## **Philosophy and Physics**

## **Robert Yusupov**

Independent researcher Vladivostok, USSR

**Abstract:** Physics and philosophy are closely, organically and inseparably connected with each other. What is philosophy, what is the holistic view of nature, what is the general worldview of a researcher of nature, a physicist, a cosmologist, such is physics, cosmology. This simple truth finds its explanation and clarification in this article.

**Key words:** nature, matter, objective reality, physics, philosophy, truth, lie, science, pseudoscience, progress, obstacle to progress.

-----

Physics is a science of nature that studies the properties and structure of matter and the laws of its motion.

And nature is an objective reality that exists outside of our consciousness and independently of our consciousness. Nature exists absolutely and without regard to anything or anyone. Nature is fundamentally material and dialectical. Matter is the primary basis, the primary essence, the origin and the first cause of everything and everyone in nature.

Matter is the unique and only substance of nature.

Philosophy develops its own view of nature in the form of a holistic worldview.

There are two opposite views on nature, on matter. The first view is a view of things when nature is accepted as it is in objective reality, and everything that happens in nature is explained (must be explained!) from within itself. This view, this approach to explaining nature is characteristic of materialists and truth-seekers.

The second view is one in which, in order to explain natural phenomena, they resort to the unfounded postulation of the existence of **something** illusory, mystical, esoteric, fabulous, fantastic, divine, external (otherworldly, not of this world!) in relation to nature.

And then **from this** indefinite, vague, smeared, foggy, inaccessible, not obvious, mystical, invented, hidden, curtained external (otherworldly, not belonging to our real world) **something** they try to explain nature.

An attempt is made to explain nature by the action of some supernatural esoteric forces standing above man and even above nature. "Some particularly close, trusted and enlightened heralds, "supermen" declare these forces to be inaccessible to either our perception or our understanding.

They are very carefully hidden and ideally disguised, conspiratorial from us. They are hidden and inaccessible as carefully as God (the Supreme Being) is for religious parties. The question arises, "Why do they need to hide"? There is only one natural answer, "so that the lie about their existence does not become obvious".

This view, this approach to explaining nature is characteristic of the forces of modern reaction and obscurantism. Modern reactionaries and obscurantists of all stripes and colors in every way hinder the development of science, progressive tendencies in society.

They are trying to impose on a large mass of people their "iron" will, their "true faith", their "true understanding", but essentially their false view of the essence of what is happening around us, in nature, in society. And here it is completely unimportant that this view contradicts nature, the real state of affairs, is false in essence. What is important here, and this is the main thing, is that the people, the philistines, the overwhelming majority of people, the cattle, believe, accept these false attitudes, positions, postulates, false worldviews on faith.

And in this "coercion to lie" powerful social forces and powerful means are involved, controlled by the ruling bourgeois parties. The targeted "coercion to lie" is carried out by various parties. These are religious parties, philosophical bourgeois-idealistic, antimaterialistic, esoteric, ruling bourgeois parties. But all of them are subordinated to one degree or another to the main party – the party of modern reactionaries and obscurantists. Here, "at the service" of fooling the philistines with lies, there is a global ramified system, a network of all kinds of bourgeois media.

-----

Physics is the main science of nature among all natural sciences.

Philosophy develops a general view (worldview, understanding) of the material world around us, of nature and society.

Both disciplines, physics and philosophy, are fundamentally oriented towards nature, towards its knowledge, towards the knowledge of the laws of nature and the universe.

Within the framework of physics, within the framework of the theory of modern physics (TMP), there is an inseparable organic unity of physics and philosophy. As is philosophy, so is physics. As is the worldview of a researcher of nature, a natural scientist, a physicist, a cosmologist, so is natural science, physics, cosmology. Philosophy is objectively present in physics, despite the negative statements of physicists themselves about philosophy. This presence is realized in the form of the dominant worldview in physics, and as a philosophical core in physics.

Here's how physics is defined in one academic dictionary:

"Physics is a science that studies the simplest and at the same time most general laws of natural phenomena, the properties and structure of matter and the laws of its motion. The concepts of physics and its laws underlie all natural science. Physics is an exact science and studies the quantitative laws of phenomena" [4, p. 812].

Here it is written clearly and understandably, in black and white, and quite frankly and explicitly: "physics, as a science of nature, studies '... the properties and structure of matter and the laws of its motion'."

It is clear that matter in this definition occupies a central place, is put in the center of attention. But let us ask ourselves the question, "What is the real state of affairs in modern physics regarding the matter of nature?" This question initiates other questions. "How is matter of nature defined in the theory of modern physics (TMP)?" "How specifically is matter represented in nature (this is the main question of physics and all natural science)?" "How is matter of nature objectively reflected in the conceptual apparatus of TMP?" "What place does matter of nature occupy in the theory of modern physics (TMP)?" "How do physicists themselves relate to matter?" "What is matter of nature?" "What is nature?"

