



Scan to know paper details and
author's profile

How the Universe Works: Part 4. Philosophical Foundations of Space Vitality: Energy, Consciousness, and the Mathematical Interpretation of the Processes in Space of Universe

Dr. Vasyl Oryabko

ABSTRACT

Space is a material structure, a container of material objects densely enveloped in energy. The main function of space is to ensure the vitality of the Universe in the process of interaction of objects of matter on the basis of intellectual and informational support of its basis - objective reality. The task of the latter is ensuring the failure-free execution of all processes of interaction, what is the basis of the vitality of the space of the Universe as a whole. The existence and development of subjective reality on the basis of biological life on our planet is based precisely on the vitality of objective reality and the intellectual and informational properties of space. Subjective reality is the consciousness of the life process, which is created as a result of the total process of life as a whole throughout the entire period of its existence. The body in which the process of life of a certain individual takes place is a material shell of the primary vitality based on the vitality of objective reality. The main function of subjective reality of biological life is to create a product that goes beyond the capabilities of objective reality. The main function of subjective reality of biological life is to create a product that goes beyond the capabilities of objective reality. First of all, it is the process of creating and circulating specific biological energy resources that are provided by living organisms themselves or their foetuses in the form of food. This is necessary to ensure the viability and stable functioning of renewable bioenergy.

Keywords: space, substance & energy, vital capacity, consciousness, force interaction, work of energy, mathematical sequence.

Classification: LCC Code: QB500.8, BD431, QA299.6

Language: English



Great Britain
Journals Press

LJP Copyright ID: 925612

Print ISSN: 2631-8490

Online ISSN: 2631-8504

London Journal of Research in Science: Natural & Formal

Volume 25 | Issue 11 | Compilation 1.0



How the Universe Works: Part 4. Philosophical Foundations of Space Vitality: Energy, Consciousness, and the Mathematical Interpretation of the Processes in Space of Universe

Dr. Vasyl Oryabko

ABSTRACT

Space is a material structure, a container of material objects densely enveloped in energy. The main function of space is to ensure the vitality of the Universe in the process of interaction of objects of matter on the basis of intellectual and informational support of its basis - objective reality. The task of the latter is ensuring the failure-free execution of all processes of interaction, what is the basis of the vitality of the space of the Universe as a whole. The existence and development of subjective reality on the basis of biological life on our planet is based precisely on the vitality of objective reality and the intellectual and informational properties of space. Subjective reality is the consciousness of the life process, which is created as a result of the total process of life as a whole throughout the entire period of its existence. The body in which the process of life of a certain individual takes place is a material shell of the primary vitality based on the vitality of objective reality. The main function of subjective reality of biological life is to create a product that goes beyond the capabilities of objective reality. The main function of subjective reality of biological life is to create a product that goes beyond the capabilities of objective reality. First of all, it is the process of creating and circulating specific biological energy resources that are provided by living organisms themselves or their foetuses in the form of food. This is necessary to ensure the viability and stable functioning of renewable bioenergy. Nature itself, possessing all the prerequisites, cannot change itself, since it is not able to create the necessary conditions for this. Nature itself, possessing all the prerequisites, cannot change itself, since it is not able to create the necessary conditions for this. Nature is able to provide all the processes of creating and ensuring jet motion, but it is not able to create a jet engine. Due to this, the activity of subjective reality has radically changed the natural conditions on earth. The vital capacity of space, possessing an extremely high level of intelligence, is provided by the intellectual and informational capacity of objective reality, which is the basis of the subjective reality of the Universe. Extremely important in this context is the mathematical interpretation of energy transfer processes in space, which are mathematically described by a mathematical sequence with the performance of work. The method of mathematical analysis, which significantly expands the possibilities of mathematical interpretation of energy transfer processes, provides the opportunity of creating an universal formula for interaction in space.

Keywords: space, substance & energy, vital capacity, consciousness, force interaction, work of energy, mathematical sequence.

I. INTRODUCTION

The problem of studying the concept of space in general, its physical content and philosophical essence occupies one of the leading places in the study of the environment, its nature and especially from the point of view of the place and role of human civilization and the existence of life. Despite the recognition of the concept of space as fundamentally important for understanding the philosophical essence of the Universe, the definition of the physical nature of space itself remains uncertain.

Hypothesis: *Whatever the size of the Universe, whatever its nature, it is space that is primary, since it is the container of everything, with the entire integral material world. Based on this, it is unacceptable to associate space with geometric volume. Nothing in the world can exist outside of space, since only space is the basis of the foundations of the existence of matter. This makes space a material substance in the form of a single energy body of the Universe, which consists of material objects, densely enveloped in an ocean of energy. Energy, due to its ability to act by means of force, is the main and only driver of interaction in space.*

There is no Universe, even an infinite one, that can be more infinite than space, since space itself is the container of the Universe, matter, including life. Therefore, space and the Universe are concepts that are correlated in size, physical nature and philosophical essence, and represent a single whole in the form of a united energy body of the space of the Universe. Space, being a highly intellectual structure guided by the laws of nature, ensures the execution of all processes at an exceptionally high intellectual and informational level. Nature in the form of an objective reality does not make mistakes. Due to this, all the laws of nature and processes in space occur unerringly in accordance with the cause-and-effect relationship, which is the fundamental basis and physical essence of the natural analogue of time. The measure of compliance of physical processes is the sequence of performing an action by force and performing the work that is the consequence. Chronometers and the time reference system, artificially created by humanity for its own use, practically do not affect events in space, especially outside our planet. Space successfully coped with all the problems on its own long before humanity created a system and tools for its reference. Nothing, even theoretically imaginable, can exist outside of space. Space is self-sufficient and, acting in accordance with the cause-and-effect relationship based on its own intelligence, creates all the conditions for effective functioning. It is space that is the repository of information about all processes, all events and their information support. including consciousness.

As a container of material objects, space is primarily a material structure capable of ensuring the existence and implementation of all processes of vitality occurring in its environment. Life is not something exceptionally special in the Universe, but is one of the forms of existence of matter. Therefore, space is a material structure with all the signs of vitality, the function of which is to maintain the level of intellectual and energy capabilities of life support at all levels of its existence. Signs of vital capacity are:

1. The presence of a high level of intelligence.
2. The presence of a high level of organization of interaction processes.
3. The ability to intellectually and physically communicate with the environment.
4. The ability to act as a basis for performing intellectual and physical work. The effectiveness of work performance.

So, space is a structure with vital capacity and a multi-level organization of the life support process. It also creates both a physical and social environment - connections, personal space and everything necessary to ensure this phenomenon. Biological life as one of the forms of existence of highly intelligent matter has been successfully working on our planet. for billions of years.

The main physical content of space is to ensure the interaction of individual objects of matter on a permanent basis. The interaction between them occurs exclusively with the help of Newton's force, which is the universal unit of the Universe. It is the force, combined into energy flows, creating pressure, that provides both energy and intellectual and informational support for all processes. The carriers of force are elementary particles of energy, which, interacting with each other, ensure the functionality of the viability of space.

In this context, the mathematical interpretation of the processes of space functioning is extremely important. Energy plays the main executive role in ensuring the implementation of all processes. Energy is a sequence of forces, the combination of which, when united in flows, creates pressure, thereby ensuring the performance of work. Mathematically, the process of energy transfer is expressed by mathematical sequences, with the help of which their subjective interpretation takes place.

II. PURPOSE AND OBJECTIVES

Throughout the existence of the Universe, all its processes occur in space according to their own laws, undoubtedly in accordance with the laws that are referred to in the scientific community as the laws of nature. This is absolutely obvious and, to a large extent, subject to observation, scientific analysis, and corresponding conclusions. But "Homo Sapiens", or representatives of other life forms with limited capability of their consciousness, are unable to comprehend the processes, let alone directly influence, taking place in space. That is why the philosophical essence of life itself, and even more so the vital capacity of space as a material unit with an extremely high level of intelligence, is questioned. Sometimes even completely denied. However, the existence of biological life in space, devoid of intelligence, would be impossible, primarily due to the impossibility of any communication. The body of a living organism is so complex that the secrets of its structure and functionality will probably never be understood by "Homo Sapiens". Nevertheless, it works surprisingly effectively, primarily thanks to communication with the environment. The subjective reality on Earth, created by biological life, has the exceptional ability to subjugate the extremely powerful intellect of objective reality, manipulating it to use its capabilities for its own purposes. This is extremely necessary for the creation of living conditions. Mathematical modelling is one of the powerful tools of communication. Their mathematical analysis is extremely important for facilitating the study of these processes.

The space of the Universe is a highly organized structure, therefore all processes in the Universe, as well as in space, occur at an extremely high organizational level. This indicates the presence of a powerful intellectual basis by means of which clear and unerring control of processes occurs. Despite the vastness of the spaces, there is not even a hint of chaos. Throughout the existence of the Universe, all its activity unerringly occurs according to its own laws, which in scientific circles are called the laws of nature. This is the work of consciousness of a high intellectual level. The external similarity to the automatism of processes indicates precisely their conscious implementation. The problem is that such technologies are not available to humans.

Matter exists in the form of objects of matter, connected to each other by intellectual, force connections, thus forming integral material objects of various sizes - from microscopic elementary particles to galactic formations of gigantic sizes. All material objects are in a state of constant force interaction between their individual objects, which is subjectively perceived by the senses and can be recorded by devices. Being objectively invisible, force interaction is perceived as a feeling of force in its various manifestations and the performance of work to change the state of the environment.

Space, thanks to its intellectual capabilities, supports a cause-and-effect relationship, which, being a natural analogue of time, is the primary basis of its functional ability. The functional ability of space is provided by force, the carrier of which is an elementary particle of energy.

The causal relationship is the fundamental basis of time - a theoretical and philosophical unit, which is widely practiced in the economic and everyday practice of human society. In objective reality - the reality of the objective functioning of all natural processes - time as a physical, actually existing structure does not exist. It is a chronological reference system, against the background of which both purely natural and socio-production processes occur. This system is extremely important in the activities of mankind. But it does not have any influence on the objective processes occurring in nature.

