

**VESELIN BOZHIKOV  
GANCHO GANEV  
TODOR TODOROV**

**translator  
Desislava Mineva**

# **ENERGY UNIVERSE**

**/Energetic Physics/**

**first edition**

**COEPA®**

**2015**

© Veselin Bozhikov  
© SPHERE, 2002-2015  
ISBN 978-954-9803-51-8

## CONTENTS

INTRODUCTION.....	
New Quantum Model.....	
Absolute and Relativity.....	
Fundamental Forces.....	
Energy Transformations.....	
Polarisation and Discretisation.....	
Components and Derivatives.....	
CONTACTS.....	

## Introduction

This book is published to make our ideas about the Energy Universe popular.

In this field in 2002 we started to publish articles on the site of the Research Laboratory Sphere : <http://research.zonebg.com/>

In the first article we present you with a quantum model, from which the corpuscular-wave properties of the quanta follow directly.

The model is applicable for all the detachments of the microcosm.

The acceptance and application of the model solve the recent problems connected with the double-natured character of the quanta.

In the second article, we go through the behavior of the pulsating quantum model in time-space. Using it and many other facts we prove that the relativity is inverse, turned backwards, to the one from the General Relativity Theory (GRT).

Onwards in the text, based on the model, we examine and clarify the transformation of the energy into motion and the transformation of the motion into energy with an ultimate speed in time-space.

In the end, we explore how energy quanta change in gravitational fields.

In the next article, we will discuss the behavior of the pulsating quantum model in the Absolute time-space.

Based on the Absolute time-space, we clarify the dependence of the NQM and the ultimate speed in it. We relate the NQM directly to the Absolute time-space. On this base, we take out the Fundamental forces that predetermine the behavior of the energy in time-space.

In the end we clarify that the NQM is a result of the Fundamental forces in the Universe.

In the next article we go through different variations of balance between the Fundamental forces in New Quantum Model.

We explore the possibilities from absolute and non absolute balance, and we relate them to reality. Based on the facts we exclude the irrelevant models.

On the base of the confirmed model, we make the conclusion that the Absolute entropy predetermines the development of the Universe.

In the next article we will discuss the NQM in the aspect of Fundamental forces (Absolute entropy and the Absolute gravity) and we will find out that the energy is polarized by them.

From here on we analyze the behavior of the polarized model in sharp interactions with extreme differences in time-space. In these conditions the change of the pulsation is not capable of taking the big difference and that leads to discretisation - decay of the energy.

Thanks to the Discretised Quantum Model (DQM) the fundamental characteristics of the matter find their logical explanation (mass, impulse, magnetic moment, charges). This is how matter and antimatter became understandable and via their extra discretisation we get a mechanism for the explanation of the mysterious phenomena of the microcosm.

Last but not least, using the DQM, familiar to us forces from nature, can be worked out only from the Absolute entropy and the Absolute gravity.

In the last article we go through the behavior of the Descretised Quantum Model in high energies.

We observe that in a situation of over discretisation, the model would be unstable, because of the fundamental AE-AG (Absolute Entropy - Absolute Gravity) unbalance in time-space.

As a result of the unbalance, in high energies the unstable Overdiscretised Quantum Model decays to more stable DQM.

In the end we clarify that in the microcosm it is not realistic to look for fundamental components (atomos) because all the microstructures, in their energy essence, are component-derivatives of reality.

Only the energy quantum can be defined as a fundamental component of the microcosm.

## New Quantum Model

According to the philosophy, the most correct answer is the most general one. And the truth is, the more we get into the technicalities of a specific detail, the more we limit ourselves to it and miss the others.

That is why, to clarify what energy is, we need to absolutely let go the thinking of materialism and to focus on the most general thing that characterizes it.

We will not use many words here or detailed discussions, but we will directly present the most general definition in relation to the energy which we had reached.

Energy is every Difference in time - space according to time - space itself.

Wherever we spot differences, we actually have the presence of energy.

If we try to give a more detailed definition of energy, we will get onto the limits of isolated cases, which will be crucial for our forward coming analyses.

Now, let us take a look at energy in the most general idea, as a difference in time-space.