Let us return to the definition of physics [4, p. 812]. If you leaf through this the same physical encyclopedic dictionary, then we will not find in it articles (headings) about either nature or matter. These concepts are not define in this same "physical encyclopedic dictionary". This already says a lot. This already means a lot.

This means that within the framework of the theory of modern physics (TMP) there is no clear and precise scientific understanding of the nature and matter of nature. This is already alarming. Something is obviously wrong in our "scientific physical kingdom"! Legitimate questions arise. To declare the study of nature and not to give a definition of nature or at least an explanation. To declare the study of matter and not to give a clear definition of this phenomenon and concept. Somehow all this does not fit with science. There is no definition, so there is no science here. But if there is no science, then its place is taken by various conjectures and fantasies. Where science recedes into the background or is absent, its place is necessarily taken by antiscience, pseudoscience. And these "impudent ladies" are good at dressing up in various scientific-sounding outfits, such as, for example, mysticism, esotericism, the teachings of Kabbalah,

religion, theology, "common sense", "universal reason", "teachings of ancient sages" and all other essentially anti-scientific fantasy outfits.

Science begins with clear and precise definitions of basic concepts and properties. And these concepts for physics (as a science) are precisely the phenomena and concepts of "nature" and "matter", "space", "physical object", "property", "physical quantity", "truth", "falsehood", etc.

There are no definitions at all in the theory of modern physics (TMP) and in physical encyclopedias for such concepts as "nature" and "matter".

There is, for example, in this in the same physical encyclopedic dictionary there is an article, a rubric for the concept of "spacetime". But this is a purely eclectic combination, a mixture of two different concepts of "space" and "time" into one concept. There is no particular sense in citing it here. Something else is important. What is important is that there is no real proof of the real existence of the four-dimensional space-time of Einstein-Minkowski in this rubric. But also the entire party of modern physicists (PMP) itself does not have and does not provide us with real proof of the real existence in nature of either simple space or four-dimensional space-time. The entire GTR is based on a false belief (false postulate) in the existence of space-time in nature.

## < Digression.

ECLECTICISM, eclecticism (from the Greek eklegein - to choose) - an unprincipled, mechanical combination, without the necessary internal connection, of heterogeneous and contradictory theories, views, points of view, passed off as a new theory. "'Both', ' on the one hand, on the other hand' " - these are the formulas characteristic of E. (see Lenin, Works, Vol. XXVI, p. 132). E. has nothing in common with dialectics. "Dialectics requires a comprehensive consideration of relationships in their concrete development, and not the plucking out of one piece, then of another" (ibid.). "If," Lenin explains, "... two or more different

definitions are taken and combined together completely by chance..., then we get an eclectic definition" (ibid., p. 134). Dialectics, on the other hand, examining phenomena from all sides, is based on the objective unity of the subject itself and the phenomena surrounding it, and reveals the essential, defining aspects of the subject. Eclectics attempt to combine materialism with idealism, whereas "attempts to jump out of these two fundamental trends in philosophy contain nothing but 'conciliatory charlatanism' " (Lenin, Works, Vol. XIII, p. 278). E. constitutes the methodological basis of opportunism. "When counterfeiting Marxism as opportunism," says Lenin, "the counterfeiting of eclecticism as dialectics most easily deceives the masses, gives seeming satisfaction, supposedly takes into account all aspects of the process, all tendencies of development, all contradictory influences, etc., but in fact does not provide any integral and revolutionary understanding of the process of social development" (Works, Vol. XXI, p. 383).

[https://ru.wikisource.org/wiki/MCЭ2/Эклектика]

End of the digression >

< Insert. Physicists do not provide us with any real proof of the real existence of four-dimensional space-time in nature. This is similar to the fact that all religion is based on false faith ("true faith") in the existence of God (the Supreme Being). And faith alone will not get you very far. Science needs real proof of the real existence of the postulated object (space-time). But it does not exist. And religious authorities are speculating and cheating here with all their might. They say that religion is not science and proof is not needed here. You just have to believe. Yes, religion is not science. But then do we have to believe in religious lies? No, that will not do. You gentlemen, religious academics and professors, yourselves talk about "true faith", that is, you still need the truth, and you are guided by it. But then provide us with real proof of the real existence of God (the Supreme Being). So that we ourselves can judge the truth or falsity of your judgment "God exists". If this</p>

judgment of yours corresponds to nature, then it will be true, and your "true faith" will receive direct confirmation in your own proof. If this judgment of yours does not correspond to nature, then it will be false. In this case, your "true faith" will be a lie. Provide us with real proof of the real existence of God, and we will decide the question of "true faith" from you. End of insert >.

-----

F. Engels spoke very correctly about the inseparable organic connection between philosophy and natural science. This is recorded in "Dialectics of Nature". These are remarkable words, here they are:

"Natural scientists believe that they free themselves from philosophy by ignoring it or abusing it. They cannot, however, make any headway without thought, and for thought they need determinations. they take But these unreflectingly from the common consciousness of so-called educated persons, which is dominated by the relics of long obsolete philosophies, or from the little bit of philosophy compulsorily listened to at the University (which is not only fragmentary, but also a medley of views of people belonging to the most varied and usually the worst schools), or from uncritical and unsystematic reading of philosophical writings of all kinds. Hence they are no less in bondage to philosophy, but unfortunately in most cases to the worst philosophy, and those who abuse philosophy most are slaves to precisely the worst vulgarised relics of the worst philosophies.

