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Électronisme

A New Physics of the Universe

Essay - Ongoing study

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# ÉLECTRONISME

A new physics of the Universe

The whole theory

The electron is the only fundamental particle of the universe.

All electrons are similar, containing an unknown material which vibrates  
continuously.

They fill the space, creating it with all of its objects

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## Introduction - Summary

I know nothing. I believe I know.

Électronisme is the Physics of the Universe  
With space and all the stars

It is also the Theory of Everything, sought for a very long time

The whole theory

The Electron is the fundamental particle of the Universe.

All electrons are similar, containing an unknown material which vibrates continuously.

They fill space, creating it, with all of its objects.

Vibrations cause their movements in space and in all the matters objects of this space.

Vibrations cause electrons to move in space affecting all the matters and objects of space.

They thus meet other free electrons or already components of materials.

Contacts can be followed by new movements or links.

This results in the formation or modification of materials and the creation of all objects in space.

The operating rules are simple and immutable

All actions are carried out by electrons, anywhere, any time, in the same way, always following contact between them.

Thus, no action is possible remotely, in the absence of a contact.

This theory is scientific, according to the criteria of Karl Popper.

This ongoing study is based on the knowledge accumulated by scientists as a result of all their observations and experiments, according to what I have the possibility to know.

They all are accepted and I did not invent anything.

Except for a different explanation for the majority of known phenomena.

As currently described in 2016, the theory is complete.

But we do not yet understand all the phenomena that create all that we see in the Universe.

Further checks and complementary explanations need to be performed and elaborated by scientists.

## Features of Studies with Électronisme

Électronisme theory is based on a single element, the electron which we regard as known and accepted by all scholars with all its features, invariable in all places and circumstances.

To know all phenomena and objects on Earth and elsewhere in the Universe, we know that we need each time, as much as possible, to find the electrons with their immutable rules of operation.

Between matter that we observe and electrons, its basic constituents, there are a very high number of compounds created by chance, different from each other, often difficult to understand.

The entire system of the Universe is essentially random.

All actions are performed at random, without any relation between them.

Electrons' operating rules are immutable and few, but no specific rules apply to the establishment of compounds, materials and all objects in space which in turn are random objects using other objects already created randomly.

Last century, the physicist Edward Lorentz (1917-2008) showed that chaos is predictable but the chance based systems are not at all predictable.

Thus mathematics studies by leading physicists, Newton, Einstein, Maxwell, Dirac, Feynman and others were long and difficult when they were interested in the elements observed, which are the results of random phenomena.

Their theories and explanations are difficult to understand and some have to be changed.

The study of the Universe and its physics remained very marked by the difficulties of these studies and the requirement that seems now not necessary to know mathematics to dare to try to understand.

Despite the creation of a new paradigm, the Électronisme will not change much the practical physics of scientists, researchers and technicians, for their studies, current research and technologies are carried out mainly by trial and error processes and actual observations.

## The Universe

Energy, light, heat, time and other phenomena, to which we are accustomed, do not exist in the Universe.

From the beginning of their creation, humans have observed the workings of the Universe through the events and objects around them. Mass, light, heat, motion and energy, have always been known and were part of themselves.

They attached great importance to these elements that seemed to regulate their existence:

The Earth and all objects. They called it Mass.

The Sun and fire. It was energy.

Day and night demonstrated light.

Men then created the material, social and intellectual habits that have evolved over time.

We still use today, despite the work of all scientists, mass, energy and other items, as they were defined precisely from the beginning of mankind. We apparently manipulate them according to rules that correspond to what we, as living beings, are expecting, because that's what we have always used to get .

We incorporate in our thoughts elements that seem to naturally exist without feeling the need to know what they are, such as light and energy.

But we do not know what they are, and this prevents us from understanding many other phenomena.

## Current state of research for Électronisme, 2016

Recent reasoning leads us to think that the Universe system is much more random than we had imagined from the beginning of our study.

The creation of compounds and material objects is realised by the complete rules by which electrons operate. We must add, in our description of the connections of electrons to create compounds and materials, the circumstances and the time needed for all the vibrating electrons, participating to this creation to realise these contacts and connections.

Time does not exist and the operations that always happen instantly, do so only when the actual contact between electrons allow it. A very long time (on a human scale) of motion and "unsuccessful" contacts can take place until the realisation of all or most of the necessary connections. This time is very variable depending on the importance of random compounds and previous links also randomly established.

This explains all the time necessary for the realisation of materials and objects in space, and the almost eternal existence of the Universe.

## Summary following the chapters of the Essay

1 - The Universe existed since a non-start, almost an eternity ago. It is a reality as strong as that of our existence.

Current cosmology is not grounded in science, accepting as it does certain forms or situations whose reality is only a belief.

The Universe is created by the existence of electrons that form the Ether of space and create all objects and materials, visible or not.

Time does not physically exist. It is a tool created by men and for them. And therefore Einstein's Space-time does not exist either.

It is an active system without conscience, in which everything is directed by chance. Therefore all the objects in space, stars and others in a cycle of "life" of several billion years are created by chance.

2 - Electrons are the only elementary particles. They are known to all physicists. We use their properties and we have added the vibrations that were guessed for a long time and start to be observed.

They are only a vibrating mass constituting the entire mass of the Universe.

Energy, as active force, does not exist, neither participating in particles, nor free in space.

Thermic agitation is a consequence of actions. It is felt as heat by living beings.

The equation Einstein  $E = mc^2$  is explained differently than usual.

3 - In the Ether of space, electrons vibrate and move continuously. They can meet what causes changes in their movements or their connections to each other. In billions of years they create materials and all objects in space.

We explain thus the creation of compounds, in particular, atoms and molecules of a great variety of forms.

They create at the same time:

- Gravity which remains inside objects at all levels of their structure. It explains the creation of objects in space and galaxies and very extended clusters.

- The gravitic clouds, or atmospheres of objects and new links and objects, within the limits amongst which magnisme acts, instead of magnetic fields that do not exist.

- Space disturbances that we know only as waves, a phenomenon linked to the capability of our observation materials.

- Electricity, which for the living beings on Earth, is the apparent force:

- - Thus is explained the creation, in billions of years, all space objects, grouped into larger structures, nebulae, planets and bright stars that become black holes, quasars, pulsars and many other very different objects to each other, created from the same material. These rules also explain almost eternity of the universe.

4 - Wave disturbances move throughout the space Ether. They then appear as waves that living beings use in different ways, light and vision in particular, which we explain fully, including the ripples on a pond when a stone is thrown on it and a tsunami wave that has similar origin.

Light exists therefore only for living beings who have learned to use it. It allows us to observe, understand and use many phenomena of the Universe.

5 - Air and water are quasi-materials within the atmosphere of our planet and probably other objects in our galaxy and elsewhere.

Air corresponds to gravitic clouds with winds of particles that exist around all objects.

Water is created from the mass of fissile materials that are processed at increased temperature of the material on the planet. It created the oceans and now probably continue to create atmospheric rivers and deep water tables inside the Earth.

Nuclear energy seems poorly explained and could be used in trying to directly produce electricity in networks.

Electricity is the possibility, under certain conditions, of binding electrons in contact, in all objects of the Universe. It always exists, without features or special provisions in these elements. There is no need for any force or energy for the electrons to bind together.

6 - Life is a phenomenon which we do not yet understand. Living beings are created as all matters in the Universe with the feature "Life" added to them. All living things are surrounded by an envelope that participates in their functioning.

They all have more or less apparent and developed nervous systems, from the colonies of unicellular individuals to the brain in so called superior beings.

This system can be described as a fairly large network of specialised proteins whose permanent successive modifications are stimulated by information transmitted by disturbances of the internal space of the organisms.

The creation and evolution and social life of all individuals is the normal consequence of these functions.

So... "It is conventionally agreed to admit that only human beings have spirit.

But what do we know of other non-human persons, to whom we recognise a certain level of intelligence as we understand it, and those who seem not to need spirit to exist?

Similar reactions of some people to external phenomena depend on acquired reflexes, sometimes imposed by the leaders of the people, for the good of their community or under this pretext. This can include physical and mental behaviour such as military obedience, and exclusive beliefs, usually religious. "

7 - Électronisme theory must find its place in the knowledge of the reality of the

Universe and needs many additional complementary studies to be conducted by physicists.

An overview will follow of the important issues of the dissemination of scientific information and of some theories different from Électronisme.

An overview will follow of the mathematics that have been used for three centuries to control Physics research, regardless of the random nature of all observed phenomena and values.

Everything is explicable by the theory of Électronisme.

Some phenomena are described in our Essay. Thousands more need additional experiments or further studies to fully understand their meaning.

## CHAPTER 1

### THE UNIVERSE

- 1,1 - The Reality of the Universe,
- 1,2 - The Ether of the space,
- 1,3 - Time, 1,4 - Space Time,
- 1,5 - The Age of the Universe,
- 1,6 - Gravity,
- 1,7 - Active system,
- 1,8 - Random system and hysteresis
- 1,9 - Disorder and entropy,

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#### **1,1 - The Reality of the Universe**

For us living beings, the Universe is as strong a reality as that of our very existence.