Naturally, every difference is isolated (confined) in the dimensions. The energy quanta (called just quanta in the text), in their essence, are also limited in time-space.

Why, then, do the quanta reveal wave properties?

Undoubtedly, to answer that question we have to look at the conditions in which they reveal their properties.

Quanta exist in motion and their wave properties are naturally connected with it.

In every case of direct (spontaneous) registration, the quanta act like particles. Their wave properties are shown in cases of motion and are always connected to the parameter - wavelength.

What is wavelength actually?

In the aspect of the new definition of energy, this is the part from time-space in which a difference is observed. (The wavelength and the frequency are reciprocal and depend on the energy of the quanta).

Let us form a model in which energy, wavelength and time-

space find their places, and where the wave properties can be seen. (fig.1-1)

It is time for us to stop thinking in a way of material ideas and to start thinking in energetic way in relation with the case given to us.

It is no longer difficult to realize that to observe a wave activity of the quanta, the latter must have wave behavior in time-space.

Now let us imagine what the simplest wave behavior of such a model would be.

Of course the model should excite.

Let us look at the model of exciting (pulsing) quantum.

The basic model is the one of the pulsing quantum between two extreme positions in time-space. In the inner extreme, the quant is characterized with the smallest volume (taken from the difference in time-space) and the biggest concentration of energy. In the outer extreme, the volume of the difference is the biggest, but the concentration of the energy is the smallest. (fig.1-2 , fig.1-3)

The characteristics of this model are in direct correspondence to the ones we are familiar with from the real world.

The energy here defines the minimum and maximum volume of the difference and the frequency of the pulsations in time-space.

The parameter, which gives the space between two minimums and two maximums, equals the wavelength and the parameter that gives us the timing between them equals the period.

Let us describe the most basic movement in the difference (energy) in time-space.

$S=V.t$  - the distance travelled by the difference equals the speed multiplied by time.

Now we will take the case of one cycle (from inner through outer to inner extremes.)

The distance of the difference  $S=V.t_1$

Let us also quote the familiar physical formula for wavelength

$$\lambda = V/f = V.T$$

Now we will analyze it along with our case

$$S=V.t1$$

$$\lambda=V.T$$

Here  $t1=T$ , as we only look at it in one cycle (period). The speed of the motion of the difference (energy) is constant - the speed of light.

In conclusion we get

$$\lambda=V.T=V.t1=S$$

So, using only a mathematical approach, we get to the fact that the space in which the difference is seen equals the wavelength.

The model we analyzed gives us all the characteristics of the quanta and presents it as a detachment (particle) and constancy (wave) when it shows its wave characteristics - the pulsating difference in time-space.

It is time to take the model out of the book and place it in reality to check its accuracy. (Nothing can limit us from doing so but the limitations of our own mind).

What can be observed in the motion of the pulsing quanta?

We already mentioned the energy of the quantum defines the frequency of the pulsation and the minimum and maximum volume in time-space. When the so pulsing quantum moves with a constant speed (the speed of light) it makes a wave in time-space. We don't really have a concurrent wave in time-space, but we have a regular motion of the wave detachment with a given  $E...$

It is not difficult to imagine what happens when we simultaneously have a great number of quanta in time-space... it is possible to observe wave phenomenon that are known from experimental physics.

When we get into the details of the model, one can see that it doesn't contradict reality, it explains it.

(We leave detailed mathematical explanation to those who are

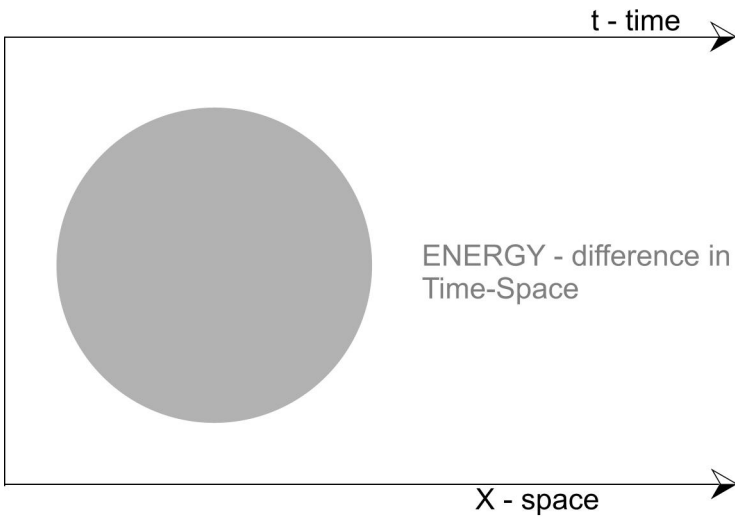


really interested. Once they personally go through the pulsating quantum model, they could realize the fundamental meaning of it).