Natural scientists may adopt whatever attitude they please, they are still under the domination of philosophy. It is only a question whether they want to be dominated by a bad, fashionable philosophy or by a form of theoretical thought which rests on acquaintance with the history of thought and its achievements. "Physics, beware of metaphysics!" is quite right, but in a different sense.

Natural scientists allow philosophy to prolong an illusory existence by making shift with the dregs of the old metaphysics. Only when natural and historical science has become imbued with dialectics will all the philosophical rubbish—other than the pure theory of thought—be superfluous, disappearing in positive science" [5, p. 490-491]

-----

Complete confirmation of this indestructible organic union of philosophy and physics in the two mirror-opposite examples presented below.

The first example (BIP+TMP). This is an example of the inseparable organic unity of the theory of modern physics (TMP) and the fundamentally false and deeply anti-scientific bourgeois-idealistic philosophy (BIP). The lies and anti-scientific nature of BIP are completely consonant and synchronized with the lies and anti-scientific nature of TMP; they complement each other. The lie in the foundations of TMP is directly relate to the formulation and solution of the main question of physics and all natural science. This same question is the third side of the main question of philosophy. This question sounds like this: "How is matter specifically represented and manifested in nature?" The lie in the foundations of BIP is directly relate to the formulation and solution of the main question of philosophy (the first side of the question). This is the question of "what is primary in nature: matter or consciousness?"

Within the framework of the TMP, this question is not raised or resolved at all. But meanwhile, the correct and true solution to this question exists, it is very clear and simple, it is as follows: "The content of elementary particles is `pure` concrete matter of nature". This conclusion is essentially a statement of a simple and clear natural fact. But this conclusion and this fact have not been accepted and recognized to this day in the theory of modern physics (TMP).

< Insert. The author of TN has been making every effort over the last 10 years to bring to the consciousness of physicists the successes, achievements and results of the "Theory of Nature". TN has 40 solved fundamental problems of the foundations of physics and cosmogony (cosmology). But this turned out to be unnecessary for the entire modern physical community, the entire modern physical party (MPP), all physicists, theoretical physicists. They have been playing the mass fool for 10 years and raging. With this active rejection and non-recognition of TN and its world-historical achievements over the last 10 years, the party of modern physicists (PMP) openly and brazenly, demonstratively shows its rotten essence, as a party of outright tyrants and assholes in the service of the master, the party of modern reactionaries and obscurantists. Not to notice the "Theory of Nature" for 10 years, not to recognize TN, not to notice and not to recognize the scientific Revolution in physics and cosmogony (cosmology), accomplished by the "Theory of Nature" - this is the true "face" of the modern party of physicists (MPP). The crisis in the theory of modern physics and in general natural science has been going on for over a century. There is no way out of the crisis and none is visible. This is a crisis of worldview. The worldview of the modern physical party (MPP) is idealistic, anti-materialistic. This contradicts nature itself. After all, nature is fundamentally material and dialectical. A change of worldview is needed for the entire party of modern physicists (MPP) from the false and anti-scientific bourgeois-idealistic to the true and scientific dialectical-materialistic. The truth is knocking at the door. And the door to the physicists` fiefdom is tightly closed. The situation in modern physics, as they say, is "total ass". But physicists are not itching. The entire party of modern physicists (PMP), all modern physicists, theoretical physicists, and along with them the entire theory of modern physics (TMP) are turned to nature, to the truth with their asses, and even stand on their heads. That is my opinion. And "Theory of Nature" turns physics upside down and puts it face to nature. End of insert >

Thus, the fact of nature that "the content of elementary particles is `pure` concrete matter of nature" has not yet been recognized by the party of modern physicists (PMP), theoretical physicists. By this, the PMP removes the TMP from nature to an idealistic distance. The party of modern physicists largely ignores another fact of nature: "Nature is fundamentally material and dialectical. Matter is the basis of nature". By ignoring the facts of nature by the PMP (at the will of physicists), the effect is achieved that the matter of nature does not receive a proper and adequate reflection of its nature in the conceptual apparatus of the TMP. The PMP and all physicists essentially do not care about the facts that nature is fundamentally material and dialectical. The PMP functionaries also do not care about the fact that matter is the primary principle, the primary essence, the origin and the root cause of everything and everyone in nature. The PMP and all modern physicists don't give a damn about the fact that matter is a unique and the only substance in nature. This is the kind of "don't care" attitude towards nature and the matter of nature that the Party of Modern Physicists (PMP) demonstrates to us. But matter is the main active principle in nature. And it is absolutely clear that the matter of nature is specifically presented in the form of "the content of elementary particles". But all this clear and distinct understanding, the true understanding of the matter of nature (in its specific representation) is absent within the framework of the TMP. The Party of Modern Physicists (PMP) for more than 10 years after the scientific Revolution in physics and cosmology, after obtaining significant results (this is 2014) within the framework of scientific research into the foundations of nature, conducted by the author of the "Theory of Nature" and this article, is engaged in sabotage and ignoring the scientific Revolution in physics and cosmogony (cosmology), ignoring the "Theory of Nature" and the messages of its author. It is precisely this PMP and its leadership that have been artificially holding back scientific progress in physics and general natural science for over 10 years now. And those who hold back

and hinder scientific progress are reactionaries and obscurantists. And this is the role that PMP plays brilliantly.