Humanity, as a result of its activities, has the ability to really influence the causal relationship in nature, since it is an active component of nature. But it does not have the opportunity to actually perform these processes, since all natural processes occur regardless of the will of man. Space is a perfectly balanced system. A human, like all living biological objects, is not the manager of even his own organism, even his own life. The vast majority of objectively existing processes in one's own body from conception to death occur in the vital interests of a person, but almost without his direct participation. A person can influence how the processes of breathing, digestion, conception and fetal development occur to a very limited extent, since all processes in the body are carried out on the basis of a cause-and-effect relationship, and not chronometers or his own will. A person can create, manufacture and use equipment, weapons of various powers, tying all this to the course of the created time tracking system, but the operation of a jet engine or the explosion of a nuclear charge will occur on the basis of a cause-and-effect relationship, without any influence on this process of the operation of chronometers.

In the scientific theory of relativity, time is closely related to the structure of space-time. But the theory of relativity itself is a mathematical interpretation of processes that have no real basis. The main drawback of this theory is that the speed of movement of 300,000 km/s does not exist in nature. This is a mathematical value of the speed of energy transfer by means of pressure force, these are completely different processes. The speed of movement of EC energy is only a few meters per second, which is emphasized by engineering studies.

The limited influence of chronometry makes the influence of time on objective natural processes even on our planet insignificant, compared to their course according to the cause-and-effect relationship. Outside the Earth, this influence is reduced to the very minimum, while the influence of the natural cause-and-effect process plays one of the decisive roles in the activity of the space of the Universe as a whole. Space is an extremely complex machine, for the control of which the cause-and-effect relationship is of the utmost importance. All interaction processes in it occur on a constant basis. As a result, the cause of the next process inevitably arises, which is a consequence of the previous one, which is signalled by a decrease or increase in pressure indicators in the interaction zone. The reaction is unambiguous and irreversible. Pressure directs its action there or there, the effective value of which is always the magnitude of the dynamic force, since the system is always directed to a state of equilibrium. Thus, causality can be modelled as an information-theoretic model. The presence of a cause necessarily leads to a consequence in the form of work performed. In objective reality, only one cause with one effect can occur in a process. The continuation of the interaction is a completely different process, the cause of which can be the effect of the previous one. This excludes the possibility of chaos in objective reality. The action in the process of interaction is always directed in the direction of the force vector. The multidirectional movement of individual material particles is caused by the action of individual forces, each of which performs only its work. A set of unidirectional forces is combined into energy flows, creating pressure, which most often occurs in nature. Multidirectional movement cannot be interpreted as chaos, because this is a process of interaction. In subjective reality, there may be a multitude of causes without any consequence. Especially since the consequence may appear to be obvious falsification and manipulation of facts.



Picture 1: Alive Space

However, in the practice of subjective reality, time plays an extremely important role. Therefore, it is extremely important to deepen the study of subjective reality and its difference from the properties of objective reality. These are different forms of life ability, which in many cases are closely intertwined.

Control over the activity of processes in space is carried out using a force that induces action, and as a result of the work performed according to formula 1. (1)

$$W = Fl \quad (1)$$

Where: W - work done, F – available amount and direction of force action, l - modulus of the magnitude of displacement.

Time has no physical basis and can in some hypothetical way exist only at a certain moment of the action performed exclusively in the process of the cause-and-effect relationship. While the past and the future have meaning exclusively in the subjective reality of the existence of humanity. The action of objective natural processes occurs on the basis of the cause as a set of many natural factors, force and its intellectual support for performing the work of committing the action. All these processes occur outside the will of man without any influence of chronometers and depend solely on the energy and force balance supported by force. It is the presence of the amount and direction of the force that dictates the course and sequence of work at each point in the Universe.

The environment of existence of matter is space, a sample of which is shown in Fig. 1. Space is a living, constantly operating organism of colossal size, which consists of material bodies of various sizes, energy states and configurations. All material bodies are enveloped in a dense energy shell that provides control of all processes occurring on the basis of the laws of nature, as well as ensuring their interaction with each other at a high intellectual and organizational level of all components. The area of space illustrated in Fig. 1 clearly demonstrates the close relationship between all its segments. It is quite obvious that there are no boundaries between individual structural units of the Universe, such as galaxies, subgalaxies, individual star systems, up to an individual cosmic dust particle the size of a molecule or atom. This clear and comprehensive interaction is provided by a holistic

material-energy-information complex operating at an extremely high intellectual level, which includes ensuring the interaction of all real components existing in nature. An example is the television-radio communication that has been going on for decades between artificially created by the genius of mankind spacecraft such as Voyager and control systems on Earth. Compared to the size of the illustrated area of space in which the device is located, the size of the spacecraft is more than insignificantly small. But the colossal and amazing perfection of the activity of space allows us to see these devices, communicate with them and receive perfect information about the state of the environment around them. The only information source that can exist there is space. Thus, "Homo Sapiens", thanks to their own intellectual genius, have already created and are increasing the possibilities of direct communication with nature. This became possible thanks to the creation of an algorithm for communicating with space, and the creation on this basis of an intermediary - artificial intelligence. A Human has an exceptional ability to communicate with the intelligence of space directly, but such opportunities are quite limited.

The basis, the foundation of the vital ability of space is Objective Reality, which is manifested in the vital activity of the so-called inanimate nature. But it is precisely Objective Reality that is the carrier of the most powerful intellectual and informational complex of the Universe, the complex of laws of nature to which everything is subject, which make for some reason it to be the most alive structure. The pinnacle of the vital essence of space is Subjective Reality (Oryabko V 2025), created in the process of vital activity of biological life. However, it should be especially emphasized that subjective reality, being the pinnacle of the perfection of the Universe, was created in the information space of objective nature and is the part of it and in some aspect's user the manager of this intelligence.

A phenomenal property of Objective Reality is its complete subordination to the will of Subjective Reality. It is well known how flawlessly and precisely automated systems created by human labour work. This is explained by the fact that in the life hierarchy of space, objective reality is the executor of the will of the Summit of Subjective Reality of the Universe. That is why subjective reality performs the administrative and command function of managing all processes of the Universe. Objective reality, on the other hand, performs all executive functions with surprising accuracy and perfection to ensure the life process of the Unified Energy Body of the space of the Universe. Therefore, it is unacceptable to separate biological life from the living space of the Universe, since biological life is only one part of life as a whole and is entirely based on the laws of objective reality.

Space is capable of self-improvement and learning through the acquisition of its own experience. This is based on the vital capacity of vital components, which is simply amazing. An atom of a trace element of calcium or magnesium in its natural state has certain physical and chemical properties. However, getting into the body of a biological organism, passing through the digestive and selection system, each component undergoes a process of adaptation to the conditions of the part of the body to which it is sent, because the functions that the calcium or magnesium atom will perform as part of a living organ, in DNA or RNA cells will be completely different from the functions of the natural state. A living, even the simplest organism, is an informational-intellectual complex of an extremely high intellectual level. Therefore, it is extremely necessary for it to have a specific energy and material support of biological origin, that is, previously trained. Getting into the body, these natural components undergo a specific learning process, which is manifested by the pumping of information, knowledge and experience about the functional duties that must be performed in interaction with all components of the body. On average, it is usually considered normal for the process of adaptation and learning to last 12-15 days. It is extremely necessary for living organisms in this sense to replenish biological resources to support biological life at the expense of food components of biological origin. This is precisely because that kind of food is the high degree of intellectual saturation. Simple material food and energy from natural sources of the environment cannot satisfy the needs of biological life.

If the learning process is imperfect, it manifests itself in the body as diseases of the so-called allergic nature. With more significant deficiencies, an information failure occurs, which is accompanied by the development of foreign cancer cells. Therefore, it is obvious that each atom has information about the interaction with all components of the body. All this information is analysed, converted and transmitted by biological energy generated in the body of the organism. This energy is extremely specific and information-rich and is extremely different from an ordinary electrical or thermal energy in nature. It differs precisely in the information component, although it often uses the same primary sources.

A Human can see its own movements, controls the course of his thoughts and actions, completely not possessing the technologies of these processes. The process of its own life is not at all subject to a human, because the life is a level of intelligence that is unattainable for human understanding. Therefore, the body lives by itself, and the life of this body simply uses its services, without even having an idea of everything that happens in it. The body itself is a combination and cooperation of the lives of a huge number of individual living organisms that are closely interconnected and coordinated by a single control system.

Therefore, biological life, which is the basis of subjective reality on our planet, is entirely based on the vital capacity of objective reality, or the intellectual and informational basis of the so-called inanimate nature. As already noted, the vital capacity of biological life is created by two life-giving factors. This is a material shell that, in the form of a body, provides the functionality of the vital capacity of a biological organism, and the process of the life itself as an element of subjective reality. It is in the functional abilities of the body that the basis of the vital capacity lies. There is no doubt about the obvious fact that all processes in the body occur on the basis of the laws of nature. The body consists entirely of material components of natural origin, the individual organs of which are united by neurons and connected by material systems of communication and interaction. After death, the body degrades to its natural state, and the process of life self-destructs.

No matter how perfect the technological processes developed by human genius are, no matter how powerful the scientific and technological capabilities of their developments are, the direct execution of the processes themselves will always be exclusively the skill and genius of nature. Humans are able to control processes, create technologies, technological processes, but it is precisely the processes of boiling water or melting metal that are subject exclusively to the genius of nature. That is why the direct execution of the process of functioning of the body of the organism itself will always be performed by nature its own intellect. And a human was, is and will be ever a user. In this regard, it would be interesting to compare the intelligence of nature in the body of a human organism with the mental abilities or intellectual capacity of consciousness of one mentally developed individual. Obviously, that all information that a human has learned in its entire life could be placed on the single modern medium-capacity flash drive.