The presented model solves a fundamental physical problem, but also creates a new one.

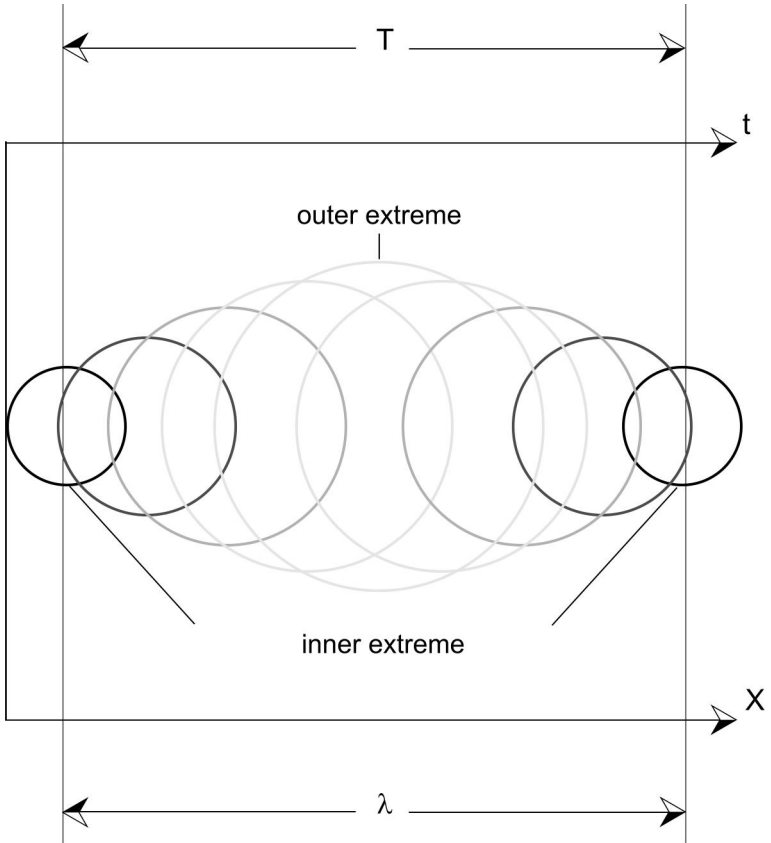
The main question that comes out is: Why do the quanta pulse?

The answer to that question will be given in the next article.