How exactly does the lie about nature and the matter of nature manifest itself in the theory of modern physics (TMP)?

The matter of nature (the specific matter of nature in the form of the contents of the elementary particle, EP) is not presented in the subject area of physics. And the matter of nature, ultimately, is not presented as a physical quantity within the framework of the TMP. Among the basic physical quantities (there are seven of them), there is no matter of nature. These are facts. These are remarkable facts. These facts stubbornly speak of the false foundation of the TMP. In general, the theory is false in its foundations, it cannot be a true and scientific theory. The theory of modern physics (TMP), including GTR, is not a true and scientific theory. TMP is a false and unscientific theory. And the philosophy of BIP is also not a true and scientific theory. BIP is a false and unscientific theory. Two of a kind: BIP and TMP. This is a negative example of "friendship": both theories are false and unscientific.

In addition to all this, it should be said about the long-term global fundamental systemic crisis in physics (and in all natural sciences) that has been going on for over a century. And there is no way out of this crisis in sight within the TMP, the philosophical core of which is the false and anti-scientific bourgeois-idealistic philosophy (BIP). For this crisis is, first of all, an ideological crisis. This is also a fact. But this fact is not recognized in the Party of Modern Physicists (PMP). This ideological crisis is a crisis of "friendship on an idealistic basis" between the TMP and the false and anti-scientific BIP. This is basically an anti-materialistic (ideological) crisis. At the heart of this close "friendship" between the TMP and BIP lies anti-materialism, lies idealism, lies the bourgeois-idealistic worldview of the entire physics community.

At the same time, it is well known (this has been established by science) that nature is material and dialectical in its foundations.

The lie about the matter of nature, embedded in the foundations of both BIP and TMP, formalized in the concept of anti-materialism, has done its dirty and dark work. Both BIP and TMP are (as a consequence of their original anti-materialism, their idealism) anti-scientific, pseudo-scientific teaching (BIP) and theory (TMP).

It is clear that the anti-materialistic lie of the TMP is also embedded in the theory of relativity (GTR). And GTR is the most important section of modern physics (TMP). This means that GTR is also a false (=anti-materialistic) theory in its foundations, and, consequently, an anti-scientific (pseudo-scientific) theory.

There is another important factor testifies to the pseudoscience of GTR. This is the concept and category of "four-dimensional space-time". This is the most important hypothesis in the foundation of GTR. During the entire existence of GTR, theoretical physicists of this direction have not provided either themselves or us with clear, understandable, reliable and unambiguous real evidence of the real existence of this phenomenon in nature. It is clear that if in nature itself there is no real space (space-time), as such, as some natural entity, then there is not and cannot be any real evidence of its existence.

A similar situation, when no real evidence of the real existence of something is provided, we notice among the supporters of the ether of nature, among believers in God (the Supreme Being), among religious parties. If ether does not exist in nature, then there is not and cannot be any real evidence of its real existence. If God (the Supreme Being) does not exist in nature, then there is not and cannot be any real evidence of its real existence. Without real evidence of the real existence of their unreal characters (God, ether, space, space-time), the corresponding parties offer their flock, their adherents, "true faith" (in their words) in their existence. But this "true faith" of theirs is essentially a banal lie. This is a false faith, a lie lies at the basis of this "true faith". This word "true" covers up the original lie. The lie dresses up in the garment of truth. And this is completely understandable and clear. And it is always worth

remembering and not forgetting that powerful social forces have a vested interest in this lie, in this false faith.

But with the matter of nature, the existence of which materialists and dialectical materialists constantly talk about, the situation is exactly the opposite. The very fact of nature that "the content of elementary particles is 'pure' concrete matter of nature" is real proof of the real existence of concrete matter in nature. Dialectical materialists not only state the existence of the mother of nature, but also provide direct proof of this existence.

This is how the position of dialectical materialists differs from the positions of various adherents of the existence of space, four-dimensional space-time, ether, and God (the Supreme Being) in nature. We have real proof of the existence of matter. This is entirely scientific proof. Our (dialectical materialists') position on this issue is honest and open. We do not resort to lies to justify our position. Truth is objectively on our side. Truth is with us. Dialectical materialism is a completely and fully true and scientific philosophy. This philosophy develops a true and scientific dialectical-materialistic worldview. Lies are the main support of religious parties, adherents of the idea of ether, adepts and supporters of the existence of space, space-time in nature. Lies are the main bet of the forces of modern reaction and obscurantism. Let us understand this.