If it were possible to describe all the information about the process of life of one person on electronic media, then without a doubt all the means that exist at the disposal of mankind in our time would not be enough. That is why the intellectual ability of human consciousness in comparison with the mental ability of the life process is incomparable. However, the advantage of human consciousness is the ability to control the processes.

Therefore, the body of the organism must be considered as a material object of the shell of life of a high intellectual level, the function of which is to provide all its needs, including protective functions. In other words, the body is a biological machine that, based on the vital capacity of matter, ensures the existence and functionality of consciousness as the basis of the life process. It is consciousness that

is a manifestation of life as the basis of the Subjective reality created in the process of life of living biological organisms.

In the process of its development from the moment of conception, extremely intensive processes of learning and intellectual-informational development of its vital life ability take place in the body of the organism. This is manifested in the development and adaptation to a full life of all material components, with each molecule and atom inclusive. All these components are composed of hereditary information up to the colour of the eyes, as well as about all life processes, which then occurs in the so-called automatic mode. However, this entire automatic mode occurs thanks to and under the strict control of the intellectual ability of nature. It is the only nature that knows how to provide the living process. Consciousness is a user of the body's work with signs of supremacy in managing nature, and nothing more. Consciousness has a very limited influence on the functionality of processes in the body. The total amount of information that a human has acquired throughout their life is insignificant, especially when compared to existing artificial intelligence. It may only amount to a few dozen gigabytes. Therefore, consciousness has a very limited influence on the functionality of processes in the body. However, having the ability to exercise general control, it has the exceptional opportunity to manage both vital and objective natural processes and exploit them in its own interests and at its own discretion.

Thus, nature in the form of objective reality is the basis of life, a life-giving structure that provides intellectual-informational, energetic and functional support for the vital capacity of the subjective reality of the space of the Universe based on the intellectual properties of matter. The pinnacle of the Subjective Reality of the Universe is the Universal Intellect, whose activity serves to ensure the management of all processes of the vital capacity of space from the Elementary Particle to the integral life-giving organism of the Single Energy Body of the Space of the Universe.

III. CONSCIOUSNESS

So, the life of a biological organism is consciousness, and the body is a shell that serves this consciousness. Consciousness does not possess the information of life, even the processes of conception and reproduction. This function is performed by the material life space, isolated in the body shell. This space is completely material, which is beyond doubt. Therefore, life consciousness, being the product of the intellectual activity of all components of life, united into a single system of isolated space, makes this system a living material structure. This system, being autonomous, has a high ability to interact with the environment due to the presence of specific organs of consciousness, capable of directly communicating with the consciousness of the environment. The organs of vision, for example, are the internal consciousness of the organism, which is capable of communicating with a similar system in the environment. These are organs that are capable of communicating with the corresponding intellectual system of the life space of the environment and perceiving and analysing images at considerable distances. The internal consciousness of the organism is an intellectual system that is able to communicate only at the level of intelligence. That is, what we see with our eyes is a reflection of intellectual information received from space. If there is no information, we simply will not see anything, which happens on a dark night. The eyes perceive information. This is clear evidence that space is an intellectual information structure with a specific vital capacity.

The organs of consciousness are not able to directly contact images, which are sometimes located at great distances. However, these organs are able to see through space. That is, it is space that is able to prepare information for the organs of vision in a form or format in which visual consciousness is able to use it. Therefore, space must have the appropriate intellectual capabilities and physical ability to process and transform information into the required format. With a deep analysis of events and life possibilities of the life capacity of space, it becomes quite clear that everything around is arranged

precisely in such a way that biological life is possible and at the same time comfortable. A Human does not know how he sees, but he can see, just as he does not know how his stomach or liver works. For a Human, it is important that these organs work, but how exactly is not really important.

This is not about specific material objects located at considerable distances, but about their energy-informational interpretation, which, when in contact with visual consciousness, creates a clear visual-informational picture of the contact space to ensure orientation. At the same time, visual consciousness is not able to perceive sounds, smells and all other sensations. This means that the internal system of visual consciousness finds and communicates with the corresponding energy of the external system. That is, information exchange occurs. This, in turn, especially emphasizes the presence of a high intellectual level of the external system. In some engineering aspects, this is called the level of resolution. It is the resolution that is an analogue of the vital capacity of space, with the help of which selective selection and exchange of information occurs. Adjacent systems communicate with each other. This is a distinctive feature of biological life, which consists in the activity of a highly intellectual material isolated space with its ability to interact with the environment.

So, the consciousness of life is a product of the material space, the result of its activity, which occurs on a material basis and is work performed on the basis of the laws of nature, the laws of objective reality. It follows from this that consciousness is a product of the activity of a high level intellectual energy systems, which are converted into the process of life. With the onset of death, the shell of the vital space of biological life is destroyed, the information space degrades to the level of objective reality. All components of the previous life, as a result of biological decay (rot), lose the acquired knowledge and skills, as well as the corresponding physical properties, and turn into a source of biological energy in the form of food for certain types of living organisms. In this deep philosophical sense, the notorious struggle for the existence of individual biological individuals is reduced to creating the basis of biological energy-material support for the existence of subjective reality, which in earthly conditions is provided by biological life. All living things need food, and in a timely manner. This is at a time when the source of food is biological life itself, which, thanks to the energy-informational support of space, ensures the continuity of the process. The death of a single individual brings a chance for the continuation of the life process to another but living one.

Conclusion: Consciousness is a product of the activity of the material life space; therefore, it has a completely material nature. Consciousness is reality, a real reflection of the processes of interaction in space, which are perceived, analysed and used for the needs of the life space of a living organism. A living organism has all the necessary intellectual capabilities and tools in the form of neural systems that provide effective communication.

Most theories of the origin and evolution of life that exist to this day boil down to an oversimplified, if not more, judgment that it, life, arose somehow by chance. However, none of these theories even allows that life is one of the forms of existence of matter, the key to their diversity. Each of the known forms of existence of matter meets the criteria of viability, the basis of which is the presence of intelligence. However, these theories do not even assume the participation of the intelligence of nature in these processes. Allegedly, somehow the structures themselves, absolutely worthless in intellectual terms, founded their own structures, but already with signs of intelligence. Although it is absolutely obvious and quite well studied that all living structures are connected by energy-informational structures in the form of DNA/RNA or any other living structures - structures of the highest intellectual level. The creation of life on the basis of natural components, "deprived" of the intellectual component, is nonsense.

IV. ALIVE SPACE

All material objects depicted in the Image 1 of space are densely enveloped in energy. Black colour denotes energy in its pure form without any material inclusions, owing to which interaction occurs between existing material objects. This is how our visual consciousness perceives it. Multi-coloured objects are an informational reflection of material objects, depending on the physical and chemical properties of their components.

The picture in the photograph is an interpretation of how information from the depths of the Universe is recorded, digitized, adapted to the appropriate standards by artificial intelligence, passing through the tool of vision in the body. Intellectual processing reaches consciousness in this form. The system of interaction of different systems and the results of its work are obvious. There is a complete mutual understanding between individual systems. The body of the organism is nothing more than a biological machine, the function of which is to ensure the needs of consciousness. All systems in the body are extremely perfect, and are equivalent in perfection to the systems of objective reality. They easily communicate with each other, and consciousness receives adapted information that is perceived by it exactly as we see it. Thus, consciousness is freed from unnecessary rough, albeit intellectual work. This is an example of an algorithm for communicating with nature with the assistance of artificial intelligence. However, our consciousness is not capable for deeply understanding these processes. "Homo Sapiens" is an active component of the intelligence of the Universe. Therefore, its scientific assessment is unacceptable, separated from the intelligence of the vital capacity of space as a whole. The principle scheme, "nature - body - consciousness", works in a single complex. If at least one link in the chain is inoperative, you are either blind, deaf, or barren.

As careful observations show, life as a whole is not the property of the living organism that is its carrier. It is, as it were, given to the owner for use. The essence of life itself, its purpose and role in the vital capacity of the space of the universe, goes beyond human perception. Its provision in no way depends on the will of consciousness, which is the user of its own body. The body performs its functions in an autonomous mode, performing all the necessary actions to maintain comfortable conditions for the existence of consciousness. From its inception to the very end, consciousness is practically unable to control the course of its own body's existence. Moreover, the consciousness of life itself goes far beyond the existence of its own body. To ensure the full functioning of consciousness, the body is provided with a considerable number of tools with which consciousness is able to go beyond its own body. Thanks to these tools, consciousness has the opportunity to communicate surprisingly effectively with the environment, thus receiving a huge amount of information necessary for its own functioning. Moreover, thanks to its special ability to circumvent the laws of nature, consciousness creates for itself a huge number of auxiliary tools outside its body, using and exploiting the exceptional capabilities of nature. With the help of artificial intelligence and other scientific inventions, consciousness has the opportunity to exploit the intellectual capabilities of objective reality and even manipulate them. It is thanks to the auxiliary science-intensive tools created by science in recent decades that enormous opportunities have been created for the exploitation of the intelligence of objective reality. Thanks to the collective use of information, both by its own innate tools and artificially created ones, humanity has created a fairly effective structure for the functioning of human civilization. This structure has become the dominant link in subjective reality on planet Earth, displacing all competitors from the animal world, even those who far exceed humans in strength.

Artificial intelligence is a system developed by man but with the direct participation of intelligent systems of artificial intelligence itself from the very beginning of its inception. It has become one of the extremely powerful tools at man's disposal, with the help of which man has gained the opportunity to directly influence both scientific research and achievements and purely natural processes. Artificial intelligence does its work independently, without needing any support from human consciousness,

except for command and administrative support. Therefore, the machine must receive a command in a language it understands. It is at this stage that the redistribution is obvious - who is who. It does not matter what name is given to the intelligence of nature. It is important that it does its work extremely effectively, correctly and without fail. 70-100 years ago, such technologies were not even discussed. This became possible precisely because humanity began to talk to nature in its language, the language of zeros and ones, which nature, through force impulses, perceives as impulses of an energy flow of information. That is why all computers need energy, which nature perfectly understands and perceives accordingly. With the help of zeros and ones, nature has already mastered most of the world's languages by means of artificial intelligence.