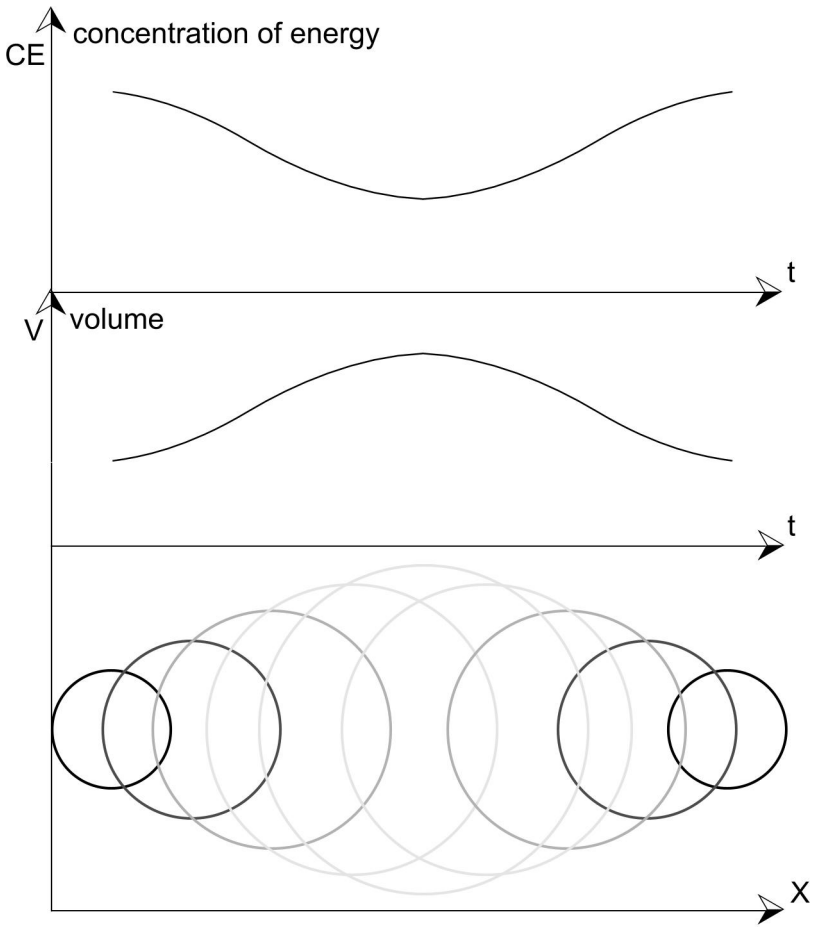
ENERGY - Difference in Time-Space

Fig. 1-1



Quantum Model - Pulsating Difference  
in Time-Space

Fig. 1-2



Concentration of Energy  
in Time-Space

Fig. 1-3

## Absolute and Relativity

Having introduced the NEW QUANTUM MODEL in the article of the same name, we should now carry on writing from where we had stopped, and this was with “Why do the quanta pulse?”

While clarifying this fundamental question from a very important value, we should beforehand ask each other - Where do the quanta pulse?

As we stated in the article before, the energy quanta in their essence are the difference in time-space compared to time-space itself. To relate to the reality (facts), we made the quantum have wave properties. So our exciting (pulsing) quantum moves with constant (ultimate) speed in time-space, makes a wave, and at the same time, it is a corpuscular with a defined maximum volume. This way the quantum has at the same time wave and corpuscular properties, which come out of the essence of the model. (fig.2-1)

Now we will have a closer look the behavior of this quantum model in time-space.

For example, our quant motions from point A to point B in space. (fig.2-2) The distance between these places is limited value  $X_{ab}$ . The pulsating quant (with a specific frequency according to its energy) will travel the distance  $X_{ab}$  with a constant speed  $C$  for time  $T_{ab}$ .

To make it simple we make the model in vacuum, and the distance  $X_{ab}$  is taken in a special way so it has a full number of wavelengths. So our quantum starts from point A and gets to point B in one and the same status of pulsation. (fig.2-1 , fig.2-2).

Now let's place another quantum at the same distance with two times the energy. This one differs from the first one and will have two times higher frequency and half the wavelength.

The result of the experiment will be identical. The quantum with two times more energy will travel the distance  $X_{ab}$ , with speed  $C$  for time  $T_{ab}$ .

The difference in the second experiment will be two times higher frequency of pulsation and half the wavelength in time-space. As we picked  $X_{ab}$  to be divisible to the wavelength of the first quantum, it will be divisible to the wavelength of the second one too. The last will also start from point A and will get to point B in one and

the same pulsation status.

If we set the next quantum with two times stronger energy to the one before and four times more powerful to the very first one, we will get identical result.

As the quanta have constant speed, not depending on their energy, they travel the distance  $X_{ab}$  for the time  $T_{ab}$  as  $X_{ab}=T_{ab}.C$ .

The objective result is that for all the different quanta, the distance  $X_{ab}$  and the time for which they travel  $T_{ab}$  is constant ( $X$  and  $T$  do not change). This is why there is no difference whether we explore if a specific quantum travels the distance  $X_{ab}$  for time  $T_{ab}$  or if for the time  $T_{ab}$  it travels the distance  $X_{ab}$ .

With the constant speed of the quanta, the axel of time doesn't differ from the axel of space in relation to their travel in time-space.