But the parties, communities, groups, classes, associations (religion, ether, space, space-time) mentioned above do not have such simple, clear, convincing real evidence! Such evidence cannot exist in principle due to the absence (actual non-existence) of the declared characters and personalities. And they do not need such evidence at all in principle. The absence of real evidence of the real existence of these objects and characters is replaced by lies, false faith ("true faith" according to their classification), false postulates. Lies are the basis of all these teachings: about God, about ether, about space, about four-dimensional space-time. But we must also understand that mysticism and esotericism, the teachings of Kabbalah, other invented and far-fetched teachings ("wise elders",

"universal mind", "solar energy", "divine vision", etc.) - all this is also a big lie for fooling the average person, the common people. All these are instruments of lies for the real replenishment of the party of cattle. The functioning of the party of cattle (the party of mass dumbing down and stupefaction of ordinary people) occupies a leading place in the plans of the party of modern reaction and obscurantism.

And there are powerful social forces with a vested and material interest in these forms of mass lies. These are the corresponding parties and communities. But the main guiding and inspiring force of all these pseudoscientific teachings and theories is the false, pseudoscientific bourgeois ideology. The lie of bourgeois-idealistic philosophy (BIP) is closely connect with this bourgeois-ideological lie. This is an inseparable tandem. But this false, pseudoscientific bourgeois ideology is opposed by the true and scientific teaching of Marxism-Leninism and its philosophical justification - the only true and scientific philosophy of dialectical materialism.

There is also no recognition of the fact of nature about matter in its specific manifestation and representation in the form of "the content of elementary particles" and within the framework of the Big Bang theory (cosmology). This means that this theory is also false and unscientific.

There is also no recognition of the fact of nature about matter in its specific manifestation and representation in the form of "the content of elementary particles" and within the framework of the theory of the "Standard Model of Elementary Particles" (SMEP). This means that SMEP is a fundamentally false and anti-scientific theory.

At the same time, it cannot be ruled out that these false teachings and theories may contain a rational kernel. But it is not this (the "rational kernel") that creates the overall picture. Lies, false faith (in the packaging of "true faith", "true worldview"), a false antimaterialistic (=idealistic) foundation at its core, a false antimaterialistic (=idealistic) worldview remain the original dominant factors in these theories. And this lie forms the overall picture of all these pseudoscientific theories.

**Second example (Dialectical Materialism + TN).** Here we will consider the commonwealth of the only true and scientific philosophy of dialectical materialism (Diamat) and the "Theory of Nature" (as a new physics and cosmology) of the author of this article.

TN is a new dialectical-materialistic physics and cosmology. TN is primarily the foundation of a new dialectical-materialistic physics. Cosmology is physics on a cosmic universal scale.

The main novelty of the "Theory of Nature" is that matter, which is the basis of nature, is placed at the basis of physics.

< Insert. But none of this is in the theory of modern physics (TMP). The matter of nature is not listed, not recorded, and is not in the foundations of TMP. TMP is anti-materialistic (=idealistic) in its basis. The matter of nature is not recognized in TMP in its natural manifestation, representation. And this specific representation of matter in nature is the "content of elementary particles". This means that the matter of nature is not adequately (correctly and truly) reflected in the conceptual apparatus of physics (TMP). But this speaks of the anti-material nature of the foundations of TMP. But this is the main sign of the anti-materiality of the foundations of TMP. The matter of nature is also not represented and reflected in TMP as a physical quantity. The anti-materialistic (idealistic) nature of TMP is embedded in the very foundations of physics; matter is not properly represented in the foundations of TMP. The anti-materialistic (idealistic) character of the TMP is manifested (reflected) in its idealistic worldview, and this idealistic worldview is objectively inherent in the entire party of modern physicists (PMP). Anti-materialism is the basis of the false foundation of all modern physics (and cosmology). End of insert > .

Within the framework of TN, the fundamental question of physics and all natural science is clearly and openly posed. This is the question of a specific representation of matter in nature (matter of nature). The solution is simple, clear, understandable, unambiguous, presented in the form of a judgment: "the content of elementary particles is 'pure' concrete matter of nature". This judgment is also a statement of one simple fact of nature. A judgment that is a statement of a fact of nature is an obviously true judgment.

Those physicists and natural scientists who answer the question "Is the content of elementary particles 'pure' concrete matter of nature?" with "yes' take (accept) the position of nature and recognize this truth of nature. By doing so, they take the position of recognizing nature as it is in reality. They take the position of truth about nature. This is a dialectical-materialistic position. This is the position of the philosophers of dialectical materialism. This is the position and worldview of the only true and scientific philosophy of dialectical materialism (Diamat).

Those physicists and natural scientists who answer the question "Is the content of elementary particles 'pure' concrete matter of nature?" with "no" do not take (do not accept) the position of nature and do not recognize this truth of nature, do not recognize nature as it is in reality. By doing so, they take the position of lies about nature. This is a bourgeois-idealistic position. This is the position of bourgeois-idealistic philosophers. This is the position and worldview of the fundamentally false and deeply anti-scientific bourgeois-idealistic philosophy (BIP).