We do not know the reason for its existence, nor for ours.

What we know of it gives us no reason to think there could be one or more other universes that we do not know.

The reflections, on this, are philosophical, often guided by irrational beliefs so strongly held as to be unquestionable.

The study of the Universe is made by human beings, for themselves.

There is nothing, no one anywhere in the Universe that could do it for us and that we could understand.

Some physicists question the very reality of the Universe by asking themselves why something exists while a void could be in its place. Philosophers of science also raise questions about the value of what we do not understand and what we do not know that we do not know.

In the early 20th century, the study of the Universe was troubled by cosmology, speculation that deals with the knowledge of the Universe and is scientific only if one takes into account only facts and actions actually known and proven.

Before this century, cosmology was not considered a science until Einstein gives a shape to the Universe based on his theory of relativity, whose mathematical study is difficult to understand and accept.

Einstein was a physicist, not mathematician and his thoughts on the physical phenomena are more valuable than his mathematical development.

Many physicists continue to explain it as if no one had really understood it. This may be true.

His theories of relativity were based on poorly known elements in his time:

- The relativity of Galileo transposed, in parts of non-breakable space, very physical observations of terrestrial events.

- The Newton gravitational attraction in which he himself did not believe.

See chapter III.

Its average value on our planet is very variable depending on locations and is very different in all other objects in space.

In the last century its value has changed more than 300 times.

- The speed of light considered as invariable and insurmountable without reason since nobody knew what it was.

- Maxwell's equations for non-existent phenomena, never explained.

The way we interpret facts and observations depends on the knowledge we have of them.

There was the discovery of the atom and then the discovery of its components; that of "geo" and subsequently "helio" "centrism"; the gravitational attraction of masses noted from the time of Aristotle and elaborated by Newton who did not believe in it himself; then Einstein's relativity, the Big Bang and quantum mechanics, that no one could ever understand, explained its creators and Richard Feynman.

Nowadays, in the beginning of the 21st century, with improvements in observational technics, astronomers discover other objects and phenomena which lead them to take an interest in the theories of the last century. But it seems that astrophysicists, and mainly cosmologists remain wedded to ideas never actually proved, such as fundamental Universe constants, the expansion of the Universe and the supposed existence of unknown or exotic matter and energy called 'black'.

In astronomy, many scientists consider that 85 percent of the Universe would consist of unknown material whose characteristics are difficult to know and understand, despite all the current research.

For some scientists, an invisible energy fills all space. Its manifestations are supposed to be very many. Others find in free space, a force called vacuum energy, related to an alleged expansion of the Universe.

This expansion and vacuum energy are hard to admit, and experts recognise that they do not yet understand them fully.

With constantly improving equipment, astrophysicists observe and explain that new stars are created with the remains of space objects, destroyed at end of their life and observed particularly in nebulae. The clouds of these residues are invisible to us, as we explain in this chapter and the 4th.

## 1,2 - The space Ether

Human beings have always thought of an Ether of space which would support the stars, gravitational waves and photons. But scientists of recent centuries imagined it with difficulty and did not find a substance that would be free of all its components and elements supported by it. The idea has been accepted for a more or less long time by many scholars including Descartes, Newton, Einstein and Poincaré.

Space is everywhere, in what we call space, of course, up to our home gate and in all material objects and in open spaces around and in all matters.

In this space, the systems of the objects are gathered into various structures, galaxies, clusters, and more, without observable or sensitive boundaries between these structures and the immense areas that seem empty.

Since the 17th century, many researches were directed to examine a ‘substance Ether’ linked to the objects it would carry. The matter should have been constituted of atoms, like all other matters on our planet, and probably elsewhere. This was the system conceived by Pascal and later Michelson and Morley.

The researchers never found Ether.

Newton, before forming his idea on gravitational attraction, thought that the Ether could be a ‘kind of very subtle spirit that penetrates all solid bodies’. We could say this about our Ether.

Other explanations indicate that the matter composing Ether has no influence on objects and therefore does not exist. This is a flawed conclusion: the fact that something has no apparent action for us doesn’t imply that it does not exist.

Currently, despite all our knowledge, it seems that physicists fail to establish a theory synthesising the ideas of the Ether and vacuum of space.

Einstein considered Ether in 1905 in his studies of gravitation and relativity, then abandoned the idea. But he revisited it, and sketched a history of the concept of Ether in his lecture in Leiden in 1920. The lecture ended with this paragraph: "A space without Ether is unconceivable... This Ether should not however be conceived as being endowed with the property that characterises ponderable media."

In Annex 5 of his book on relativity, he quotes Descartes and Kant and vindicates the first against the second, denying the existence of vacuum, that is to say, he specifies, the existence of a space without a “field”. He notes in the preface to the ninth edition of his book: "Physical objects are not in space, but they have a spatial extent. Thus, the concept of ‘empty space’ loses its meaning".

With our theory, we propose that space exists by the presence of elements that fill it entirely and create it.

**This is at the same time the creation of the Universe itself.**

Thus space consists of one volume, which is space itself and the Universe. Its elements, the electrons of the Ether, are the "universal" medium.

They vibrate constantly with a variable volume in two dimensions, which we explain in the next chapter.

The elements of space seem to bear all the free space bodies and made objects, which, as objects, keep their volume in space.

They are not held together, they just vibrate side by side and the movement of expansion of their vibrations makes them move away from each other; they can also meet, and incite each other to move.

They do not leave a gap between them, because nothingness cannot exist in the Universe, it would lead it to its non-existence.

In this environment, all bodies, free from all connections with others, of any quality or size, move without limit, except the meeting of other elements.

Other free electrons of Ether and other bodies resulting of previous meetings and their connections form inevitably more complex compounds which, by chance, at every possible contact and connection, in a time of billions of billions years, create the objects that we know.

Thus these objects of space, stars and planets in their galaxies and clusters are **the results of the disorder of electrons of the space Ether.**

**There is no purpose in these creations.**

Objects are always special, different from others, **because somewhere by chance, one or many contacts between electrons were somewhat dissimilar...**

### **1,3 - Time**

There was much discussion of Augustine phrases evoking time... "What then is time? If no one asks me, I know; but if you ask me, and I undertake to explain, I find that I do not know. I can boldly say that I still know that if nothing had happened, there would be no past time; if nothing should happen there would be no time to come, and that if nothing was happening, there would be no present time ... "

And also: "Time is not a knowledge but a thought."

Time does not exist as a material concept with a tangible presence or substance that would have an observable action.

We perceive it when a new event takes place, different from another, previous or not, depending on how we observe it. The two events exist in different times, in

what we call a space of time, indefinite period, like all other events in the Universe, near or far.

They were carried out at different times, without need for an element that separates or collects in a determined time. Multiple events can happen in a certain space of time, but no material element of time is needed to connect them.

If no new event occurs, there is no time that would be determined by the observer. In men everyday life on Earth, in the Universe, new events occur continuously and as they always have an impact on each other, an apparent time always exists.

### **It is the observer who creates time.**

This was not the case at the very beginning of the Universe. Thus, we cannot estimate a duration for periods without events and without a time frame that could have set the date for the beginning.

Eternity exists in these conditions. We'll never know its duration.

According to Électronisme, the only element acting is the electron. It consists of an unknown mass of material whose volume increases instantaneously and then reduces in the same way, increases again, and so on without interruption.

The action is instantaneous, without "time" for implementation.

With our human appreciation of time, we can consider that the operations follow one another, instant expansion of an electron, instant return to the minimum volume will not be realised at the same time and there may be a very short time of change of action.

There is no "time" determined between the two objects, an expanded and then contracted electron, which we see as new while it is the same original Mass.

We could observe four **instantaneous** operations and situations: the expansion of mass, its pause, a return to the original volume, its pause. These cumulative instantaneous operations take "a certain time" according to our human observations or reasonings.

With the very sophisticated equipment now used by researchers, we can observe and record intermediate stages, in which two objects are confused into one "time."

We get a **virtual or stealth image of an object that does not exist** and that physicists consider a trace or footprint of new objects such as those discovered and used by quantum mechanics and listed in the **Standard Model**.

They are observed only during a very short "time" and are of a very varied quality, without ever showing a precise mode of action or participation in actual physical events.

This would be the case for particules like a boson, the Higgs boson, for example, which is described only as traces of an unknown thing whose form we do not know since it disappears as soon as it is created and we have never seen it. This would be an *intermediate* object shown by very or too precise specific equipment that observes objects that are very difficult to distinguish from each other.

The trace is found only in very small quantities in tons of accumulated information.

If it really was the vector of a "Higgs field" which would give its mass to the elements in the Universe, it should exist in very large quantity.