It is also clear that for all the quanta, time and space do not change and they are not dependant on the quantum energy (i.e. from the quanta themselves). That is why time and space are absolute! The dimensions do not depend on the quantum, but the different quanta have different behavior in time-space (dimensions) according to their energy.

If different quanta (with different energy) start parallel to one another and move synchronously in space, the result will be identical. Within the same time, they will travel the same distance.

Absolute is present in time-space, in which the relativity energy (quanta) always travels the same distance in the same time. Described in an easier way, in a very specific moment in time, the energy quanta are in a specific place in space and, inversely, they are at a specific place in space in a very specific moment in time.

Up until now we were analyzing the corpuscular behavior of the quanta, and the important thing for us was that the quanta are limited volumes of energy moving in time-space.

Now it is time to focus on the quanta behavior as waves. It is proven that proportionally to the energy of the quanta, their frequency (of the pulsations) in time-space increases. With the increasing of the frequency (of the pulsations), a decreasing of wavelengths in time-space occurs.

Dependence is clear to us, too. The bigger the energy of the quantum, the more movement (in all directions) through pulsations it makes. This way the pulsating quantum performs a complex of

two types of movements. One is with a constant (ultimate) speed in time-space directed in the direction of the travelling (where  $C$  vector is directing), and the other one is cyclic in all directions (where energy expands to its maximum volume) and from all directions (in contraction of the energy in minimum volume). (fig.2-4 , fig.2-5)

We also observe the dependence. Because of the ultimate speed, the forces that affect the quantum do not lead to a change of its speed in the motion direction in time-space, but lead to a change of the speed of its pulsations (frequency), i.e. the speed of cyclic motion in all directions.

In the absolute time-space there is an ultimate speed of motion of the difference. Because of that, when you transfer a moment of motion to the quantum, it cannot increase its speed towards the direction of the motion in time-space, but it does increase the speed of pulsation (cyclic motion in all directions).

In this case, the ultimate speed of motion is the only possible speed for the quanta, because even the least energy quanta move with a constant speed  $C$ .

If we didn't have an ultimate speed -  $C$  (according to the material logic), it would mean that the quanta can accelerate infinitely for the affecting forces.

The facts, though, prove that with real objects there are no infinite quantities. Because of that, there is an ultimate speed for motion of the energy (the difference) in time-space. In these conditions the quanta are relative (they change) in the absolute (not changing) time-space.

Now let us take a closer look at a more complex setting, in which the quanta are emitted from a moving system in the moment it gets to point A (fig.2-3).

From the moment of emission the quantum becomes independent from the moving system.

As the quantum speed does not depend on the speed of the emitter, the quantum will travel the distance  $X_{ab}$  for the same time  $T_{ab}$ , as in this case, when emitted from, but not moving toward, the AB emitter. It is also important that the speed ( $V$ ) with which the emitter of our quantum travels is of no importance. In all the cases, the speed of the quantum remains the same (ultimate)  $C$ .

The setting may be made more complex with different moving systems with different speed. In all the cases, because of the constant limit speed, the quanta will travel the same distance in the same amount of time. Therefore, the absolute of time-space is present and does not depend on the systems and their motion.

We have an increased interest in the relativity itself (the change) of the quantum in time-space.

For this purpose, we will take a closer look at the case of the moving system (according to AB) which emits a quantum in point A. Although the system moves with a speed  $V$ , the facts show us that the emitted quantum will not move with speed  $C+V$ . What happens with the moment of motion? Why does that do not lead to an increasing of the speed of the emitted quantum?

Many experiments prove that when there is a force that may affect the moving of the quanta (as it was with the matter) it affects their energy but not the speed of travel in time-space. In this case, because all the quanta move with ultimate speed, everything affecting their force leads to a change to their energy.

How does this happen?

Now we will analyze the behavior of the quantum in the moment of emission from the moving system. If that was possible (according to the matter logic), the speed of the system should be summed up with one of the emitted quantum. Because of the ultimate speed, this is not impossible with quanta. The speed in the direction of the motion in time-space cannot be increased above the ultimate.

As we made it clear it above, the moment of motion in this case leads to acceleration of the cyclic motion of the quantum in all directions by the increasing of its pulsation in time-space. This is how, by the increasing of the pulsations, the quantum gets the given motion, which is transformed into energy.