Within the framework of TN, the main question of physics and all natural sciences, the question of a specific representation, manifestation of matter in nature, is correctly and accurately resolved. Further in-depth scientific study of this problem, conducted by the author within the framework of his TN, led with logical inevitability to the concept of "quantum of matter" (EUM). According to the dialectical-materialistic worldview of the author of TN and this article, quantum of matter (EUM) is a material true

"first brick" of the universe. Quantum of matter (EUM) is a minimum portion (quantity) of matter in nature (matter of nature). There is no smaller amount of matter in nature and cannot be in principle. Quantum of matter is the lower limit of the amount of matter. Quantum of matter is not further divided or subdivided. Quantum of matter is "pure" primary matter of nature. A quantum of matter is not a solidified material solid like volcanic magma (or asphalt or concrete). A quantum of matter is a material flesh pulsating in the rhythm and tempo of nature. A quantum of matter is matter type EUM (first type). The natural rhythm and rate of pulsation of a quantum of matter is initially set by the natural mechanism of Singularity [1, 2]. This is the rhythm and tempo of functioning of the Singularity itself. Singularity is a unique special area of nature or a unique special natural mechanism (object). Singularity is a kind of perpetual motion machine (engine) of nature. The functioning of Singularity is an eternal non-stop process in nature. This engine sets in motion all matter of nature. The raw material for the mechanism of Singularity is the so-called material vacuum dust (MVD) [1, 2]. The presence of a sufficient amount of raw material for the functioning of the Singularity is ensured by the constant and continuous attraction of the material vacuum dust (MVD) by the Singularity. This prevailing movement of the material vacuum dust (MVD) to the Singularity or the attraction of matter of the MVD type by the Singularity within the framework of TN is considered a law of nature [1, 2]. The vacuum itself is emptiness and matter of the MVD type. In the rhythm and tempo of nature, which is set by the Singularity itself, the mechanism of the Singularity forms material NUM-objects (this is matter of the NUM type). Immediately after its formation, the material NUM-object receives an initial impulse from the Singularity. Having received the initial impulse, the material NUM-object is emitted by the Singularity into the surrounding vacuum. The material NUM-object emitted by the Singularity begins to move by inertia rectilinearly and uniformly away from the Singularity. This is the original cause of the movement of material bodies by inertia. The initial speed of this movement is

equal to the maximum speed in nature (in the Universe) at the moment of emission. Within the TN, this speed is designated by the triune symbol MVN. For the modern era of the Universe, this speed (MVN) is equal to the speed of light in a vacuum. This speed (MVN) is one of the most important characteristics of the Universe. The magnitude of this speed (MVN, as a characteristic of the Universe) according to the "Theory of Nature" is an increasing value. In his TN the author believes (and adheres to this opinion) that the speed of movement of a material NUM-object remains constant, unchangeable. But for himself (outside TN) the author does not exclude the option that this initial speed of movement of a material NUM-object changes over time in the direction of decrease. This question (problem) is open and subject to further scientific research and investigation.

In its further existence and movement, the material NUM-object disintegrates, crumbles into UCN quanta of matter EUM. Here  $UCN = 1.210256 \cdot 10^{44} (UCN=1.210256*10^{44})$  is a unique and universal constant of nature (the Universe) [1]. Material NUMobjects are the final products, the result of the functioning of the Singularity mechanism. The process of functioning of the Singularity is an infinite, strictly periodic, harmonic process. In each step (cycle) of the functioning of the Singularity, one material NUM-object is formed and emitted. The duration of one step (cycle) of the Singularity's functioning, as established within the framework of TN, is one quantum of time (EUT). All matter emitted by the Singularity goes after the decay of NUM-objects into quanta of matter (EUM), to the construction of the Universe. But first the quanta of matter form elementary particles (EP). And later the elementary particles form atoms of all chemical elements. All material bodies in nature consist of (are formed from) chemical elements.

Only the matter of nature, which is formed as material NUMobjects and emitted by the Singularity, is the matter of the Universe. It is taken into account as the matter of the Universe. Of course, the quanta of matter (EUM), as decay products of NUM- objects, are the matter of the Universe. The amount of this matter is the most important characteristic of the Universe. This is a variable amount. This amount is measured in natural units matter (NUM) or in quanta of matter (EUM). This quantity is a variable value, and in the process of evolution of the Universe this quantity grows, changing (for the unit NUM) within the range from 1 to UCN^{2} units [1, 2]. The total time of evolution of the Universe will be UCN^{2} EUT (quanta of time) or UCN NUT (natural units of time). Translated into our everyday language, the total time of evolution of the Universe will be approximately 2.8\*10^{34} average Earth years. Within the framework of the TN, the current age of the Universe is determined. It is equal to 124 trillion 666 billion 537 million 596 thousand years. All this is presented and thoroughly explained in the "Theory of Nature" [1, 2].