It is in this aspect that the correct understanding and interpretation of the properties of objective and subjective realities is extremely important. The consciousness of objective reality is radically different from the consciousness of subjective reality. However, the body of a biological organism functions exclusively thanks to the intelligence of nature. That is why it is so obedient and unfailing to the will of the organism's consciousness. The organism's consciousness is command, while the consciousness of the organism's body carries out executive functions. This is the issue that requires a more thorough and comprehensive study.

Based on the above analysis, an assessment of the mechanism of interaction between the intelligence of the consciousness of "Homo Sapiens" and the intelligence of the consciousness of objective reality is provided. No matter how powerful the intelligence of nature is, a human has innate abilities to control the consciousness of nature.

The perception of the world order by consciousness occurs figuratively, through the creation of certain images by energy-information flows. Human consciousness is unable to comprehend the elementary structure of, say, a giant planet, as well as a miniature atom, since the amount of information would be too large and immeasurable for consciousness. This information would not fit either in the organ of vision or through resolution. However, this does not mean that complete information about these objects does not exist at all. It even exists in detail. However, in a format accessible to the biological life of subjective reality, it is filtered by the organs of perception. In space, it creates conditions for the formation of an image that is sufficient for consciousness to assess the situation. This factor clearly demonstrates the intellectual basis of the matter of the Universe. The ability to communicate in terms of mutual exchange of information is provided by energy, which emphasizes the material nature of both information and consciousness. Both information and consciousness, having one source, are carriers of real physical material content. Information is the main means of consciousness. Therefore, the ability to use the capabilities of artificial intelligence, to observe and analyze space, use information is a fundamental property of space. If the organs of vision cannot see a material object at accessible distances, this means that such an information image does not exist in space at all, or at least in a state accessible for information exchange.

These organs are able to communicate with the corresponding intellectual system of the living space of the environment and perceive and analyse images at considerable distances. However, these organs are not able to contact directly with images, which are sometimes at great distances. Therefore, these organs are seen as a means of space. That is, it is space that is able to prepare information for the organs of vision in a form or format in which visual consciousness is able to use it. This means that the space has the appropriate intellectual capabilities and physical ability to process and convert information to the required format. With an in-depth analysis of events and life opportunities, the vital capacity of space, it becomes quite clear that everything around is arranged in such a way that biological life is possible and even comfortable. Humans do not know how they can see, but they see,

just as they do not know how their stomach or liver works. It is important for them that these organs work, but how they themselves are not important at all.

An object that does not exist in reality in the material aspect is not material. Such objects include the so-called realistic objects. An artistically created painting or photograph at a high level can create a realistic image, a real natural interpretation of which, however, does not really exist. Real in this sense will not be a realistic image, but the material body on the basis of which this image is created. Realism in terms of reality that is objectively existing in the material-informational plane is false. A realistic image of any picture does not provide any information about the image itself but is a subjective reproduction of a real image. Not to mention that both portrait images and intellectual information can appear to be true, but in fact be a fake. Realism is a falsehood that claims to be true but is not as such.

Therefore, the philosophical formation, being a realistic reflection of the sequence of the objective process of being, is not an objective reality. Events that occurred centuries ago can be realistically depicted. However, they are not real. Information about them as objects of objective reality does not exist, since they are only a subjective reflection of processes that once occurred. But in the present, such processes are not elements of objectively active processes. Therefore, real time can only be a cause-and-effect relationship in nature, which connects the progressive process of interaction in nature. The subjective realism of past, present, future times, conditionally existing states of all categories do not have a physical basis, material, energy-informational support, are not carriers of the living space of the corresponding intellectual-informational level and are non-existent. That is why the correct understanding and appropriate interpretation of processes from the point of view of objective and subjective reality is extremely important. Attempts to recreate prehistoric mammoths or others like them are impossible. Even if it is possible to recreate a copy that is outwardly similar, it will not be mammoths. These will be artificially created objects of artificial intelligence created by "Homo Sapiens". Because life is not a body. It is intelligence. An artificially created life shell will be the beginning of a new kind of life at the expense and on the basis of the existing one at the time of creation. It is impossible to restore the intelligence of a mammoth, or any other, since information about the past mammoth does not exist in space.

In the absence of planets or their satellites with the appropriate level of intelligence in our solar system, biological life is impossible there due to the lack of suitable conditions. These conditions must be created there, which is impossible with the capabilities of human civilisation. For the existing subjective reality of a higher level in space, there is obviously no need to create it. Therefore, at the moment, the conditions for the existence of biological life exist exclusively on planet Earth.

Intellectual-power interaction of energy flows of space

In the absence of integral material bodies in space, the function of its physical filling is performed by energy in the form of bodies of elementary particles of energy (EPE) - photons and quants - electrons, which are physical carriers of the force of interaction. "There are various kinds of scientific, well-founded hypotheses that all material bodies, depending on their chemical composition and physical structure, are 90-98% quantitatively composed of energy." (Oryabko V., 2024)

Energy is a conglomerate of EPs of the thermal and electromagnetic spectrum of extremely diverse power and other characteristics. Precisely of that they do not compete with each other. The property of energy is interaction as a means of force action. It is precisely because of this phenomenon that the law of conservation of energy operates. Energy cannot be created or utilized, because it already exists in quantities sufficient for the full functioning of the Universe as a whole. Interacting with each other, space, thanks to energy, is a generator and at the same time a conductor for transmitting information

over infinite distances. Energy is the filler of space and its physical essence, filling the entire space, no matter how immense it may be. By combining into thermal and magnetic flows, energy flows create force structures, the driving force of which is the force of the pressure created by it. If individual forces act in a specific given direction, then a huge amount of EP of energy acting simultaneously creates pressure which in a static position acts in all directions. It is this factor that makes the action of force a universal acting unit of space.

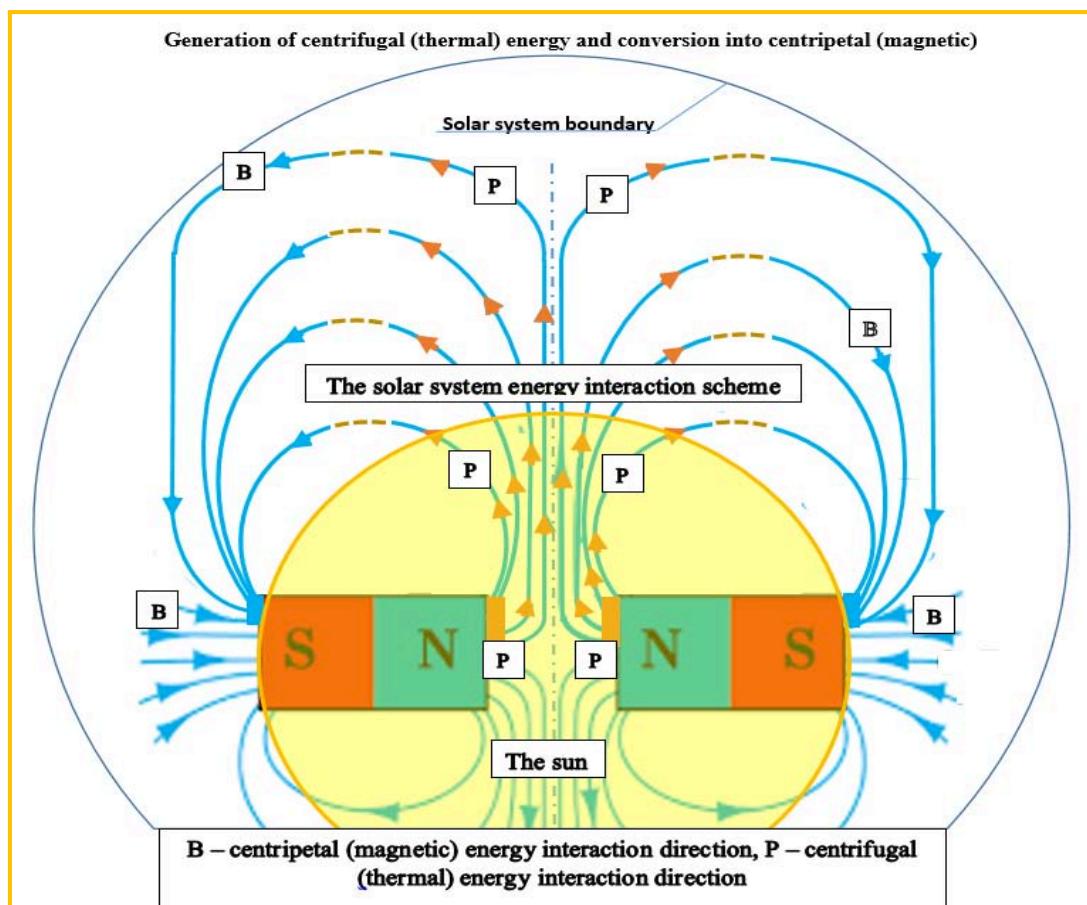


Figure 1: The principle of converting centrifugal (thermal) energy into centripetal (magnetic) one in the Solar system

Energy has a unified unique nature and differs only in the direction of the forces that create pressure. An illustration of the principle of converting centrifugal (thermal) energy into centripetal (magnetic) energy in the Solar System is shown in (Figure 1). The Sun is an energy generator and operates on the principle of an energy pump, in which the body of the Sun plays the role of the rotor. Through the magnetic poles along the magnetic axis, a flow of magnetic energy with a pressure of B_0 is pumped into its body (Figure 4). Under the action of centripetal pressure, the flow of magnetic energy creates conditions for sustaining a thermonuclear reaction. This leads to the release of a certain (large) amount of heat in the form of EM thermal energy, the carriers of which are photons (Figure 2). By all indicators, the sun should explode. But this does not happen, primarily because in the body of the rotor, the magnetic flux changes the direction of action to the opposite by which energy is carried outside the body of the Sun. This occurs due to the rotational movement of the sun's body, which acts as the generator's rotor. The principle of operation is the same as that of an electric generator, and especially a centrifugal water pump. If in a water pump centrifugal acceleration is imparted to water molecules, then in the case of the sun it is an avalanche of plasma full of energy.