This could also be the case of **neutrinos** which change their "flavour", without anybody having so far found the reason for their existence and variations. Again, if it exists, it is surprising to find so little of it.

According to our current knowledge, living beings on Earth are alone in the Universe to use time for their material and social life.

Men gave human measures to time and our most accurate clocks are based on vibrations, "almost" stable, of well defined crystals. Current research is directed to the use of vibration of atoms in place of those of the crystals composed of atoms. We are getting near to the electrons' vibrations.

In objects, all compound bodies vibrate a bit differently than electrons and maintain an agitation which can be very high, especially in stars. This agitation corresponds to movements at varying speeds of free compounds or particles; it does not affect the movement of electrons' vibrations; so there is no significant difference in time compared to that of a space devoid of objects.

Thus to establish our distance to the stars, astronomers have never doubted the immutability of the "natural" speed of light.

We will see in chapter IV that it is based on the speed of movement of electrons' vibrations. It is an *accumulation of time observed* for the "instantaneous" creation of successive objects.

## 1,4 - Space-time

In the Universe and its objects, for example on Earth, the assessment of four dimensions, three of space and one of time, is logical to allow us, living beings, to completely locate objects and events.

All are located in a point specified by its distance to some determined material bases at a specific time in their existences and ours.

Space-time has always existed in the lives of human beings. It is an unconscious and necessary **unconscious social phenomenon** that has no particular scientific value.

The dimensions, considered as tools for locating objects and events, exist only by sentient beings and for them. We have on Earth the matter that allows us to create these benchmarks.

Without them, the dimensions and distances cannot exist.

In the Universe, we have no reference or location of objects and their distances, except using our system of references.

Particularities of these dimensions, or extra dimensions that may be difficult to understand, are therefore meaningless for us in the Universe.

Symmetry, or another particular orientation of movements of particles and various bodies, cannot be assessed except with our references.

The curvature of space-time is a creation of Einstein, to try to incorporate the gravitational attraction of masses. This deformation is incomprehensible in an isotropic volume without structure. The graphs are misleading, showing deformed volumes, by an attraction pulling "down" without the consequences of 'counter-deformations

Similarly, geodesic means nothing in the vacuum of space.

No astronomer has ever considered this curvature of space in his observations of heavens and the calculations of distance to galaxies and other objects.

## **1,5 - The Age of the Universe**

We cannot imagine a beginning to the Universe.

For it to begin at a definite time that we would know, it would have to be created by something in a void that at the same time would not be nothing; and, for the supporters of space expansion, may still exist, but not necessarily.

According to our theory, the Universe has been existing since a non-start, which happened an extremely long time ago, an almost infinite number of billions of **human years**.

In chapter III, we explain the creating of electrons compounds, the first stage being not too frequent, the binding of elements of the Ether of space with others,

free or already participant of particles and various bodies. As soon as they are linked together, electrons, taking part in the space Ether, are not free anymore but their volumes, though slightly modified, are still a participant in the system.

We may think that all the elements that make up the compounds were originally participants of the space Ether.

At the very beginning of the no-start of the Universe, billions of billions years ago, a first singularity occurred: electrons tied together and that was the beginning of the creation of the matters, objects and the Universe as we know it.

These singularities have not been more frequent in the time that followed, and that continues at present, but they continue to happen, until they constitute all the objects existing in space. They are still hardly known and the astronomers and astrophysicists do not estimate the quantities of objects by numbers, or by mass or volume, compared to the volume of the Universe which is unknown to us.

But they try to estimate the volume occupied by the objects compared to the volume of the whole space, considering it as homogeneous and isotropic.

Recent observation (end of 2013) of a "large quasar group" which could be the largest structure ever seen in the entire Universe, shows that space is not what we thought it was.

The volume of objects, particles and constituted matters, increases regularly from the first links of the Ether electron. We could draw two cosmological pieces of information.

- A knowledge, in the "limited" volume of "observable" Universe, of the average rhythm of the links of the Ether electrons, and an estimate of the number of electrons in all the already created objects, could give us the age of the Universe, in billions of billions years, with an accuracy of more or less some tens of billions. An almost eternity.

- An estimate of the volume of space void of objects, could allow us to calculate the time for «filling» it, that means the number in billions of billions years needed until all the free electrons of the space Ether are changed into matter and objects. This would amount to another almost eternity, but in this case, it could take a bit more time at the end!

- And after? We have plenty of time to think about that! May be a Big Bang...

## **1,6 - Gravity**

As explained above and later in the essay, space objects are in perpetual creation and modification. Their shape and their number is constantly increasing. They live a few billion years, then are replaced by others that are built with previous remains. We will see that intricate bonds are indestructible, which might suggest that

as measuring the progress of time, **objects, stars, galaxies and other clusters gradually become larger.**

Objects in space could be created just like those we know on Earth and in the solar system and beyond with astronomical observations.

**The gravitational attraction of masses, attributed to Newton, does not exist.** It has never been properly explained. We do not see any justification for it. Nothing explains why a mass would attract another.

To understand its presence in the space of current cosmology, we must go back to Aristotle and the Persian astronomer Al-Khwarizmi. Philosophers - Physicists "knew" that a force of attraction existed between the celestial bodies, for "standing them where they were." The studies were difficult, evolving with general understanding of astronomical systems.

The idea was acquired, indisputable. Such as the movement of the planets, the existence of light and heat from the sun. The stars 'held' themselves in the space because a link existed between them. The observed shifts of planets took it into account and there was no need to explain the basis of the system.

Copernicus, Kepler, Galileo continued the study, from a general system to another without ever questioning this ill-defined attraction that tied all these objects by their Mass. Then Descartes and Newton in the 17th century, show the same ideas, Newton adding earth gravity to this system.

Newton explains the gravitational pull in his work but he does not admit this attraction, from one body to another, even very far from each other, without a material connection. He would have been the first scientist to refuse it, but he found nothing to replace the idea accepted by all.

He writes this it but nobody will consider it.

Einstein at the turn of the nineteenth and twentieth centuries, took up the idea with the theories of relativity. His mathematical studies are difficult, probably because he is not certain of the reality of gravitational waves. He will discuss them for the rest of his life.

The idea that Newton and Einstein lacked could be that of the internal gravity of objects created by the normal operation of electrons as explained by Électro-nisme. See chapter III.

We will see that in all compounds, materials and objects that form, a gravity is established by the normal functioning of electrons vibrations : reducing the volume of the bound electrons from their volume when they are separated, without loss of mass, in the compound creates a different density which is manifested by an inner attraction which is a manifestation of gravity.

The gravity in all compounds and objects is always accompanied by gravitic clouds, or particle winds, more or less bounded, participating to the creating of extremely various structures.

In space, all objects and their groupings, form the same type of gravity, with very different various phenomena, according to thermic agitation, sizes and qualities of the matters evolving to create new objects.

Thus, it is difficult to foresee all the events in space. The disappearances and regrouping of stellar and galactic systems are not very well known, but they all follow the electrons functioning rules, applying, on our planet and everywhere, to the smallest elements that are the constituents of the Ether and the matters of their objects.

The same rules inform the rays of compounds, creating thermic agitation, very rarely, leaving the gravitic clouds, forming relatively marked limits around all masses of objects and a space devoid of objects.

It is very difficult, if not impossible, to imagine without using the concept of infinite, "the immense magnitude" of the Universe, and therefore also its shape and limits, if they exist.

It has no form, if it is not limited in a material sense. Therefore it has no outside that would be another Universe or nothingness. Or else we must admit another theory, that of the existence of a significant number or infinite number of Universes.

It cannot be flat or convex or even as a Moebius ring, which may require, according to the belief, an exterior and a limit...

Cosmologists speak of its flatness without indicating what is the thickness of the flat sheet in the thickness of which our entire observable Universe would be found...

## **1,7 - Active system, without conscience**

It is an active system, in the sense that its constituent particles constantly vibrate and create objects **without a reason**, in perpetual change and renewal in other forms. They are random and we cannot predict or track their permanent changes. We understand them with the help of the concept of chance, as we shall study at a later stage.

The elements always act in the same way wherever they are, regardless of environmental conditions. No conscience, provision or particular directive is possible or necessary, despite the immensity of the number of all relevant factors concerned.

Such a system can only work because the actors are all similar, and follow simple functioning rules

The occurrence of the events and their quality depends solely on three phenomena:

- The environment in which they take place, the result of all the above facts, or initial conditions that may be specified for a particular phenomenon.

- The state of the elements in contact. Similar elements in identical environments always give the same results.

Thus compounds are created and similar materials, for example crystals, in well determined systems. The phenomena are realised sooner or later depending on the available items, according to their qualities and quantities.

- From chance. See next section.

**Mathematics** have no character that could indicate a need for an origin in the Universe. This is the subject of philosophical development without any connection with the physical phenomena.

The essentially random creation of all the materials and objects in the Universe does not allow the use of mathematical tools to predict their development.