Note that the matter of vacuum, material vacuum dust (MVD) is the matter of nature, but is not the matter of the Universe. This is an important detail. In the "total quantity" of the matter of the Universe, the matter of the MVD type (material vacuum dust) is not taken into account. The Singularity, like a pump, sucks in the material vacuum dust (MVD) and forms material NUM-objects from it. These NUM-objects are emitted by the Singularity immediately after their formation. Some time after their emission by the Singularity, the material NUM-objects disintegrate into quanta of matter (EUM). But it is the quanta of matter (EUM) are the original material "first building blocks" for the construction of the entire Universe.

< Insert. The above global reasoning about the matter of nature is possible only after recognizing the fact of nature that "the content of elementary particles is 'pure' concrete matter of nature". These reasonings are possible within the framework of TN and are completely unacceptable within the framework of TMP. After all, the matter of nature is recognized within the framework of the "Theory of Nature" and is not recognized within the framework of TMP. The truth is where matter is recognized - and this fully</p>

applies to TN. Therefore, TN is a true and scientific theory of nature. Well, a lie is where matter is not recognized - and this entirely applies to TMP. This means that the theory of modern physics (TMP) is a false and anti-scientific theory. TMP is not a science in the full sense of the word. Information about this state of affairs in the theory of modern physics (TMP) was repeatedly sent by the author of TN by e-mail to numerous addresses of physical organizations and institutions, institutes, departments, deans' offices, laboratories, ministries and departments, editorial boards of physics and philosophy journals. Numerous e-mails were also sent to the personal addresses of a large number of physicists, theoretical physicists. In the author's letters to physicists, the latter's special attention was drawn to the discoveries of TN, to the solution of 40 fundamental problems of the foundations of physics and cosmology, to the scientific Revolution accomplished within the framework of TN. But all this was in vain. There has been no adequate positive reaction from any side, not a single physicist, since 2014. Here it is, the real modern physical party (MPP) in all its "splendor" and "brilliance". The facts of nature lying under the noses of physicists are not noticed. My letters with solutions to 40 fundamental problems of the foundations of physics and cosmology lying on the desk of physicists are not noticed. The Scientific Revolution in physics and cosmology is not noticed by the class of physicists, by the entire modern physics party. Absolute blindness, anti-materialistic bourgeois-idealistic. This is what a false and anti-scientific worldview does to people, to physicists, theoretical physicists, a worldview borrowed from the bourgeoisidealistic philosophy (BIP), which is false in its foundations and anti-scientific. End of insert >.

What did the collaboration of the philosophy of dialectical materialism and physics give within the framework of the "Theory of Nature"?

We remember that as is philosophy, so is physics.

< Digression. Bourgeois-idealistic philosophy (BIP) and the theory of modern physics (TMP) are in a close, indestructible organic union. BIP is the philosophical core of TMP. This union has generated a protracted, deep, fundamental, systemic crisis in the foundations of physics and all natural science that has lasted for more than a century. This crisis has not yet been overcome, it continues. This crisis is first and foremost a crisis of worldview. And this is a fact. The false and anti-scientific BIP has generated a false and anti-scientific worldview - the bourgeois-idealistic worldview. This is an anti-materialistic worldview. And nature, meanwhile, is fundamentally materialistic and dialectical. This worldview (BIP), which contradicts material nature, is a fundamentally false worldview. It is clear that from the position of a false worldview, a worldview that contradicts nature, it is impossible in principle to resolve the worldview crisis in physics, it is simply impossible. The worldview itself must be changed. It is necessary to stand on the foundation of the only true and scientific worldview. This foundation, this worldview is developed by the only true and scientific philosophy of dialectical materialism. This is a dialectical-materialistic worldview. This is a worldview that corresponds to nature. End of digression >.

The philosophical core of the "Theory of Nature" is the only true and scientific philosophy of dialectical materialism.

Within the framework of this commonwealth (dialectical materialism + TN), the ideological crisis in the theory of modern physics has been resolved.

The fact of nature that "the content of elementary particles is 'pure' concrete matter of nature" is recognized. The matter of nature is clearly designated in the subject area of physics. The matter of nature is introduced into the bosom of physics as the main physical quantity. Thus, within the framework of physics, matter is actually recognized as the basis of nature. Physics has risen to its feet and turned to face nature. Further development of the idea, the fact that "the content of elementary particles is 'pure' concrete matter of

