortex systems (vehicles, energy sources, etc.) is sure to be beyond the reach of other technologically "developed" countries and International corporations, because these technologies have to be mastered "from scratch" since by now there is nothing in stock except "unclear" and hidden samples left by Victor Schaubetger, Nikola Tesla, Viktor Grebennikov, and VTortex systems left by earlier civilizations who got on Earth as a result of tragic events.
- Only as few as hundreds or thousands of people (the Noah's Ark) will be able to emigrate to another new planet. No money will help to get into this list.
- The rest of Mankind *"will all perish but the doomed will be dancing into agony and bacchanalizing (Nostradamus)*
- The first to get into the list are research engineers and clever rich people who earnestly earned their money and will give it gratuitously for development of VTortex systems because they understand their mission in the life of Mankind and want to rescue themselves and their families.

In this situation knowledge (50%) and finances (50%) will merge.

Reference List

Valeriy Shikhirin has more than 250 publications (1971 – 2010).

1.Valeriy Shikhirin, http://youtube.com/user/elastoneering, part 1-10 etc.

Working models video and animations. **This is very important for understanding**:

- Part 1: Tore Technologies, Single-component toroids (2008), **video**;

- Part 2: Tore Technologies, Multi-component toroids (2009), **video**;

- Part 3: Torus and VTortex Surface Structurization. VTortex as Free Energy and Information Source. Basic Torus Knots knotted Torus and VTortex (2009), **animation**;

- Part 4: Ideal Natural VTortexes Galaxy and Tornado as Free Energy and Information Source (2009), **animation**;

- Part 5: TorArt. Imaginations (2009), **animation**;

- Part 6: Torus and VTortex Bodies Structurization by Shikhirin Cell[7] or Color Cell[7] (2009), **video**;

- Part 7: Torus Algorithmic Spirals, Angular Toruses, and Global Cooling (2009), **animation**;

- Part 8 Damaged Oil pipe/well sealing and recovery of efficiency under water (July 2010), **video [**24];

- Part 9: Color/Shikhirin Structure of Platonic Solids, **video (pending)**.

- Part 10: Global Natural Toroidal Phyllotaxis Process, **animation (pending);**

- Part 11: Skeleton/Frame/Ether Structure of Regular (Typical) forms of working fluid medium in Nature: Sphere-4D, Torus-5D, Torus-7D, Mobius Band-6D, Klein Bottle-6D and other polyhedrons (Shikhirin Cells[1,2,3,4,5,6,7] or Color Cells[1,2,3,4,5,6,7]), **video (pending);**

2. 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.

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

3. V. Shikhirin. Elastic Mechanics as the Basis of Future Machines and Mechanisms. Electronika: Science, Technology, Business, No.5, 2001, pp. 10-14, http://www.alt-tech.org/files/fizika/shikhirin1.pdf.

4. V. Shikhirin. Elastic machines and mechanisms of the future. The Summary of Technologies, № 2(6), 2001, p.37-42,

http://www.alt-tech.org/files/fizika/shikhirin2.pdf.

5. 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, plenary report, pp.22-48.,

http://www.evgars.com/mechanik.htm, http://www.alt-tech.org/files/fizika/shikhirin/TORTECH_R.pdf.

6. V. Shikhirin, V. Ionova, O. Shalnev, V. Kotlyarenko, Elastic Mechanisms and Designs. A Monograph. Irkutsk State Technical University Publishing Office, 2006, 286 p.

http://www.alt-tech.org/files/fizika/shikhirin/ElastBook.pdf.

7. V. Shikirin. The Structure and Principles of Development of the Universe as well as Platonic, Archimedean and Shikhirinean Solids. Proceedings of 7-th International Scientific-Practical Conference "Tore Technologies", Irkutsk State University, Russia, 27 October, current collection.

8. 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", 23-25 Nov., 2006, Irkutsk State Technical University. www.evgars.com/climate_r.htm, http://www.alt-tech.org/files/fizika/shikhirin/Climat_R.pdf.

9. V. Shikhirin. Structurization Energy and Information – A Technology of Matter Existence in Nature. RESTRUCTURING OF NATURAL SCIENCE AND ENERGETICS – 2009, XVIII International Scientific Symposium. S, Petersburg, Russia, 28-30 April, 2009, or a paper from Proceedings of 6-th International

Scientific-Practical Conference "Tore Technologies", 28 October, 2009, Irkutsk State Technical University, pp. 42-55, http://www.evgars.com/a_e.htm, http://www.alt-tech.org/files/fizika/shikhirin/2Structurization3.pdf.