Mathematics do not give a concrete reality to useful concepts and virtual elements to the reasoning as the directions of charges, antimatter or cosmological constants.

Everything can be observed in the Universe, but aesthetics and beauty are very specific sensations to living beings on Earth. Appreciation varies with them.

They can never be used to set universal rules or developments.

## **1,8 - Random system and hysteresis**

Chance is involved in the entire functioning of the Universe system.

After Poincaré and other physicists in the early 20th century, Edward Lorenz studied chaos and established some laws, - when possible - with overly complicated mathematical developments.

The chaos reflects initial conditions.

They do not exist in the random system of the Universe.

The big difference between chaos and randomness of the Universe is that the Universe's system does not accept "the hidden order in apparent disorder"

(Wikipedia), or attractors with mandatory rules or fractals that are never complete.

The Universe has no initial basis, except that its existence is due to the vibrating electrons whose actions are simple and immutable, creating random objects that constitute the basis of the following ones.

In their studies, physicists, aided by mathematics, have always tried to reflect the chaotic randomness, with the initial received knowledge of their time. But each had his own. The information used also varied and it seems that no one has given what they were so much chaotic.

All creations of compounds, their modifications and transformations in materials and objects are the result of phenomena created by all similar electrons, according to immutable rules of operation "in all places and at any time" throughout the Universe.

Under these conditions, all events should be predictable.

This is not possible because the actions are carried out with completely random contacts of elements, free electrons or electron compounds, and their relative positions. Created or modified compounds are different from each other and unpredictable. Variations from one element to another in a specific area may be relatively small, which may allow the creation of almost homogeneous matter.

Chaos is a particular system that would limit the action of chance by bringing observations to a prior event that would be the beginning of the studied system. This does not change much for the Universe because the number of elements is so important that the return to a starting position is virtually impossible.

We might think that the random system of the Universe is peculiar since all operations are performed by electrons with very precise rules that would be "the" preconditions. But the actions are carried out "at random" encounters between elements whose qualities are not specified because they are the result of random previous operations.

This particular randomness of the Universe does not allow more forecasts than chaos or complete chance.

Studies have been made, with Laplace determinism and chaos theory, Poincaré studies, reflections such as the butterfly wing of Edward Lorenz in the 20th century. Excessively complicated mathematical models have been used to try to understand what we do not see and predict... chance.

In meteorology, results depend on the importance of the mass of information gathered and used very quickly with complicated mathematical models.

Mathematical and computer simulations are therefore very difficult if not impossible for both the study of phenomena that have already taken place and for forecasting in space the creation of stars and other events.

Biologists and physiologists are currently discovering that randomness is very important in the creation and life of cells of living beings, and their very different molecules, elements of microscopic, nano-metric and even smaller dimensions. That is to say that we are still obliged to take into account some factors that we do not know, and give random results that we are trying to predict.

It is then natural to think that the phenomenon exists at all levels for all elements of smaller dimensions up to that of the electron, or in the other direction, towards larger space objects.

Because of random conditions for the formation of compounds, the objects created are all different from each other. Astronomers have never observed two planets, stars or galaxies that are identical in space. On Earth, the mountains or sets of the "same" rock or ore, are of varied qualities and varied forms according to their different places of origin. Marble cutters use granite in different colours according to their original quarry and coal, iron or copper, for example, are never identical from one region to another on our planet.

The frequency of the process and quality of results are always random for us.

**No «decision» of action is instantaneous.** During its movement, an electron, free or already participating in a compound, can meet another, similar, but in a different phase of its vibrations, and if conditions allow them to form a link, this action is carried out immediately.

They can also not act because the quality of contact prevents them. Several or very numerous successive contacts may not lead to entanglement and an event. when it occurs, it may have happened over a certain period of time that varies depending on the compounds, objects and environment.

This time lag between the first meeting that could have enabled the action to take place and the moment when it occurs is **the hysteresis**.

It is variable according to the quality and importance of the involved elements. It is perceptible by us directly, on our planet, in numerous phenomena such as electricity, and the creation time for some compounds and objects. Special cases for us are the creation and development of living beings.

Like time, the hysteresis is a phenomenon observed by men. It has no character linked to the Universe, space or objects.

It is a consequence of the fundamental rules of electron operations.

**Its duration is essentially variable** at all operating levels of the electrons even at a subatomic level that we cannot directly observe.

Without hysteresis, the Universe could not have existed. From its appearance, it would have immediately be fully created and destroyed, in strict application of the rules of operation of the electron, despite the notion of vastness, inseparable from that of Universe.

## **1,9 - Disorder and entropy**

From the non-beginning of the Universe, electrons bound together, formed a wide variety of compounds, thus creating what seems to us **disorder**.

Since then, normal vibrations affect the movement of free elements and all bodies in this disorder, and create new objects in space.

**Disorder** describes the disturbances that change the state of a system. In any non inert one, random changes are always disturbances, which cannot be eliminated at random, except if they are transferred to another system, separate but contiguous.

In an isolated or uniquely existing system, such as the Universe, disturbances cannot be deleted. They only move and change constantly, randomly, by vibration.

**Entropy** refers to the overall distribution of disturbances within a medium. If the system is isolated, vibration can only break, regroup and scatter evenly small faults whose number will increase. This is an increase of entropy.

This new entropy does not happen immediately in a medium with the immensity of the Universe, especially considering that the modifications of the defects never stop and remain connected to their areas, with a continuous distribution in larger environments.

In space, there are more or less great regions with more or less large entropies, such as those which seem empty of objects, and others which include varying amounts of stars, galaxies and other items. They vary continuously.

As disorder is related to the importance of compounds and materials, it seems natural to think that it is more important in clusters of galaxies and clusters of other space objects in areas considered empty.

## CHAPTER II

### ELECTRONS

- 2,1 - Their properties,
- 2,2 - Vibrations,
- 2,3 - Energy, 2,4 - Mass, 2,5 -  $E = Mc^2$ ,
- 2,6 - Actions, Motion,
- 2,7 - Rays and radiations,
- 2,8 - Thermic agitation

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#### **2,1 - The properties of the electron**

In the study of Électronisme, smaller elements than electrons have never been required which would be, for example, its components or participate in the creation of matter or any other phenomenon or event.

In classical contemporary physics, nothing suggests that electrons would not be paramount. It's a fact that seems accepted by all scientists.

Nothing can be created out of nothing.

No particles of any size, described either by its mass or energy, depending on the needs of researchers and technicians, cannot be created from nothing, neither in space nor in the material composing objects.

In many physicists current texts, the word "electron" is imprecisely used to account for the activities of particles and compounds, of all sizes, or with variable power charges.

The properties of electrons are hard to find among the definitions of theoretical, quantum or classical, contemporary physics and in common use. Some are very specific, others difficult to understand.

For this study, we retain the **qualities considered and accepted by the vast majority of scientists.**

**Electrons are all similar and consist of a constantly vibrating unknown material.**

Their **lifespan** is "stable", which means they are indestructible.

Their **mass** is determined:  $9.109\ 382\ 6 \times 10^{-31}$  kg.

This is a **quantum of matter**, according to the precise definition of the word: «finite and determined quantity»

In compounds, matters and objects, the number of quanta of mass are always equal to the number of electrons. The differences between the compounds come from the number of electrons and the quality of entanglement and structures created.

## 2,2 - The vibrations

To this description of their known characteristics must be added that electrons seem **vibrate constantly**, always in the same way. Their movements of vibrations occur at a precise frequency, invariable and the same for everyone in any place and time.

A "vibration" is made up of four different **instantaneous** operations: expansion, stop, contraction, stop.

They occur one after the other because **they can be take place only if the previous action has taken place**.

No time (in our ordinary use of the word) exists between the four operations of vibration, but they take place in a very small, almost imperceptible duration (on a human scale), however they always take place in a sequence and time span.

**Hendrik Lorentz and Thomson in the late 19th century**, had considered the electron as the **elementary** particle of atoms and Lorentz made a mathematical study of vibration which he attributed to them, and he connected them to electromagnetism, of which Maxwell was establishing the equations.

In recent years, the improvement of observation equipment and the ingenuity of researchers have allowed them to observe and analyse vibrations in certain objects.

Physicists point to the fact that they could be associated with molecular bonds, or connected to energy and thermic agitation.

In late 2009, other scientists were able to "see the tremor frequencies" of particles. Their characteristics would be quite acceptable for the electrons and their compounds.

In early 2011, researchers discovered that slightly different vibrations of apparently similar odour molecules change their qualities, and their perception by living beings.

Scientists have also observed the vibrations of all the crystals and very numerous compounds, without explaining their origin or their causes.

Moreover, the term **frequency** is often mentioned while describing particles and their functioning, without any indication of the action or quality of this fre-

quency. Physicists know that a movement takes place again and again more or less fast, but they do not know what is it.