nature" led to the creation of the "Theory of Nature" itself, as a new dialectical-materialistic physics and cosmogony (cosmology). Within the framework of TN, about 40 fundamental problems of the foundations of physics and cosmology have been solved. Each solved fundamental problem is worthy of the Nobel Prize in physics. But the Nobel Committee has not noticed the "Theory of Nature" for 10 years. Each problem solved within the framework of TN is also a fundamental problem of the foundations of nature and the universe. The "Theory of Nature" is a scientific revolution in physics and cosmogony (cosmology). But the Party of Modern Physicists (PMP) is unable to understand this either. The only true, correct and accurate explanation for this phenomenon of mass misunderstanding is this: "PMP is the advanced scientific detachment ("scientific special forces") of the modern forces of reaction and obscurantism". And the non-recognition of TN and the scientific revolution in physics and cosmogony (cosmology) is a kind of special non-military operation (SNMO) of the PMP and the Party of Modern Reactionaries and Obscurantists (PMRO) against scientific and social progress. This special operation (SNMO) is also directed against the natural desire of people to know the truth, the truth about the structure and evolution of nature (the Universe). This special operation is directed against all progressive forces of society. This special operation is directed against the truths about nature already known within the framework of TN. This is a special operation (SNMO) of the united forces of the PMP and the PMRO against the future of all mankind. To be an obscurantist means to hinder scientific and social progress. The "Theory of Nature" is the most important link (step) in the scientific and social progress of modern society. TN is an event of world-historical significance and global scale. TN is a scientific Revolution in physics and cosmogony (cosmology). Any unbiased person will make these conclusions after a careful reading or even a quick look at the "Theory of Nature" [1, 2]. The author's book "Theory of Nature" is understandable to high school students who do not shy away from physics and mathematics.

-----

Within the framework of TN, the problem of nature itself has been solved [2]. Comprehensive answers have been given to the questions "What is nature?", "How does the evolution of nature occur?" [1, 2]. Within the framework of TN [1, 2], the algorithm of the evolution of nature and the algorithm of the evolution of the Universe have been cognized and discovered. This is an event of world-historical significance and scale. But the Party of Modern Physicists (PMP), its leadership, and the entire modern physical community do not notice this.

The party of modern physicists (PMP) is not capable of giving a correct and true objective assessment of the successes, achievements, accomplishments and solutions to fundamental problems within the framework of the "Theory of Nature". The forces of modern reaction and obscurantism really hinder scientific and social progress. And in their ranks, the party of modern physicists (PMP), the party of tyrants and assholes in fact, plays a significant role. But despite all the efforts, provocations, obstacles and barriers created by the PMP, despite the sabotage from the PMP, the "Theory of Nature" will break through this blockade and come to the consciousness of the conscious part of human society.

There is a persistent impression that members of the modern physical community, members of the PMP, the leadership of the PMP (this primarily applies to the modern bourgeois Russian Federation) cherish in their minds the idea that today they represent a collective physical brain in Russian society. But to me, as the author of the "Theory of Nature", it seems that this is not a physical brain, but a physical shit on a Russian scale. The fate of the "Theory of Nature", its non-recognition by the PMP, as well as the PMP's mouse-like fuss around the question of accomplishing a scientific Revolution in physics and cosmogony (cosmology) over the past 10 years, only confirms this conclusion.

But there is no doubt that the scientific Revolution in physics and cosmogony (cosmology) will gain its rightful right of citizenship. Evil and lies, implanted and preached by the PMP and the party of

modern reactionaries and obscurantists (PMRO), will be defeated. There should be no place for tyrants and assholes in science. The "Theory of Nature" will take its rightful place in the system of scientific knowledge. Truth will defeat lies! Truth will triumph! Truth is on the side of TN, and victory will be on the side of the "Theory of Nature"! The future belongs to the "Theory of Nature"!

The cause of the "Theory of Nature" is just! The enemy will be defeated! Victory will be for the "Theory of Nature", for the scientific Revolution in physics and cosmology!

With respect,

Robert Yusupov from Vladivostok, independent researcher, dialectical materialist, Marxist, communist

-----

## References

- 1). *R. Yusupov*. Theory of Nature (physics of nature, revolution in physics, critical notes on modern physics): monograph [in Russian] / R. A. Yusupov. Vladivostok: Publishing house of the Far Eastern Federal University, 2021. 325 p. ISBN 978-5-7444-4973-5. DOI <a href="https://doi.org/10.24866/7444-4973-5">https://doi.org/10.24866/7444-4973-5</a> // URL: <a href="https://philpapers.org/rec/YUSTON">https://philpapers.org/rec/YUSTON</a> (date accessed: 03.12.2024).
- 2). *R. Yusupov*. Nature as an objective reality <a href="https://philpapers.org/rec/YUSNAA">https://philpapers.org/rec/YUSNAA</a> (date accessed: 03.12.2024).
- 3). *R. Yusupov*. Announcement of the Scientific Revolution <a href="https://philpapers.org/rec/YUSAOT">https://philpapers.org/rec/YUSAOT</a> (date accessed: 03.12.2024).
- 4). Physical encyclopedic dictionary [in Russian] / Ch. ed. A. M. Prokhorov. Ed. Col. D. M. Alekseev, A. M. Bonch-Bruevich, A. S. Borovik-Romanov and others M.: Sov. Encyclopedia, 1983. 928 p.

5). F. Engels. Dialectics of Nature. P. 311-588. // KARL MARX FREDERICK ENGELS COLLECTED WORKS Volume 25 Engels 2010 Lawrence & Wishart Electric Book P. XXVI—750