If the emitter is moved in a direction opposite to the emission, we take out a moment of motion from the emitted quantum (because of the kickback), which does not lead to a decreasing of the speed in the axel of travelling, but to the decreasing of the speed of pulsations in time-space. This way, with a decrease of the pulsations, the quantum loses energy which transforms in motion.



The information given here will sound improbable to those who think in terms of material ideas (because of the limits of their own ideas) but for those who think in terms of energy, the acceptance of the pulsing quantum model is just a simple conclusion.

From the essence of the model directly comes not only the corpuscular wave properties but also the phenomenon with the transformation of motion into energy and of energy into motion.

The new quantum model easily deals with the behavior of the quanta in the gravity fields. When the quanta move to the source of the gravity field, they do not accelerate in the direction of attraction, but accelerate the pulsations and, in this way, increase their energy. When the quantum moves in the opposite direction, they do not slow down in the direction of motion, but slow down their pulsations and, in this way, decrease their energy.

The validity of the pulsing model expands over the objects from the microcosm, but their detailed research will be done in another article.

The most important thing is for us to find the answer to the question about the inverse (reverse) relativity.

Why did Einstein make time-space relative?

The answer is given to us by history.

He was a scientist for the 19th century, born and raised with the mechanics of the great Newton. Until his last moment, he was not just looking for a way to change Newton's theory, which is obviously true for matter, but he was also looking for a way to apply to it the hated light, which was not obedient to the laws of the mechanics. Thus he was ready to make a lot of compromise (including to limit time and space) but not any that would break the law established by Newton.

So Einstein got to the paradox with the relativity of time-space. Instead of introducing relativity of matter and energy in the absolute time-space, Einstein introduced the relativity of the time-space as it relates to matter. According to him, it was not the energy and the matter that change nor the energy-matter processes, but instead time-space change according to the energy and the matter. In this way, the changes in the energy and the matter are explained.

Yes, it is true that Einstein introduced relativity of dimensions. He got to the calculation of the relativity of the measured, but all

this limits the development of future science.

When we present an infinite number of different time-space (for each quality detachment), we make the objects absolute (energetic and material).

In reality, we cannot divide time-space to smaller time-spaces - portions or fragments (any part of the time) as we can do with matter. Every single experiment to theoretically quant the time-space turns up impossible in reality (facts).

Time-space is one! It is indivisible and absolute! Relativity is a fact but it is inverse! In the real world, energy and matter change in time-space, not vice versa!

Of course, the relativity of the objects can be calculated mathematically by entering the relativity of the dimensions (time-space) as the great scientist did. What Einstein did is really tremendous, because he pointed out relativity as prime in importance. He was quite aware that this was only a temporary solution to the problem. Unfortunately, after him the majority of the scientists neither understood the General Relativity Theory (GRT) nor wanted to hear of another theory... they just believed in GRT. The firm belief in the science itself undoubtedly limits its development...

The best way to understand the paradox of reverse relativity is when we realize how we measure the objects in time-space.

The answer is through other objects. I.e. we measure some relativity (measurable ones) through other ones. It is quite normal in the process of the scientific development to accept in the first place that time-space is relative. Is it not measured with relative devices?

Later, after we fully realize the relativity of the objects, we get to the conclusion that from the stated, does not follow the relativity of time-space, but just the opposite.

Every difference in time-space, according to time-space itself, is energy.

Therefore, every differences between the objects (energy of matter ones) in time-space are a result of the energy.

According to this, every object is different (relative) in time-space. In other words, we will observe differences in objects and processes (energy of matter ones) according to their energy.

In simple wording, the objects and the processes change, not time-space.

If we were thinking materialistically, this would seem impossible. According to the materialists the objects are absolute, and as a result of the effect of the forces, they can only change their position in space, which happens for a specific time.

This is why Einstein was having a trouble with the speed of light, which remains constant in time-space and does not depend on the direction and the speed of the emitter (the forces). It is true that after the introduction of the separate complexes of time-space for each individual object, it is possible to mathematically calculate the relativity of the objects themselves, but this happens on the behalf of limitation of the dimensions.