In quantum mechanics, particles have spin, that is to say they would turn on themselves at a certain speed. "Quantum" physicists doubt its veracity because the rotation would give to the peripheral portion of the particle a greater speed than that of light, considered unsurpassable.

The spin could be an appearance of vibrations.

In a recent text (early 2000) by « laboratoire de Physique des Lasers, Atomes et Molécules, www-phlam. univ-lille1 » (Laboratory Physics Lasers, Atoms and Molecules, of the University of Lille in France) we read:

"Spin is a purely quantum "object" whose physical understanding remains, currently, to be completed. Despite this, we can consider the reality of spin to be proven and it is surprising that the rules concerning it are relatively simple. In particular, spin can take only specific «integer» or «half-integer» values."

They could be compared to the movement of vibration, which we attribute to electrons, with maximum and minimum volumes. They would explain the qualities of the spins, which would merge with the movements of electron vibrations.

For the constitution of matter, electrons are "materially" connected to others, which is incompatible with their possible rotation.

Because of vibrations, the size of the electron radius is not accurate. We retain the average figure, according to physicists, of  $10^{-18}$  meter, i.e. a billionth of a millionth of a millimetre.

The speed of light observed by scientists, allows us to calculate the frequency of vibration, and we obtain  $10^{15}$  Hz, a figure consistent with current observations.

At the expansion, the radius length is doubled, thereby increasing the volume by approximately eight times.

**These values are to be checked by physicists.**

We, living beings on Earth, do not (yet) have the means to observe all actions. We know them only because the observed objects are different, never knowing how many and which actions were taken to modify them.

Especially since all actions are performed at random, as we explained in chapter I.

## **2,3 - Energy**

### **Energy does not exist in the Universe**

It is a phenomenon that exists **only by human beings and for them.**

What we call force or energy is a concept that is particularly difficult to understand and of which we know only the performed action.

From immemorial time, men have linked the motion of objects on Earth and in space to a force or energy that carried out the operation. Later, with the development of certain techniques, ideas have evolved, the concept of energy has been completed by the concept of electricity, a force that could be adapted to the needs of living beings.

We, humans, cannot imagine what we call energy, while we use it for many of our activities and we attribute it some functions in space and its objects.

As if it had always been there and it was completely part of our lives. Thus, no one thought to try to understand what it is materially.

We studied the laws of its use, while we did not know at all how it works, both for the movement of the stars, and on Earth to spin an electric motor or many other systems. We established mathematical rules useful for technicians.

But no one knows what is its real form and how it works.

Physicists and other scientists have never observed a particular material element that would act in or on a small or large object, solid or of no fixed form, which would make it mobile or would be able to make it do a job, by transmitting it the force that might be needed.

This is because the material reality of the energy does not exist.

Electron operating rules contain nothing for actions other than bonds of electrons between them.

The conditions for creating these connections are explained in the following chapter.

***This apparent force "available" everywhere, in all matter, is electricity.***

It is only apparent and does not correspond to any element or special quality of electrons, except that in their contacts they can bond and form other real objects that shape their future.

This availability is tempered by chance. The connections electrons are realised in specific conditions of contact, as explained in the following chapter.

These conditions of presence and functioning of electrons, confirm that the electric, magnetic and electromagnetic fields do not exist, neither in the materials of objects in space, or in space itself.

Space contains no free "natural" or black energy. For it to exist, it would need a support that would be a particle or similar object, which has never been observed.

Electricity on Earth is partially explained in chapter V.

Electrons and all their compounds have no "**mathematical**" **direction of operation**.

This is understandable for a free body in space without dimension, without reference points, and so for us without orientation.

In the 19th century, physicists have given direction to certain elements, particularly those which seemed to contribute to electrical phenomena. They were called electrons, and accepted as the primordial elements still sketchily defined.

Early in the next century, the direction of the particles has been mathematically confirmed, and used more, without special consequence to practical physics.

But, theoretically and practically, physicists continued to manipulate the free electrons or participants to objects, regardless of what they would repel each other without ever binding if they all had the same "mathematical" direction.

The direction attributed to electrons was necessary to mathematical studies, especially those of Quantum Mechanics and to explain the apparent repulsion of the electrons and nuclei in atoms, such as they were explained at that time.

It has no other purpose and does not explain anything, neither for free electrons nor in atoms as they are currently analysed.

It has no influence on a mathematical direction, which should affect the electron compounds with all the same negative direction.

In early 2011, scientists suggested that the explanation of these facts had not yet been found.

In this study, as in all Électronisme physics, we do not consider the direction of electron charge and of all objects that are made of electrons.

**It is never necessary or even simply useful** in reasoning and explanations of all the observations made to date.

## **2,4 - Mass**

**Mass** is the constituent substance of the electron.

We do not know what it is. It is inconceivable for the human mind at the current state of our knowledge

As the electron is indestructible, its substance is indestructible too. It constantly exists.

It is in-traversable and unbreakable.

The quality of withdrawal and expansion movements shows that the matter of this "thing" is very special and inconceivable to the human mind in the present state of our knowledge.

Together, electrons form **the entire mass of the Universe objects**.

We did not find a reason for the attraction of a mass by another, as determined by the "gravitational mass attraction", proposed by Newton who did not believe himself. See next chapter.

If it was, why would it not bound all the electrons together?

## 2,5 - $E = Mc^2$

Einstein's formula  $E = mc^2$  is subjective and spectacular.

In the early 20th century, it was of its time! Many physicists were searching for a formula to connect mass and energy as they were known and studied at that time. It's Einstein's formula which was accepted by scientists and media. In his time, this formula had some psychological and political importance, at least in the scientific community.

For the general public, it had also a poetic valour. Comparing a grain of sand to a ray of sunshine!

Einstein's equation implies that mass and energy can be substituted for one another, in situations that are not specified. It is used to estimate the amount of energy that appears when a little quantity of mass seems to have disappeared.

The coefficient " $c^2$ " is relatively very large—it is the square of the speed of light—to show that a little mass corresponds to a lot of energy. It is a human judgement that has no meaning in the scientific field.

Reading the documentation, we have found no example of real change into mass of a specific quantity of energy or vice versa.

Some explanations point to specific units of energy, the Hiroshima bomb for example or a ton of TNT, to measure the result of explosions. These units however are not particularly accurate!

## 2,6 - Actions - Motions

The free electrons of the Ether of space move randomly in the environment they create, encouraged by their vibrations and meeting other objects.

One of the two following phenomena then occur, **a change in their movement or a binding with another**.

**These are the only two possible actions** by electrons across space and the materials of the objects.

**There is nothing else.**

In this section we study the motion.

**The creation of compounds will be the matter of the next chapter.**

The **free electrons of the Ether** have no reason to move.

They are close to each other, and their own vibrations incite them to move a little, or give them an impulse for movement in a certain direction, that nothing can change, or stop, except the meeting of another object.

The prompted displacement is rectilinear and unlimited, without need for special forces that would be called momentum or inertia.

When electrons move, they can meet other free ones or constituents of matters and objects. The displacements of the two elements which meet are then modified, based on their participation in compounds.

We will see in the next chapter that the connections, that sometimes occur at these meetings, are always accompanied by an increase in thermic agitation. This phenomenon stems from the normal rules of operation of the electrons. The created compound, larger than electrons that have met, create more opportunities for meetings.

We saw in chapter I that the Universe operating system is random. It has no general operating rules alongside those of electrons. All connections are made at random, as much the meetings themselves than the environment in which they are realised.

These movements of particles and free compounds, by their own vibrations, and their sending back after meetings, at the same time realise a new **distribution of elements that create disorder.**

Under certain conditions, the newly created compounds are distributed with all objects of the disorder.

It is a constant balancing, in areas of variable dimensions without precise limits, constantly moving.

Thus, in the free areas between the atoms and molecules organised in materials, free elements spread and eventually make these materials evolve.

## **2,7 - Rays and radiation**

**Radiation and rays** are terms that refer to all objects, material or not, that irradiate from a centre to a wide range of distances, depending on the quality of the "radiated" elements and the density of objects present in the environments traversed by them.

Moving away from the centre, the volume of radiated elements does not change, and as the crossing area expands, the encounters with other bodies are progressively less numerous.

In the physics of the Universe, all rays, in space and in objects are movements, of different bodies, dragged, during their contacts with each other, by the expansion movements of the electrons which compose them. They cause more or less electron bonds with increased **thermic agitation**, which is nothing but the general movement of these elements.

**Thermic agitation is only the movement of these elements.**

This explains why the most simple bodies, free electrons and primary compounds are the fastest. This is the case for X and gamma rays and other radiation.

These rays are stopped and "absorbed" differently from one another by materials encountered. The absorption means that they lose their independence, they bind to other compounds, creating new compounds with new increased thermic agitation.

Plasmas are created by an increased number of encounters and electron bonds in compounds. These compounds grow depending on electrons that bind to them which leads to other contacts and an **increase in thermic agitation**.

This phenomenon is inevitable.