It should be emphasized that water molecules consist of more than 90% energy, which is the binding component between individual components in molecules. There are various scientific, well-founded hypotheses that all material bodies, depending on their chemical composition and physical structure, consist of 90-98% energy. Clear evidence of this can be seen in nuclear and thermonuclear explosions involving a small amount of explosive material, which result in uncontrolled processes of decay or, conversely, synthesis of atomic nuclei. With a small amount of explosive material, a tremendous amount of energy is released, which can only be calculated approximately. But most importantly, only neutrons can cause the destruction of atomic structures. Being neutral, neutrons are carriers of mass, i.e., objects of matter. All other components of nuclei are energy.

The plasma energy flow is ejected under enormous pressure into the atmosphere of the sun. Material components settle on the surface, and photons of thermal energy under pressure propagate in the space of solar energy. Thermal energy of photons has no temperature. Therefore, outer space is cold. The equivalent of temperature in space is the EP of thermal energy - a photon that is a carrier of Newton's force. Acting with the force of pressure on an air molecule in the atmosphere, a photon increases the volume of the molecule, which is subjectively felt by life as thermal comfort. The EP of energy of photons does not go beyond the boundaries of the solar system. Having performed their work and centrifugal force, photons gradually change the direction of force and move on to the return path in the centripetal direction. (Figure 2) Naturally and structurally, they remained photons - carriers of force. But the powerful gravitational force of the sun forces some of them to return back, changing the direction of force. But material bodies react to the centrifugal action of photons as a force of magnetic attraction, while centrifugal as a force of repulsion. Thus, the law of conservation of energy is ensured. All the energy of the solar system is its property, since it is the equivalent of mass. Outside the system, for communication with other spatial systems, information is transmitted by means of the pressure force.¹ The speed of movement of EP of energy is several meters per second, while the speed of force transmission is 300,000 km/s. It is thanks to the transmission of information at such a speed that the force mechanism of interaction is extremely sensitive and effective. The work according to the received information is performed by completely different photons, that is, those that are in the interaction zone. The essence of the process does not depend on the name of EP of energy, but on the nature of the interaction.

The essence and physical nature of phenomena and processes that objectively occur in nature do not depend on the terminology and symbolism used to define and designate them in scientific practice. Processes in nature occur objectively, strictly in accordance with its nature, laws. But for unknown reasons in the case of radiation or magnetic energy, the concept of force is replaced by the concept of energy flows or power of flows. The concept of energy flow is correct and is a unifying force structure. This is the combination of the VP of energy forces into an energy flow, which fully corresponds to Pascal's law.

$$P = F/S \quad (2.1)$$

The pressure of light was experimentally confirmed by Lebedev P 25 years after Maxwell's prediction. Lebedew, P. (1901). Pressure, as a physical process, is inextricably linked with force. There is no pressure without the participation of a universal physical unit - force. In scientific practice, it is common to denote phenomena of the same type by physical nature with different symbols. But, from the definition of equivalence, it is known that "...two expressions are logically equivalent if they have the same truth value for all possible combinations of truth values for all variables occurring in these two expressions." (November 2024) That is, the expression of the pressure of the hydraulic flow, or heat flow according to Pascal $P = F/S$. is equivalent to the expression of the pressure of the magnetic

¹ A good example is a conventional battery that first receives energy from the outside, then gives it back. The amount of material electrolyte in the battery remains unchanged after each cycle. The amount of force is variable

flow according to $B=\Phi/S$. The logical equivalence of the above expressions is obvious; therefore, they have the same truth, therefore, they are equivalent.

$$B=\Phi/S \leftrightarrow P=F/S \quad (2.2)$$

Therefore, it follows that such physical quantities as hydraulic pressure and, magnetic energy (current) density $J = I/S$, magnetic flux (July 2025), magnitude $B = \Phi/S$; luminous flux density (intensity) $I = \Phi/\Omega$ are physical quantities that characterize the distribution of the force action on the cross-sectional area of an energy body in the process of interaction of two or more isolated energy bodies. The fact that radiant energy is able to create pressure on material bodies has been confirmed experimentally and is beyond any doubt. Therefore, it is a proven fact accordingly, the quantities $F = PS$, $I = JS$, $\Phi = BS$, $\Phi = I\Omega$ are the quantities of the pressure force acting on the cross-sectional area of a certain material body. The above conclusions do not deny, but on the contrary, agree with the already established practice of using different symbols for the same physical processes, provided that the physical nature of the processes taking place is correctly interpreted. Therefore, this should not be perceived as a denial, but rather as an agreement with the classical terminology that is already widely used in scientific practice. Provided that in the entire space of the Universe there is only force described and introduced into scientific practice by Newton.

V. PRINCIPLES OF ENERGY INTERACTION TRANSFER. HEAT ENERGY TRANSFER

Space is a material structure with a high level of organization of the vital capacity with an extremely high level of organization of all processes of interaction on the basis of the intellectual and informational capacity of energy, the carrier of which is matter.

Energy is a key element of interaction in the Universe. Interaction occurs on a clear intellectual and informational basis exclusively by means of force, one of the carriers of which is a photon. Its, photons, computer model is shown in a photograph (Figure 2) taken by Dr. Yuen B. (2024) and colleagues at the University of Birmingham. The photon, being an elementary particle of energy, is quantitatively expressed by its elementary quantitative portion.

Energy is an elastic force substance that exists in the form of a force intellectual-informational interaction between individual objects in the process of transferring force created by a force flow of pressure. Energy, as is known, has a corpuscular - wave nature. Being quantitative, energy consists of the EP of force, the carriers of which are photons. It is photons or corpuscles that are considered the smallest parts of thermal energy. One photon, being a separate unit of force, exhibits exclusively corpuscular properties, since it acts pointwise and in only direction. In a single state, a photon cannot physically exhibit wave properties.

But, being a quantitative quantity, plenty of force actions has the natural property of being combined into energy flows, which in the process of interaction and sequential action are divided into separate waves. A wave is the result of the sequential action of a set of forces combined into energy flows.

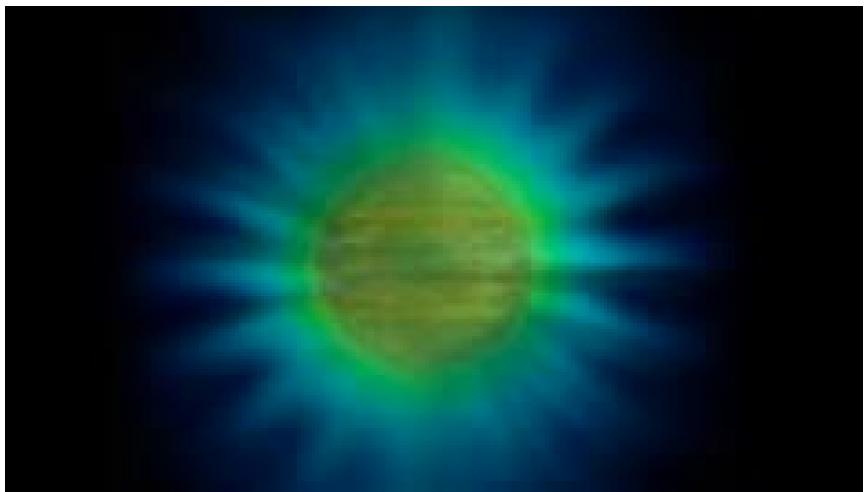


Figure 2: The shape of a single photon

Heat flux is a flow of heat carriers (EP) – photons, force carriers, acting in the centrifugal direction of interaction. Heat flux density (July 2025) is the total heat flux (Q) divided by the surface area (A) through which this flow passes,

$$q = Q/A \quad (2.1)$$

The heat flux density is equivalent to the force of the pressure of energy flux according to the Pascal law. It is obvious that the expression for the heat flux density is equivalent to the Pascal hydraulic pressure expression, $P = F/S$,

$$q = Q/A \leftrightarrow P = FS \quad (2.2)$$

The logical equivalence of the above expressions is obvious; therefore, they have the same truth, therefore they are equivalent. So, energy is a process of sequential action of pressure created by the combined action of the force of photons in the process of interaction with the performance of work in the process of interaction. Pressure $P = F/S$ in turn is the process of transferring the action of the set of forces of interaction between material objects. Both energy and pressure have one property that unites them into a single concept, this is the property of transferring the force of interaction. In the process of transferring energy in the form of pressure, work is performed, which will certainly be accompanied by the release (absorption) of other types of energy.

Therefore, thermal energy is a sequential process of thermal interaction through the transfer of force pressure, by means of which the interaction occurs with the performance of a certain amount of work to change the state of the objects of interaction.

Formula for performing the work of the action of the energy force on changing the state of an energy body with a variable volume in isobaric processes will be

$$A = P_n(V_{n+1} - V_n) \quad (2.3)$$

The change in volume symbolizes the change in the energy state of an isolated energy body, since it is the changes in the volumetric characteristics of the energy body that are a function of the change in the amount of EP of energy. The change in the amount of energy leads to a change in the volumetric characteristics of the space of the energy body. It should be noted here that formula (2.3) is valid for a

constant pressure value, i.e. for isobaric processes in thermodynamics. It is obvious that the error in the calculations will be the greater, the greater is the difference in the pressure value in adjacent sections of the energy body. Therefore, the formula $A = p\Delta V$ cannot always be used, since it gives the correct result under conditions of constant pressure.

However, for an elementary small change in the pressure and, accordingly, the volume of any system, this formula can be applied to a larger difference in their values. By dividing the total volume of the energy body into a certain number of elementary volumes using integral calculus, the error can be reduced to a value that can be neglected. In this case, the formula of the work of thermal energy dissipation is the product of a fixed pressure and the difference of the elementary volumes of the energy body and will have the form of a definite integral.