The other great problem for the famous scientist was the gravity speed. He wanted to include the gravity interaction to his relativity theory, but he couldn't find a way because of the problem with the gravity speed (which was reckoned infinite). He played a trick there. Once he introduced time-space as relative, he decided to curve it as if it was affected by gravity; it is relative, isn't it? Then why not curved too?

There immediately comes the question about the speed of the curving of the time-space itself, which is deliberately avoided up until now. The analyzing of it brings a dead end to the finding of the solution of the problem of the gravity speed.

Einstein himself was aware that it wasn't the way things were in reality. Unfortunately, throughout his life, he was never able to find a better theory, and after him the firm believers of GRT can never accept the contestation of it.

To all of them we will say that, just like time-space, which has no components which are familiar to us, gravity has no found carrier. Because we have no carrier of interaction, we cannot solve the problem with its speed. As in time-space, we can only analyze gravity through relative objects (matter and energy ones) without really being able to make a carrier of the interaction stand out.

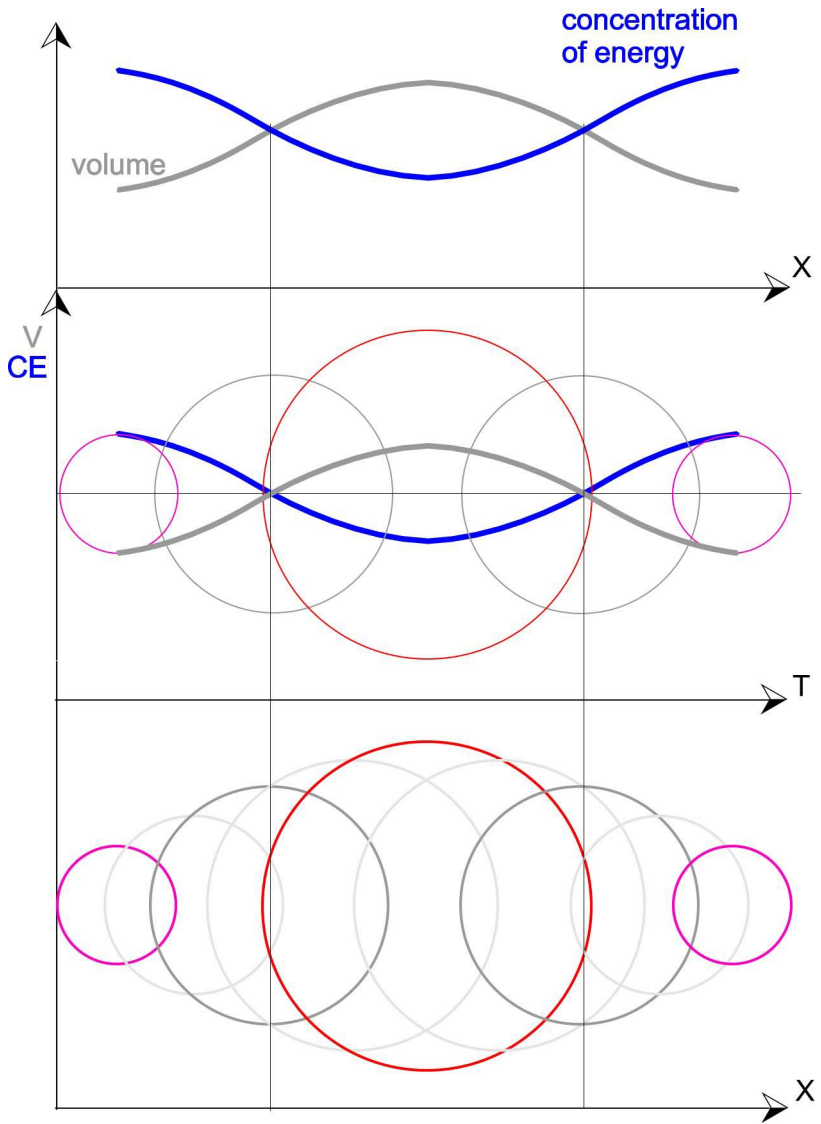
From now on we can carry on with the interactions, but we will stop here, because analyzing the latter will be done in another research.