10. V. Shikhirin. Energy and Information Exchange in the Universe by Examples of Vegetable and Animal World. Proceedings of 7-th International Scientific-Practical Conference "Tore Technologies", Irkutsk State University, Russia, October 27, 2010, current collection.

11. V. Shikhirin. A Study of Possible Use of Mathematical Methods for Press Mold Distribution in a Model Casting Shop of Izhevsk Mechanical Works. Graduation Thesis. Izhevsk Mechanical Institute, 1971

12. 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.evgars.com/vtortex.htm , http://www.alt-tech.org/files/fizika/shikhirin/VTORTEX_R.pdf.

13. V. Shikhirin. Development of Perfect Energy Sources for Survival of Mankind under Global Climate Change – Space Cooling Phase. Proceedings of 4-th International Scientific-Practical Conference "Tore Technologies", 24 October, 2007, Irkutsk State Technical University, pp. 3-28, http://www.evgars.com/energy3.htm, http://www.alt-tech.org/files/fizika/shikhirin/EnergingR.pdf.

14. Ya. Frenkel. On Substitution of Drops for Balls in Bearings. Journal of Theoretical Physics, Vol. XX, Issue 8, p.1027, 1950. The USSR Academy of Sciences. Leningrad.

15. Ya. Frenkel. On Behavior of Liquid Drops on a Solid Body Surface. Journal of Experimental and Theoretical Physics, Vol. 18, Issue 7, p.659, 1948. The USSR Academy of Sciences. Leningrad.

16. Ya. Aron, Ya, Frenkel. On Behavior of Liquid Drops (and Bubbles) on a Solid Body Surface. Journal of Experimental and Theoretical Physics, Vol. 19, Issue 9, p.807, 1949. The USSR Academy of Sciences. Leningrad.

17. Synergetics of the Universe as a Natural Self-Supported Mechanism. First Approximation. Proceedings of 5-th International Scientific-Practical Conference "Tore Technologies", 23-34 Oct., 2008, Irkutsk State Technical University, pp.22-54, http://www.evgars.com/new_page_42.htm, http://www.alt-tech.org/files/fizika/shikhirin/SynergeticsUniverseR.pdf.

18. 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., 2008, Irkutsk State Technical University, p. 54-87, http://www.evgars.com/smerch_new.htm, http://www.alt-tech.org/files/fizika/shikhirin/SynergeticsTornadoR.pdf.

19. 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, http://www.evgars.com/transport.htm, http://www.alt-tech.org/files/fizika/shikhirin/TRANSPORT_R.pdf.

20. V. Shikhirin. VTortex, or a Life Cell as Self-Supported Superior Form of Fluid Medium Existence in Nature of Mega-, Macro-, Micro- and Nano-Worlds. RESTRUCTURING OF NATURAL SCIENCE AND ENERGETICS – 2009, XVIII International Scientific Symposium. S, Petersburg, Russia, 28-30 April, 2009, or a paper from Proceedings of 6-th International Scientific-Practical Conference "Tore Technologies", 28 Oct., 2009, Irkutsk State Technical University, p. 14-42, http://www.evgars.com/y_z.htm, http://www.alt-tech.org/files/fizika/shikhirin/1VTortexLifeCell-1Irkutsk.pdf.

21. V. Shikhirin. Natural "Elements" of Information and Energy as the Basis for XXI Century Device 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, http://www.evgars.com/infenergy1.htm.

22. V. Shikhirin. Natural "Elements" of Information and Energy as the Basis for XXI Century Device 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, http://www.evgars.com/infenergy2.htm.

23. V. Shikhirin. Breakthroughs in Natural Science Occur in Times of Global Crises of Mankind. RESTRUCTURING OF NATURAL SCIENCE AND ENERGETICS – 2009, XVIII International Scientific Symposium. S, Petersburg, Russia, 28-30 April, 2009, or a paper from Proceedings of 6-th International Scientific-Practical Conference "Tore Technologies", 28 Oct., 2009, Irkutsk State Technical University, p. 55-69, http://www.evgars.com/c_m.htm, http://www.alt-tech.org/files/fizika/shikhirin/3Kritika.pdf.

24. V. Shikhirin. Ideas and Simplest Torus Devices for Blocking a Damaged Oil Pipe by Example of the Deepwater Horizon Incident in Mexican Gulf. Proceedings of 7-th International Scientific-Practical Conference "Tore Technologies", Irkutsk State University, Russia, October 27, 2010, current collection.

25. 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 November, 2006, Irkutsk State Technical University, pp. 131-143 www.evgars.com/piphi.htm, http://www.alt-tech.org/files/fizika/shikhirin/PHi_R.pdf.