The energy transfer process can be expressed in the form of a descending sequence, where the magnitude of the energy pressure (P) at each step is the difference between the initial pressure (P_{n-1}) and the work done,

$$P_1 = P_0 - A_1; P_2 = P_1 - A_2; \dots; P_n = P_{n-1} - A_n; P_{n+1} = P_n - A_{n-1} \quad (2.4)$$

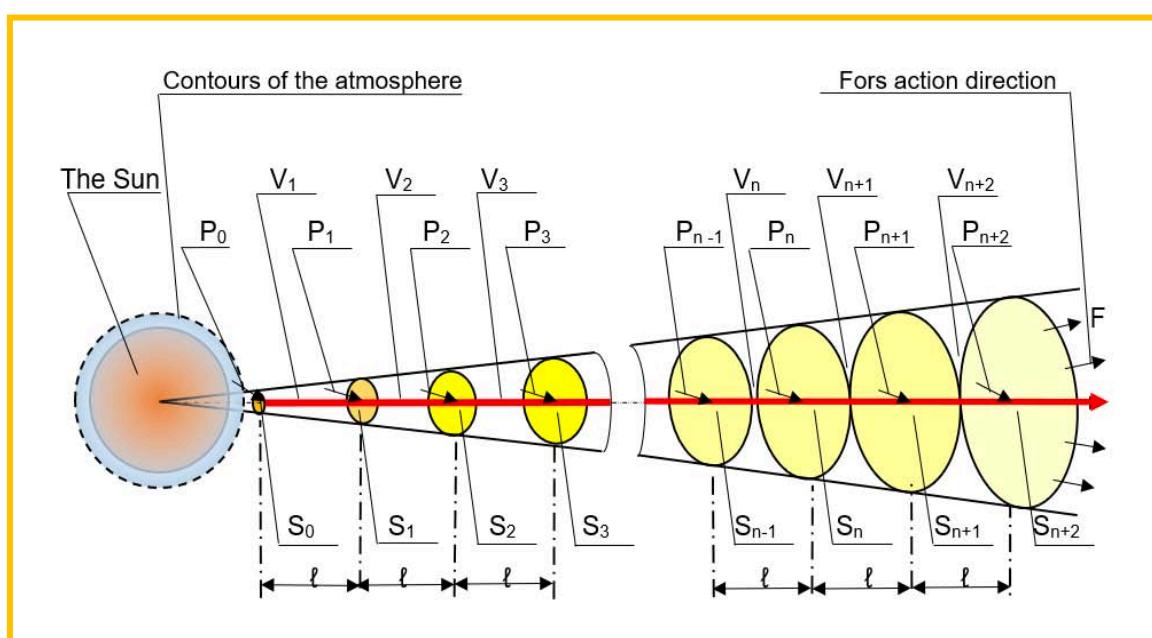


Figure 3: Principle of energy transfer of centrifugal thermal interaction in space.

The work done is expressed in the form of integral expressions,

$$A_1 = \int_{V0}^{Vn+1} P0dV; A_2 = \int_{V1}^{V2} P1dV; A_n = \int_{Vn-1}^{Vn} Pn - 1dV; A_{n+1} = \int_{Vn}^{Vn+1} PndV \quad (2.5)$$

Each term of a mathematical sequence minus the work done will be,

$$P: P_1 = P_0 - \int_{V0}^{V1} P0dV; P_2 = P_1 - \int_{V1}^{V2} P1dV; \dots; P_n = P_{n-1} - \int_{Vn-1}^{Vn} Pn - 1dV; P_{n+1} = P_n - \int_{Vn}^{Vn+1} PndV; \quad (2.6)$$

By substituting the value of work in the form of the defined integral into the mathematical sequence, we get a universal formula for the process of transfer of centripetal (magnetic) energy in the open space,

$$E: P_0 - \int_{V_0}^{V_1} P_0 dV; P_1 - \int_{V_1}^{V_2} P_1 dV; \dots P_{n-1} - \int_{V_{n-1}}^{V_n} P_n - 1 dV; P_n - \int_{V_n}^{V_{n+1}} P_n dV \quad (2.7)$$

From here follows the formula for the momentum P_n of energy,

$$P_n = P_{n-1} - \int_{V_{n-1}}^{V_n} P_n - 1 dV; \quad (2.8)$$

So, the transfer of thermal energy in an open space environment close to ideal conditions is a natural process of sequential transfer of a uniformly decreasing pressure force with the performance of a certain work, which is described by mathematical sequences (2.7). The magnitude of a unit impulse in the transfer process is expressed by the difference in the pressure value taking into account the energy expenditure for performing the work due to an increase in the dissipation value due to a change in the volume value. Therefore, the change in the volume of an energetic body by its physical essence is a function of performing work on changing the energy state of the system. That is, the work is performed by energy, which by its force due to the creation of a variable pressure value leads to a change in the volume of an energetic body. That is, the change in the volume of an energetic body occurs exclusively due to a change in the pressure value of the energy flow, the force characteristic of which is the Newtonian force - the universal unit of the Universe.

VI. MAGNETIC ENERGY INTERACTION TRANSFER

Magnetic energy, being equivalent to thermal energy, is the second part of the energy balance of the space of the Universe. Interacting with each other on a permanent basis, together they represent a boundless ocean of a united energy body of space, a container of all material bodies regardless of size, and provide all processes of interaction in space at all levels. Electromagnetic energy, which is also the basis of the gravitational energy of our planet, and on the basis of which at least half of the energy balance of the production and economic complex of the world economy is created, is the main part of the magnetic balance of the planet too.

The principle of centripetal magnetic energy transfer is equivalent to the principle of thermal centrifugal energy transfer, although they act in opposite directions in nature. Energy in nature acts as a united intellectual-informational and force complex of interaction in space. This complex acts inseparably. Only theoretically, energy can be divided into centripetal and centrifugal. But this has a significant impact on the reaction of matter to the action. A lightning strike is a vivid example of this. Being electromagnetic in nature, it causes an electromagnetic shock by connecting with the mass of the earth. At the same time, a considerable amount of heat energy is released in parallel, which always acts from the centre of the earth. This is because both magnetic and thermal flows are present in the energy body of the discharge. James Clerk Maxwell's (October 2012), in 1865, ground breaking theory of electromagnetism provided the prediction of light pressure.² Energy flows exist exclusively in the

² In 1865, James Clerk Maxwell's ground breaking theory of electromagnetism provided not only a unification of electric and magnetic fields but also a series of profound predictions, one of which was the phenomenon of radiation pressure. Maxwell's equations implied that light, as an electromagnetic wave, could exert force on matter. This insight was theoretically extended by Bartoli in 1876, who, using principles of thermodynamics, inferred that radiation pressure could perform work, establishing light as a quantifiable force-carrier. Maxwell's formalism thus suggested that a beam of light impacting a surface could impart a minute, yet measurable,

process of transferring a directed force of energy pressure on a constant basis, thus creating an elastic medium that tightly envelops material bodies, ensuring their interaction on a constant basis.

Currently, in this section studied the electromagnetic interaction, process of transferring magnetic energy by the carriers of force, which, according to the definition of Planck M. and Einstein A. (2025), are quanta of energy. Albert Einstein "associated the "quantum" or minimal element of the energy to the electromagnetic wave itself".

The only difference between electromagnetic quanta and photons, carriers of heat energy pressure, is their centripetal direction of action. Magnetic energy quanta do not compete with photons in any way. Their task, acting simultaneously, is to ensure the interaction of individual objects of matter with each other. In scientific practice, as already noted, it is traditionally customary to use a separate symbolic notation in electrodynamics, different from the notations used in thermodynamics. Symbolism and terminology do not change the essence of physical processes, but for clarity and better interpretation, the use of different symbols for different types of energy is a better option. The physical essence of the processes described by Pascal's and Newton's laws or Ampere's laws does not change from the use of different symbols. Based on this definition, we accept the concept of magnetic flux pressure through a magnetic flux, which will have the following form.

$$B = \Phi/S, \quad (3.1)$$

where, B - the magnitude of the magnetic flux pressure, its density, which is equivalent to Pascal pressure, Φ - the force of the magnetic flux acting in a direction on the plane S .

Considering the energy transfer scheme, it is obvious that the maximum concentration or density of electromagnetic quanta - carriers of the centripetal force of magnetic energy pressure, of which the magnetic flux consists, is located in the centre of mass of the material body. It is the EP of matter, carriers of the mass of matter, that emit energy on a constant basis to ensure its own processes of interaction. Interaction is the main property of matter - the state of its existence. This centre is the material point of the centre of interaction of forces of both magnetic and thermal energy. In the direction from this centre, energy is transferred in all directions, because energy is transferred by means of pressure created by the total force of the interaction process. This means that in the process of transferring centripetal magnetic energy from the centre of the system to its periphery, work will be performed to change the state of the energy body.

With a variable volume, similarly to processes in thermodynamics, the work done by the action of the energy force to change the state of the energy body will be different. The performance of elementary work to change the volume of the energy body under the action of energy pressure will be according with formula,

$$W_n = B_n(V_{n+1} - V_n), \quad (3.2)$$

The change of the volume of an energy body symbolizes the change in its energy state, since it is the changes in the volumetric characteristics of an energy body that are a function of the change in the amount of electromagnetic energy in a certain volume. A change in the amount of EP of magnetic energy leads to a change in the volumetric characteristics of the space of the energy body.

Here again, similarly to the processes in thermodynamics, it is necessary to note that this formula is valid at a constant pressure value. Therefore, it is obvious that the error in the calculations will be greater, the greater the difference in the pressure value in adjacent sections of the energy body. However, with an elementary small change in the pressure value in the certain volume of the system, this formula can be applied for a larger difference in their values. Dividing the energy body into a

certain number of elementary sections by means of integral calculus will provide an opportunity to reduce the error value to a value that can be neglected. In this case, the formula for the work of magnetic energy dissipation is the sum of elementary volumes.