In the end of our article we want to make sure that from the

energetic point of view there is no doubt that time-space is absolute and energy is relative in it.

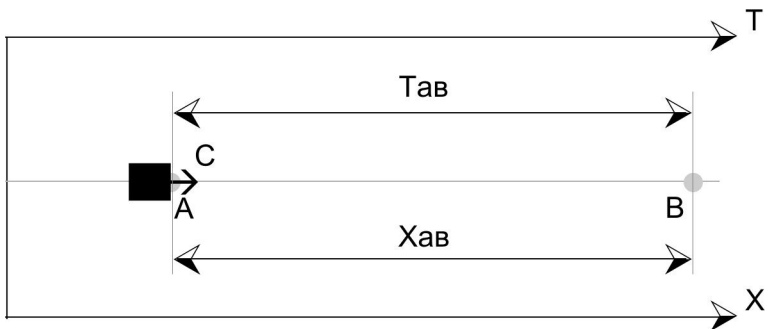
We would like to focus on micro particles and the matter, but before that we need to find out why the quanta pulse.

Actually, we are only a single step away from that.



Pulsation Status - Concentration of Energy and Volume in Time-Space

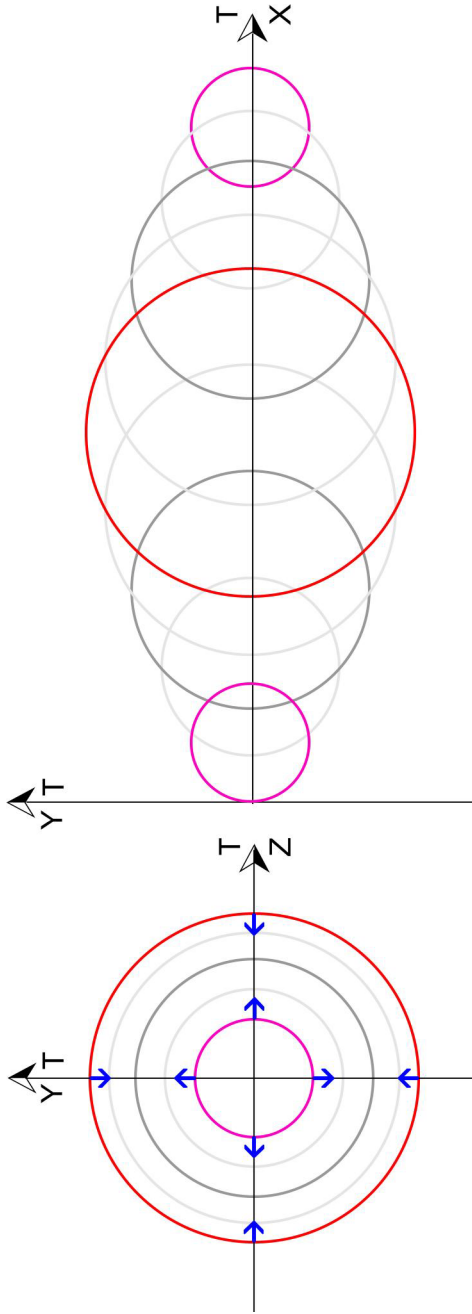
Fig. 2-1



Non Moving System  
Fig. 2-2



Moving System  
Fig. 2-3



Motion in/from all directions

Fig. 2-4

Motion in direction of travelling

Fig. 2-5

\* \* \*

Get the full book.

In the book "Energy Universe" the essential ideas of the Energetic Physics were briefly given.

A New Quantum Model is presented. It was made clear that the Universe is not material, but an energy derivative.

I.e. the energy is the base and the atomos is the energy quantum itself.

There are only two Fundamental forces in the Universe - the Absolute Entropy and the Absolute Gravity.

Everything in the real/physical world had been polarized by the Fundamental forces. The relativity is inverse, i.e. the energy and the energy derivative structures are relative in the Absolute Time-Space not vice versa. The Universe is not closed, but opened and a developing energetic system.

For requests:

<http://research.zonebg.com/en/pubs.htm>  
[sferagroup@gmail.com](mailto:sferagroup@gmail.com)





















