It exists in all matter and objects, in stars for example and all other objects even very small.

It is activated since the beginning of the formation of these objects in the nebulae and other structures in space. This explains their development, in billions years until their destruction forming other objects. We studied them in chapter II1.

During the contraction movement of vibrations, close elements occupy the place left vacant by electrons or compounds that retract.

**They seem to be attracted**, which is not correct: there is only the expansion of neighbouring electrons.

In all the events that take place in the matter that we know and its objects, their expansion and contraction movements that are side by side and simultaneous can be interpreted in two different ways, either as an expansion-repulsion or as a contraction-attraction.

Objects and phenomena difficult to understand that we are trying to explain in the next chapter have been called magnetism and magnetic fields.

## 2,8 - Thermic agitation

**Vibrations** and **thermic agitation** are phenomena which are very different from each other.

The vibrations of electrons are permanent and unchanging movements of their constituting matter.

Those of the compounds are the resulting vibrations of their constituents, depending on the quality of the connections. Atoms, molecules, crystals and other bodies of our constituted matter, vibrate in these conditions.

They begin to be observed and studied.

**Thermic agitation**, in a specific area, designates the average state of the-radiation-movement of elements which cause contacts, sometimes followed by links with new radiation.

The quality of movement depends on the overall vibration of the compounds.

In the various matters and in space, the transfers of "heat", whether natural or forced, are produced by radiation, which create in turn electron entanglements directly (that is conduction), or with the participation of intermediate elements (convection).

**Thermic agitation is measured by temperature**, the unit of which is the kelvin. With the same kind of graduation, we use on Earth Celsius degrees or other measurements.

**In space at zero kelvin, the vibration of electrons takes place normally.**

The temperature of zero kelvin could be that of space without any activity except that of electron vibrations.

The temperature is currently about 2.85 kelvins, in the free space between galaxies. It shows the average level, in this space, of thermic agitation imparted by the electron bonds and the creation of objects inside galaxies and in their environment.

The recorded radio-metrics of spots with different temperatures in some areas of space could correspond to disturbances creating waves in space, probably during electron intricacies of WHIM (See chapter I).

There is no reason why these temperatures should be due to a "fossil background radiation" that could have remained attached to elements of its time, or that these waves of space with a "radiometric" frequency register a space temperature at a specific moment in the evolution of the Universe. It was and is still, it seems, the concept of their discoverers, though they have received the Nobel Prize.

We cannot imagine the visible, physical consequences of temperatures of one or some billions of degrees kelvin in the stars or other objects in space. These values are an assessment of thermal agitation unrelated to heat, explained below.

**Heat is the human perception of thermic agitation.**

Henri Poincaré stated this idea.

For all living beings, it is the result, perceptible or not, of actions due to thermic agitation, in their bodies. Burning, for them, is a modification of certain constituents of the cells by unusual electron bindings. New compounds are created, sometimes unwanted and often irreversible, for example in the case of burned cells or tissue—a phenomenon that can have serious consequences on the life of cells, tissues and living beings themselves.

This is particularly the case for contacts of living beings with radioactive particles from nuclear reactors and in radiotherapy.

## Chapter III

### ELECTRONS TO STARS

- 3,1 - Electrons' contacts,
- 3,2 - Entanglements, 3,3 - Gravity, 3,4 - Gravitic clouds,
- 3,5 - Magnism, 3,6 - Disturbances & Waves,
- 3,7 - Rays & Thermic Agitation, 3,8 - Matter, 3,8,a - Nanoscience,
- 3,8,b - Electrons & matter,
- 3,8,c - Atoms, 3,8,d - Molecules and Matters, 3,8,e - The Death of objects,
- 3,9 - The Creation of space objects, 3,9,a - Space Observations, 3,9,b - Galaxies,
- 3,10 - The Electron's Cycle

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#### 3,1 - Electrons' contacts

In the previous chapter, we saw that the only two possible actions by electrons, throughout space and in the objects matters, are a modification of their movement and their binding with one another.

In this chapter, we focus on the electron bonds to create compounds and the matters of all objects in space.

**Contacts** of free **electrons** or electrons already participating in compounds, cause sometimes, randomly, **connections** that modify compounds or create new ones. Without consciousness in the Universe, these actions cannot be planned or controlled. They must be **automatic**.

They therefore always take place, according to precise operative modes, that do not depend either on particular circumstances, or on previous phenomena, but **only on their intrinsic qualities and their strict operating rules**, leading always to the same precise actions, in any situation.

**These actions are realised always on a primordial level, since the electrons are the only elements that act and create the bindings.**

One **must remember** that the electron is a particle which measures  $10^{-18}$  meter medium radius, that is to say, **a millionth of a billionth of a millimetre** and that all objects in the Universe are exclusively composed of electrons.

The average atom, as presently described since early 2015 by current physics, measures  $10^{-10}$  meters, that is to say, it is a hundred million times larger than an electron.

**The properties of electrons, free or already combined with others, are never modified.** A free compound or atomic nucleus, whether it is formed of two, two hundred or two hundred thousands electrons retains all the characteristics of electrons.

Electrons are never merged: their masses are not confused. **Quanta of matter remain always individualised** in all the complex structures they form.

Because of their vibrations, electrons do not easily connect to one another. To do this, they must be forced to stay together after their contact.

In these circumstances, the best mode of connection is **their physical entanglement**, which is the status of closely entangled things.

Its implementation requires specific physical characteristics for electrons: it is necessary that their external structure allows a sufficient contact under certain conditions of their vibrations.

If the movement of "contiguous" electrons occurs at the same time in their vibration cycle, entanglement occurs.

This phenomenon takes place only when a **contact** of a certain quality exists.

They could be of two kinds:

- Hard rigid encounters: The vibration movements of the two electrons are in different phases of volume, maximum and minimum. They cannot bind and seem repelled, in different ways, depending on motion speed and direction of their contacts

- Soft encounters take place when the two electrons are in the same phase of their vibrations, with either maximum or minimum volume; they vibrate side by side and an entanglement is likely to occur.

Our way of explaining human time, to the first chapter of this essay, allows us to think that there may be intermediary contacts that would create more contact opportunities.

The precise state of the movement of electrons in contacts is always random and conditions permitting interactions are infrequent, at least in the material that we know on Earth.

It is always the electrons that carry out the operations in the space free of objects and in the materials of objects.

These actions are classified as electric, electricity being the phenomenon that makes the connections, while the electrons do not contain any force or "energy" that would be responsible to perform it.

In these materials, "useful" contact of electrons already combined with others, is not easily realised because their movements are slower.

Contacts may become useful with a certain time of successive contacts without effect. Thus the creation of certain materials may require successive movements accelerated by other contacts, creating an increase of thermic agitation. This explains the need to supply heat for some syntheses or to use catalysis, processes which are explained later in this chapter.

All creation of materials and objects is always very random, with very slow results that are sometimes perceptible by us by the hysteresis.

**They could explain the almost eternity of the Universe.**

### **3,2 - Entanglements**

Because of their vibrations, electrons keep permanently their ball shape, with variable diameter, minimum and maximum.

The state of electrons determines their connections.

Each electron accepts only a small number of bonds in that they are spherical, and of the same average volume, despite the variations due to vibration.

Since **Kepler and Gregory**, in the 17th century, many physicists and vegetable growers were interested in the volume of piles of oranges in displays...

The number to remember for oranges and electrons that touch each other is 12, around a thirteenth one, with some margins due to wilting of citrus fruits or volume changes and the entanglement of electrons.

Each electron may not be surrounded and firmly entangled, by more than 12 others, whatever the circumstances.

**The intricacies are irreversible.**

When the action is possible, it always takes place. No device or conscious program exists in the Universe that could delay or prevent it.

A new action can take place immediately after, but it is absolutely not related to the previous.

No component, free or participant to another object in any matter whatsoever, can backtrack to restore the previous situation. The only new changes are other linkages which swell or bind the compound to another.

### 3,3 - Gravity

When their intricacy takes place, the **electrons** bound to apparently form only an object, **can not "physically" develop fully** during the expansion, therefore the volume of compounds is smaller than the sum of volumes of components.

This reduction is refers to the volume of the compound, without any modification in the characteristics of the electrons themselves. Its **mass** does not change and corresponds to the total masses of its components.

Relative to the volume, it is therefore increased, forming a **contraction** of the mass by itself, like an internal attraction.

**That is gravity.**

**It is adapted to the compound in which it is formed.**

This compound is always part of a greater compound which also has its gravity.

All bodies and objects show therefore a common gravity, resulting from that of all its components.

**Its "strength"** is proportional to the amount of electrons; it is relatively larger with the links between "graves" or heavy compounds, having a bigger amount of electrons.

**Gravitation** was studied in the 17th century by Newton, who resumed the work of Galilee and Kepler. It also worked practically on the idea of the first observers of space, of a force that held together the stars in the firmament.