The process of magnetic flux energy transfer can be interpreted by a mathematical sequence at each stage (B) as the difference between the magnetic energy pressure (B_{n-1}) at the beginning of the process and the corresponding work done. Each term of the mathematical sequence, taking into account the amount of work done, will have the following form,

$$B_1 = B_0 - W_1; B_2 = B_1 - W_2; \dots B_n = B_{n-1} - W_n; B_{n+1} = B_n - W_{n+1}; \quad (3.3)$$

The work done at this stage is represented by integral terms,

$$W_1 = \int_{V0}^{V1} B_0 dV; \quad W_2 = \int_{V1}^{V2} B_1 dV; \quad W_n = \int_{V_{n-1}}^{V_n} B_n - 1 dV; \quad W_{n+1} = \int_{V_n}^{V_{n+1}} B_n dV \quad (3.4)$$

By substituting the value of work in the form of the defined integral into the value of each member of the sequence,

$$B: B_1 = B_0 - \int_{V0}^{V1} B_0 dV; \quad B_2 = B_1 - \int_{V1}^{V2} B_1 dV; \dots B_n = B_{n-1} - \int_{V_{n-1}}^{V_n} B_n - 1 dV; \quad B_n = B_n - \int_{V_n}^{V_{n+1}} B_n dV; \quad (3.5)$$

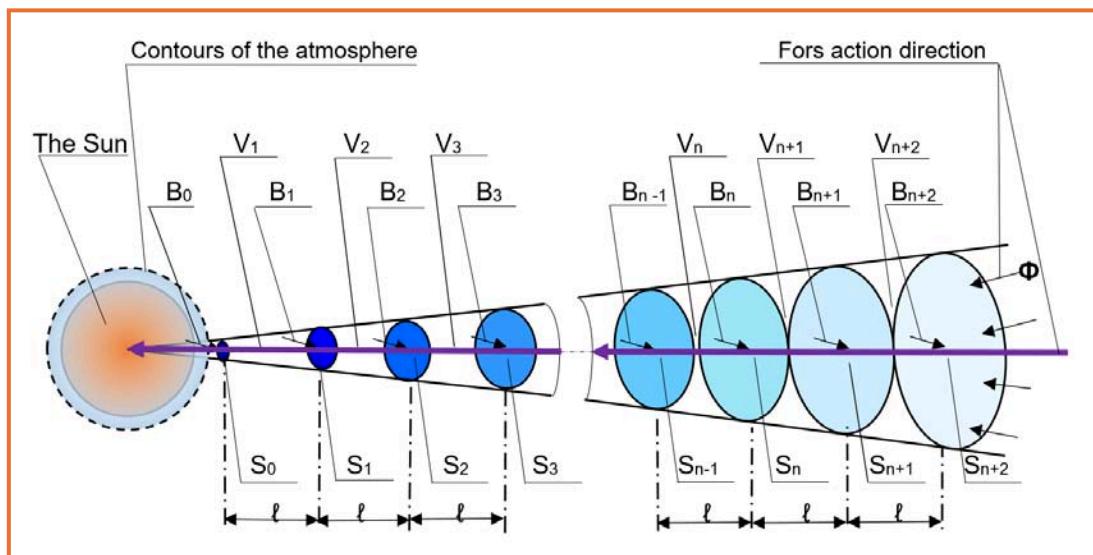


Figure 4: The principle of energy transfers by centripetal magnetic interaction in space.

we get a universal formula in the form of sequence for the process of transfer of centripetal (magnetic) energy in the open space,

$$E: B_0 - \int_{V0}^{V1} B_0 dV; \quad B_1 - \int_{V1}^{V2} B_1 dV; \dots B_{n-1} - \int_{V_{n-1}}^{V_n} B_n - 1 dV; \quad B_n - \int_{V_n}^{V_{n+1}} B_n dV; \quad (3.6)$$

From here follows the formula for the momentum B_n of energy,

$$B_n = B_{n-1} - \int_{V_{n-1}}^{V_n} B_n - 1 dV; \quad (3.7)$$

The magnetic energy flow B will expand in the direction from the energy centre. Thus, the centripetal magnetic energy performs work W by reducing the density of its internal energy or reducing the concentration of quanta in the area of the energy body. This formula is valid for determining the process of energy transfer regardless of the direction of force action - both the centrifugal thermal flow and the magnetic flow with the centripetal direction of force action. This serves as convincing evidence that in nature there is a single energy that acts as a single complex in all interaction processes. The only difference is the reaction of material objects to the action of energy in the centripetal and centrifugal directions, which is expressed in the form of work performed.

So energy is *a sequential continuous process of transferring the pressure of interaction by means of an energy flow created by a set of elementary particles of force, the carriers of which are elementary particles of energy*. Each individual EC of force acts in one direction. But a set of elementary particles of force in a static state, uniting into flows, create pressure that distributes the action of individual forces in different directions. This provides flexibility and extraordinary manoeuvrability to all processes of interaction in nature.

If, as a result of the interaction, there is a predominance of the action of forces in a certain direction, this creates conditions for the creation of a dynamic flow. The dynamic flow created by the unilaterally directed action of part of the force is expressed by dynamic pressure. The force of this dynamic pressure creates a translational motion with a certain magnitude of the force action called velocity, which is the physical essence of the physical phenomenon of motion and speed, respectively. According to Bernoulli's formula "The dynamic part of the energy force $Bd \approx k/2I^2$ is the working part of the total energy force". (Oryabko V, 2024). It is this magnitude that is the physical nature of velocity as a moving dynamic force.

The definition of speed as the distance travelled per unit of time practiced in modern practice does not correspond to the physical nature of the process. This is for accounting. For example, the processes of take-off and landing of an airplane occur at the same speed values. But under completely different force conditions. To tear off an airplane from the ground and to land it on the ground are different physical processes that require different values of applied forces. At one time, in order to somehow level this nonsense, the first - fourth cosmic speeds were proposed, which with their dynamic force are able to overcome the energy of the Earth's gravity.

VII. WEIGHTLESSNESS PHENOMENON

The phenomenon of weightlessness is well-known but insufficiently studied. This especially applies to the role of matter and energy in this process. It is in this regard that it is necessary to emphasize the fact that energy is one.

Hypothesis: *Energy in terms of the unity of its physical nature in the process of interaction, acting in different directions, that is the main factor in the state of weightlessness. It is thanks to the interaction of the centripetal action of the force of magnetic energy and the centrifugal action of thermal energy that the phenomenon of weightlessness occurs, which can be observed in open space or in the aquatic environment on Earth.* Energy is a unified elastic medium of space completely filled with the pressure force carriers mentioned above - thermal photons and magnetic quanta. It is thanks to the diverse directions of action of magnetic and thermal energy that the action of the fundamental law of the Universe, which we call Newton's third law, is ensured. This law is based on the interaction of all objects of matter by means of centripetal and centrifugal energy, which as a result ensures

relative stability and equilibrium. The interaction of two opposing energy flows, which leads to weightlessness, means the constant action of their forces on a constant basis.

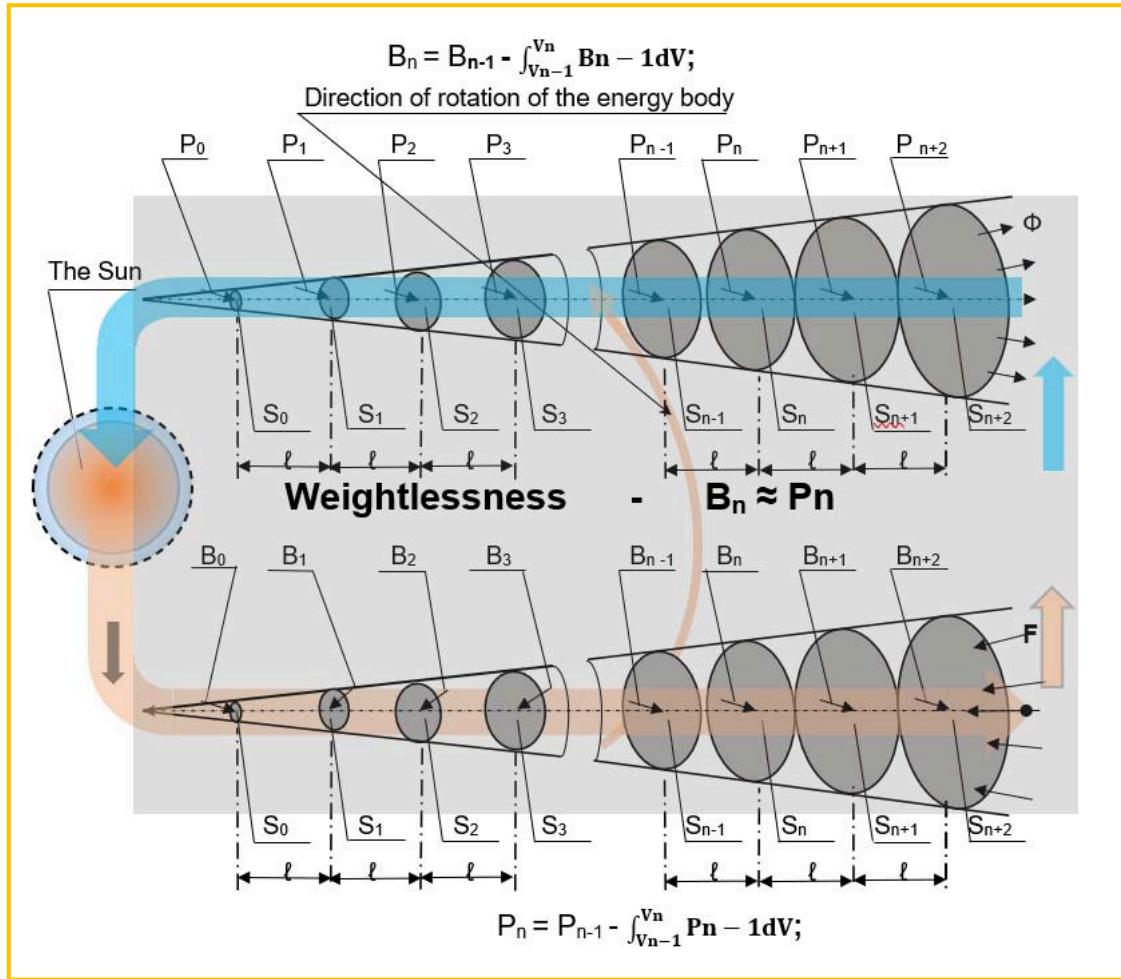


Figure 5: Illustration of weightlessness

Weightlessness is achieved due to equilibrium, and in no way lead to mutual destruction. In the depths of the oceans, at high pressure, the phenomenon of weightlessness can be observed because the opposing forces compensate for each other's actions.