Despite all his research, observations and reflections, Newton found no explanation for this phenomenon and the phenomenon of falling of bodies. He then proposed a gravitational attraction that would link all bodies by their own mass. This approach was understandable because the studies he was undertaking were all performed on space objects within our galaxy. The scientists of the time did not distinguish between the space of the galaxy and of the Universe. All known objects were bound by the gravities of their galaxies.

But it was risky to generalise to the entire space of the Universe still not well known.

At the same time, he wrote that it could not exist: "I restore to physics that thing "prohibited" since Aristotle: "instantaneous remote» action. And he sent a letter to Richard Bentley in 1692: "Whether gravity is innate, inherent and essential to matter, so that a body could act upon another at a distance through a vacuum, without mediation of other things, by which and through which their action and force can be communicated from one to the other is to me an absurdity that I believe no man, having the ability to reason competently in philosophical matters, could ever be guilty of". At the same time, he implicitly confirmed the existence of the Ether of space, which at that time, was misunderstood but was not questioned.

Physicists at the end of the 17th century did not easily accept his ideas. It took almost thirty years in order that, in France and Germany, Newton's works were recognised, but not always accepted.

**It is amazing** that currently physicists and commentators relate only very rarely these doubts of Newton, while hard evidence of the gravitational attraction of the masses has not yet been found.

The findings, beginning of 2016, of Ligo and Virgo interferometers, are not evidence.

Two centuries later, Einstein took up the idea, which leads him to invent what he called the curvature of space by the mass and energy of objects. Which has never been observed.

It is very difficult to imagine such a "curvature" in a limited volume or in any space, and imagine the counter-bends and other distortions.

But it seems that until the end of his life he did not accept the idea of the attraction of a mass by another.

Currently, in the early 21st century, physicists still take into account the gravitational attraction of the masses, despite the negative results of all searches for a possible vector. Some scientists have come to regard it as a fundamental constant with a value based on that of certain places on Earth as it is essentially variable from one place to another.

Two centuries later, Einstein took up the idea, which leads him to invent what he called the curvature of space by the mass and energy of objects. Which has never been observed.

It is very difficult to imagine such a "curvature" in a limited volume or in any space, and imagine the counter-bends and other distortions.

No scientist has ever found a justification for an attraction between the galaxies and other space objects.

As mentioned in the previous chapter, why this attraction away from a mass by another did it not apply between electrons that are only mass?

It has been observed that the strength and limit of gravity on our planet varies from one place to another in the atmosphere depending on the place, due to the quality of nearby materials.

It has never been possible to find a precise figure for the average force of gravity on our planet. It is not fixed, even if the variations are not very important.

In the space of objects, a particle, or other moving body may encounter an electron, free **or already participant of a compound**.

There is entanglement or new displacement.

If there is new movement rays are able to:

- Either stay inside, immediately meeting other elements. They acquire greater importance, increasing its mass and gravity.
- Or move outwards in the freer space, with contacts faster or slower, other particles and compounds, forming gravitic clouds.

### 3,4 - Gravitic clouds

Rays can head outside, towards free space, where they meet a variety of compounds, whose amount reduces with distance.

When contacts take place with these objects, they react like anywhere else, by repelling or bonding, modifying compounds and creating new radiation particles and small objects **more or less interrelated**.

Around the basic compound, is created an **accumulation of small compounds** which form **one or more fluctuating clouds**.

The compound and its clouds are separated or treated as such by the fact that they form different objects.

This separation is not an envelope but it is a **natural limit created by the rays tangent to one or the other object**.

This explains the limits of objects in space, star, planet, into each other around other galaxies and star clusters.

These limits are not regular because the electron bonds always take place from their random contacts.

These limits are not completely sealed. Thus in interstellar space galaxies, and in the said empty space of object between galaxies, one can find electrons and more or less important compounds, which can be the basis of new objects, stars and galaxies.

Can also move around so-called cosmic rays, gamma or X.

A "smoothing" of such limits never occurs; the particles and radiation, moving between objects bind with others where they are, at random, regardless of the forms of existing "limits".

In these areas, physicists, technicians and researchers in Nanoscience and technology are faced with unforeseen difficulties which lead them to think that the atom, and other compounds, are of very different shapes and actions than compounds in a ball shape, which was assumed in physics for nearly a century.

The outer cloud decreases and disappears with distance. As long as it exists, it remains attached to the base body, depending on their respective masses and activity of radiation, corresponding to the thermic agitation. It is maintained and continuously renewed by the rays which come from the basic compound and particles of normal space, coming from varied more or less distant objects.

**This cloud can be qualified as gravitic.**

**Gravitic clouds** vary according to the average temperature of the surrounding medium. Thus small compounds have no procession particles forming gravitic clouds. They themselves have no substantial gravity and remain free independent elements.

These elements are difficult to quantify and **similar compounds may have different gravitic clouds** according to their environment. Which further increases the complexity of the components of materials.

All other compounds or objects from a certain level up according to the number of electrons within them, to the largest bodies in space, galaxies and their clusters are surrounded by atmospheres that are their gravitic clouds and are always linked to the main body with their changing limits which depend on the density of elements in the surrounding medium.

These atmospheres are formed of particles of various compounds, elements from key objects and varying with developments and actions in the main objects near or distant.

They are of great importance in shaping planetary orbits around their star, and in the shape of galaxies as covered below and in chapter I.

According to the objects and circumstances, mainly their level of thermic agitation, the gravitic clouds, even of small objects can take great importance and clouds, neighbours in space, can intermingle and merge into one into another, resulting in more or less strong bonds between objects which form the cloud.

These are **gravitic links**.

They concern all bodies, compounds and objects such as, for example, the accretion of elements within the nebulae to form stars and other objects, to mergers of galaxies and at our level in the matter of our planet, **small electron compounds, atoms** and the formation of very numerous and massive molecules or conglomerates of different materials.

In some cases, the gravitic link may facilitate the **entanglement** of the electrons of the compounds of gravitic clouds.

This is the principle of **catalysis**: two compounds, which naturally get near each other with difficulty, can bind "gravitically" at the same time to another; thus

they get close enough and electrons can be entangled. Nothing changes for the "catalyst" which remains linked to the new compound formed gravitationally from the previous two. This phenomenon, which we, living beings on Earth, voluntarily use, could be of **very common application** in the natural changes of all compounds of matters of space objects.

### 3,5 - Magnism

We have just seen that the gravity and constituents radiation create a quasi envelope around all objects and materials, at different levels.

They can touch, thus forming more voluminous bodies or be separated from the other by a more or less large space.

Between different materials and objects, some areas are established which can be disrupted by radiation from objects. Observations are often difficult both to know the origin of radiation than the reasons and results of actions.

Historically scholars have regarded them as **electrical, magnetic or electromagnetic phenomena**. In the 19th century Maxwell theorised them with mathematical equations, without explanation.

Électronisme theory states that there is never attraction of an electron or any other element by another.

**Magnetism that describes this phenomenon, does not therefore exist.**

Magnetic rocks and the magnetisation we find on Earth are not yet explained.

A recent study by laser specialists Australian researchers, Dr. Cyril and Vladlen Shvedov Hnatovsky led us to think that the phenomena they discovered and described, could guide our study of magnetism. They explain that radiation in the atmosphere near objects, could carry small particles along, which are therefore considered attracted by others.

Their theory can be supplemented by recent observations and particularly by the fact that the attraction or repulsion of objects still involve only light elements, for short distances, in the atmosphere.

With the latest scientific observations, we discover that these phenomena are not restricted to physical objects we perceive directly. Inside the objects, materials are created by many different bodies, with their gravity clouds more or less entangled, and other compounds that fit into the spaces between these clouds.

Thus, there are many areas, more or less visible, between materials and objects with surface and interfaces manifestations **within** all objects, quite similar to those we easily observe outside.

We call *magnisme* **all manifestations of matter in these fringe areas between all compounds and objects**. Many are not directly perceivable by us and enhance the randomness of all the operations of electrons in materials and objects.

These are mainly the following events:

- Adhesions, surface tension and capillary action.
- Static electricity and other electrical and electronic phenomena studied with semiconductors and superconductivity.

Current research in Nanoscience and technology make us discover some features that are of great importance in achieving artificial phenomena necessary for our activities as living beings on Earth.

It is remarkable that superconductivity at low temperature, manifests itself especially with materials including many different atoms which probably contain more free areas sensitive to magnisme.

**The ‘magnic’ area** of Earth, other planets and stars, corresponds to the limits of the atmosphere, with special areas such as:

- The limit of winds of the Earth in those of our star, which creates, as it is observed, a protection belt against some cosmic radiation.
- The areas between the atmosphere and outer materials of our globe, especially maritime areas and mountainous masses, with consequences for weather observations and the use of compasses and sextants for navigation.
- The creation of clouds, tornadoes and cyclones, wet and dry.
- The possible influence of wind particles and groupings of objects in galaxies and other structures.