$$\Phi/S = -F/S. \quad (4.1)$$

But in the conditions of open space, everything is different. The forces of attraction and repulsion are the same in magnitude. If at a certain point in open space a material point is acted upon by the force of a quantum of the magnetic spectrum of the centripetal direction B, then at the same moment the force of photons F of the thermal spectrum of the centrifugal direction will act upon this point. (Figure 7)

$$F/S - \Phi/S = 0. \quad (4.2)$$

Thus, the effect of weightlessness is created, when the interaction of all forces ultimately leads to equilibrium. Being enveloped by extremely powerful energy flows, material bodies - planets, stars and even galaxies - become weightless, which makes energy processes in space easily controllable and carried out with minimal energy losses. This phenomenon is extremely important from the point of view of managing and performing the processes of the vital capacity of the space of the Universe. The energy body of the solar system, like the system of our planet, works on the principle of an

electromagnetic generator, where the magnetic axis of the Sun acts as the core of the rotor. The energy body of the Solar system consists of the energy body of the Sun and the outer space of the entire Solar system (Figure 7). The Sun, rotating around its axis, rotates the entire space of its system with its powerful force, just as the Earth rotates its entire atmosphere when rotating. The entire Solar system is a single whole and is completely subject to the gravitational forces of the Sun. Rotating, the core of the generator of the Sun's axis pumps a magnetic flux of centripetal energy. The Sun's body, acting as a rotor, giving the centripetal energy additional acceleration at the exit, changes the direction of its action to the opposite. That is, the flow of centripetal energy, having received an additional charge, acquires the properties of a centrifugal direction. The speed of movement of these flows and, accordingly, their dynamic pressure is negligible by earthly standards and decreases as it moves away from the Sun's body. At the same time, the speed of pressure force transmission is 300,000 km/s. Spending its own centripetal energy force from the periphery of the solar system, or having exhausted its energy, the heat flow enters the zone of magnetic centripetal influence. Changing the direction of movement to centripetal, the magnetic flows are directed to the poles of the solar body in order to support the thermonuclear reaction in the solar body with their magnetic pressure, and also to again receive additional force and pressure to become a centrifugal flow. This is a perpetual motion generator which, thanks to the constant system of circulation of the solar system's own energy, will never lose its own power. Energy cannot disappear; it can be transformed from one state to another. And thermonuclear reactions will be supported by magnetic flows on a constant basis.

The energy circulation of our planet in a miniature version occurs in the same way. The only difference is that the energy flows on the earth are significantly influenced by the flows of thermal energy from the sun. Thermal energy, being absorbed by material bodies, increases their volumes, which is subjectively felt as thermal comfort. However, this does not prevent the earth from living its own life, rotating around its own axis, producing its share of thermal energy by absorbing magnetic energy.

VIII. CONCLUSION

Space by its nature is a structure with a high level of intellectual and organizational support with the presence of all the main signs of vital capacity. The main feature of the ability to live is the presence of intelligence as a fundamental criterion for interaction. It is the ability to interact with the environment that is the main feature of viability.

Is the process of interaction with objects of interaction that do not possess intelligence at all possible? Definitely not. This is not real; therefore, it is not possible. Non-intellectual matter, matter that exists outside the laws of nature in space, does not exist. The interaction of highly intellectual objects in space with non-intellectual objects is impossible, since the existence of such objects goes beyond the scope of objective reality. Objective reality is the basis of the vitality of space, the vitality of which is provided by the basic level of intellectual support of matter. A feature of the intellectual support of objective reality is its universality and comprehensiveness, as well as the unambiguity and inviolability of the laws of nature. Therefore, objective reality is assigned the main executive function - ensuring the functionality of the vitality of space. Without the effective functioning of objective reality, life processes in space are not possible, because it is the provider of all the necessary conditions for life support. Life is a complex of interaction between all its components.

Biological life on earth is a separate and special form of the existence of matter as a higher form of life capacity – subjective reality. It is based exclusively on the vital capacity of the material shell of the body which is the basis of biological life. Unlike objective reality, subjective reality has the inherent functions of creating and ensuring the life capacity of a system. Being deprived of the function of ensuring the functionality of all natural processes of the basic level, the function of subjective reality is

the command-administrative function. Therefore, the intelligence of "Homo Sapiens" is capable of creating a management and command superstructure, while using the intellectual capabilities of objective reality, with limited own intellectual capabilities. The task of Subjective Reality is to create additional conditions for better regulation of the conditions and quality of one's own living space. The physical essence of the viability of objective reality has not changed at all from the activities of Subjective Reality. Only the conditions of existence of biological life have changed. Therefore, changing the conditions of the viability of space is the main function of subjective reality.

The implementation of the laws of nature for subjective reality, unlike objective reality, is optional, which makes it possible to use nature in one's own interests by manipulating its laws. In this regard, it is extremely necessary to deeply study the problem of differentiating the course of processes in two separate realities. The system of measuring time with modern chronometers is valid in the subjective reality of modernity. The system of time measuring by the height of the sun above the horizon by the number of conventional sticks, which was used at least in certain regions of Europe 100-200 years ago, has already lost its relevance. However, nature works on the principle of cause and effect, and in no way uses time in the processes of interaction. The interaction of objectively existing space within certain time frames or its direct influence on space is questionable. However, the exception is technological processes under the guidance of human intelligence, provided that the direct implementation of the processes themselves will occur according to the laws of nature. The contemporary speed measurement system has the same shortcomings. For administrative, economic and everyday needs, in some scientific aspects this system is valuable and useful. However, in objectively existing processes, speed is associated with dynamic force. Force is in no way associated with time. That is why, in order to get around this scientific nonsense, science uses the concept of cosmic speeds in rocket and space technologies. All this calls into question the expediency of arbitrary use in scientific practice of time, the theory of relativity, since objectively the speed of light does not exist in nature at all.

As the ancients said, it is impossible to step into the same river twice... Because the next moment there will be different water there. Objectively, it is impossible to return to the past or jump into the future. First of all, in the complete absence of information. This is possible in cinema. And it is not forbidden at all. Because life, within certain limits, is given the right and some opportunities to manipulate the laws of nature. It is possible to create a movie, very realistic, but it will never be objectively real. It is essential.

It is extremely significant that humanity, thanks to its specific intelligence, using the laws of nature, has managed to change the accounting of the entire planet beyond recognition. And this is reality, not a movie at all. But, the laws of both objective and subjective reality are real. Therefore, these laws must be known, studied and used accordingly.

One of the key roles in ensuring the above-described processes is played by the process of energy transfer and transformation. Mathematical interpretation and modelling of these processes is extremely important in terms of optimizing the conditions for the use of energy resources, without which the existence of human civilization has already become impossible. It is energy as a carrier of the intellectual potential of the space of the Universe that is the basis of the vital capacity of everything, including biological life.

The law of conservation of energy reliably protects the vital capacity of planet Earth, and accordingly biological life, as part of the Subjective reality of the Universe.

Although it is quite obvious that the body is a biological machine, everything is arranged in such a way that spending one's own life with it, with all its joys, hopes, and love, is extremely pleasant and important although not without pain and loss.

REFERENCES

1. Britannica: Newton I., (April 2025) Newton's laws of motion, URL: <https://www.britannica.com/science/Newton's-laws-of-motion>, London, 21
2. Eurekalert: Yuen B., (November 2024), University of Birmingham, Physical Review Letters: New theory reveals the shape of a single photon. URL: <https://www.eurekalert.org/news-releases/1065280>, last access: 19 November 2024
3. Lebedew, P. (1901). Untersuchungen über die Druckkräfte des Lichtes. *Annalen der Physik*, 311, 433-458. <https://doi.org/10.1002/andp.19013111102>
4. Oryabko V, Khodanych Y, (2025), How the Universe Works—Part 1. Physical Content and Philosophical Essence of Objective and Subjective Realities, Open Journal of Philosophy URL:<https://philpapers.org/rec/ORYHTU-2>, DOI 10.4236/ojpp.2025.152022
5. Oryabko V, (2024), How the Universe Works. Part II. Philosophical Content and Physical Nature of Electromagnetic Energy and Its Generation. Electric Current, Open Journal of Philosophy, Energy Transportation. Energetic Tube, URL: <https://www.scirp.org/journal/paperinformation?paperid=140795>, DOI: 10.4236/ojpp.2025.151015
6. Wikipedia: Pascal B., (May 2025) Pascal's law, Fluid column with gravity, URL: https://en.wikipedia.org/wiki/Pascal%27s_law,
7. Wikipedia: (July 2025), Heat flux. Heat flux density. URL: https://en.wikipedia.org/wiki/Heat_flux
8. Wikipedia: (July 2025), Magnetic flux. Magnetic flux density. URL: https://en.wikipedia.org/wiki/Magnetic_flux
9. Plank M, Einstein A, (July 2025), Planck constant, “The Planck constant” URL: https://en.wikipedia.org/wiki/Planck_constant
10. Wikipedia: (November 2024) Logical equality URL: https://en.wikipedia.org/wiki/Logical_equality
11. Google. (October 2012), Pressure of Light Symposium, History, Maxwell's pressure of light. URL: <https://pressureoflight.physicsandastronomy.host.dartmouth.edu/history/history2.html>, Dartmouth College, Hanover, New Hampshire