This would explain how **stars and their planets and other space objects are organised into galaxies and other clusters, by the actions of gravity as explained in our theory**.

And we could **attribute to magnisme the maintenance and evolution of these structures**.

### **3,6 - Disturbances and Waves**

In some cases, compounds or areas of materials can be relatively well limited and subject to particular actions. This is the case of electrons disturbances in the limited space thereof.

We have seen that when electrons bind and form compounds, there is a reduced volume relative to that of the separated electrons.

This **reduction of the volume of space electrons** could create a vacuum in space, or the entire space of the universe, or that of certain compounds. By their normal operation, electrons prevent it, by unusual movements, creating in the Ether

of space, disturbances moving out at "speed of light" - what we explain in chapter IV -. They are perceived by us as waves, qualified currently as electromagnetic.

These disturbances are created by the bonds of electrons in a certain area, and are "made" by copying with other electrons groups exactly the frequencies of the phenomena that created them. They thus carry to the end of the universe, or more often of limited space of the phenomenon, all the information about them.

We study this phenomenon in detail in the next chapter for light, also explaining the waves on a pond and tsunamis.

This phenomenon is very common in all materials and objects created by the connections of electrons.

We study this phenomenon in Chapter IV for light and Chapter VI for the motion of information in the nervous system of living beings.

In this chapter we evoke the creation of materials, particularly atoms and crystals. The full study will be resumed soon.

Our use of electricity on earth completely depends on this, what we show in Chapter V. This new theory could advance the study of electric systems and current, photovoltaics and supraconductivity.

### 3.7 - Rays and Thermic Agitation

In some areas, the formation of compounds or their increasing, creates more possibilities of contact between elements with the consequence of:

Either forming many more connections between the electrons,

Or a further displacement of compounds which are radiation whose quantity is increased.

This is a **local increase in thermic agitation**, a phenomenon that grows and increases by itself, leading to another, that of the **frequency** of realisation of the all the events.

Inside links may vary with the quality of contacts. The vibrations of electron compounds can be amplified or on the contrary reduced .

Thus thermic agitation that we perceive as **heat can vary greatly from one compound, material or object to another**, without being bound by volume appearances or other benchmarks.

The fact is noted in the end 2014, in a study of phase changes in matter, which shows that "**the disordered cluster grows from the outside in rather than from the inside out, as current explanations suggest, »** (<http://phys.org/news/2014-11-transitions-states-complicated-scientists.html>).

**If electrons meet and repel each other**, the body apparently moves like a beam whose **quality is that of the body itself**.

The **compound itself "realises" its movement**: the expansion of the body against the one with which it is in contact, causes its movement which continues until meeting another element.

Thus the rays are differentiated **by their own qualities and those of the environment**, where they meet various objects more or less numerous.

Free electrons move at the speed induced by the movement of their expansion, and **we know this speed is instantaneous**.

The other body, firstly compounds and all most important objects, **form rays** of very different qualities, depending on **the action of their vibrations within the compound**. Some movements can neutralise each other; thus reducing the power of the external actions, while actions on each other are increased inside the compound.

These actions are thus very varied. All values exist between the rays called gamma (they would be formed of a free proton), X, beta or other and larger compounds which move like rays. Technicians on Earth know how to use them according to their needs.

Here below, with studies of space objects, we noted that the material of the Comet 67P/Churyumov–Gerasimenko is lighter and less dense than that of our planet. As if the condensation of the material, as will be explained here, was arrested, probably because of a too low temperature of the surrounding environment. While the material of the Earth, and all other objects, would have continued to condense for a number of billions of years.

This difference between the materials of Tchouri and earth also confirms slow and permanent changes inside objects, with increased gravity and the quality of matter itself. For large objects, this can last a very long time. On Earth and for our normal use of synthesis and other chemical phenomena, events are slower but exist permanently at our levels and duration of observations.

## **3,8 - Matter**

### **3,8, a - Nanosciences and biology**

**Nanosciences** are at the limit of the observations between disparate electrons compounds - that we do not know too well - and those involved in the creation of atoms, which are the basis of constituted matter.

Technicians, engineers and researchers, know how to handle the materials they need, particularly in the electrical, electronics and biology fields. It is **their observations** during their research that give us many indications about the qualities and functioning of the materials at atomic and molecular level.

**For the first time in nearly a century** in the history of physics of matter and objects, the ideas of physicists are beginning to change:

A "Collaboration" between Cornell High Energy Synchrotron Source (CHESS) and researchers of the subject, declares that the actual structure of matter is much more complicated than when (atoms) were treated as small spheres. April 2014 information.

Scientists use equipment that is continuously improving, especially microscopes (and nanoscopes) they adapt to their needs. Current observations provide very important information for the knowledge of the creation of matter and objects.

**In biology**, researchers and technicians are familiar with **proteins** that are the main components of living matter. They describe them mainly as flexible and multiple tapes nested or folded over themselves **composed of atoms and molecules** of varied shapes, able to permanently change by replacing small parts, modifying the qualities and actions in cells.

**These structures could also exist in mineral matter.**

### **3,8, b - Electrons and matter**

The functioning of the electrons shows that all bonds, one after the other, form objects whose thermic agitation increases gradually as new connections take place to a certain level that results in their destruction.

**Free electrons** are round in shape, due to the way they operate.

But from the first links in space or in matter at the temperature of our planet, without particular pressure, compounds have very different forms and may often look like packets of ribbons, or strings more or less linked to each other comparable to certain proteins of living beings.

The protons produced in stars and their merging into nuclei do not form cylindrical bodies.

### **3,7, c - Atoms**

All phenomena, explained in the opening paragraphs of this chapter are available for all compounds, of which the best known among the small objects, is the atom.

For two thousand years, it was considered as the main constituent of matter throughout the Universe.

It has been described in different ways by many scientists, particularly in 1913 by Niels Bohr. After him others in quantum mechanics have studied and proposed overly complicated operations.

Very few researchers, physicists or chemists, were interested in its **structures**. Its spherical shape has never been questioned, and actual practical bonds between its components have not been studied.

With Électronisme, the **atom is a normal compound of electrons**, with the feature, for us living beings, that we can observe it almost directly, because of its size and the capacity of our current observational tools.

It has another feature of being formed around a core created in a different time, at a different place in matter.

It would consist - according to the generally accepted model - **of a proton and neutron core, surrounded by gravitic clouds** formed out of many electron compounds.

All this creation could depend on disturbances of electrons in the inner space of gravitic cloud created around the nuclei consisted of protons and electrons.

**This is a new idea (October 2016)** and all that we explain below will be review and complete.

**Protons** are created in stars and other objects in space with very high thermic agitation.

They could be almost ball-shaped, consisting of a specific number of electrons, which, according to their mass, should be close to 1836.

**Neutrons**, that resemble them, may not have been created in the stars, but in the nebula, at low temperature, at the beginning of the formation of matter. They break up into several small compounds, when separated from their atomic nucleus.

**More protons are "fused" to form the core (nucleus).**

This fusion corresponds to entanglement bonds, more or fewer electrons constituting the protons with electrons.

**Proton fusion** could be achieved in different ways depending on the circumstances, the **number of protons** and bound in special conditions that would give certain **characteristics** to the cores created and used to remake the materials.

It is currently considered by scientists that the core constitutes the largest part of the **mass of the atom**, and the "valence electrons" realise the connections between the cores for binding atoms in molecules.

**The gravitic clouds of components of the core** are relatively large in terms of the number of electrons that constitute them.

They thus fill a large volume of space around the cores, with **strings or ribbons electron**, more or less overlaid, depending on the variable thermic agitation.

tion, without change, to a certain extent, the quality forming atoms or those already formed.

They keep more or less long bonds direct connections with components of the core.

Links with additional free electrons or already participants in the compounds may be very important, preparing the phase change of the material created.

The phase shift threshold may vary depending on the characteristics of the materials.

Atoms come in excessively varied shapes according to their creation, giving them very different qualities.

Their structures oblige them to relatively precise links with others of the same qualities and with others with different qualities, to explain **various molecules** pertaining to various materials.

These atom shapes and of other compounds begin to be recognised by researchers, particularly in Nanoscience.

Magnisme explained in the previous paragraph could be of great importance in the creation of atoms, molecules and additional compounds which are formed in the voids of the main compounds.

The cloudless nuclei in materials with high thermic agitation, such as plasmas, on Earth and in the stars and other objects in space **are still named atoms**.

### **3,8, d - Molecules and matter**

In objects of space as long as thermic agitation is low enough not to turn matter into plasma, atoms and other compounds of electrons of a certain mass, are surrounded by **gravitic clouds**.

These gravitic clouds of nearby atoms can combine, **forming various molecules of similar or different atoms**, more or less stable in very specific conditions, which are still not sufficiently studied and probably depend on disruption of the internal space of gravitic clouds.

In these combinations of atoms, further intricacies and "gravitic mergers" create relatively complicated structures. They resemble the mineral or organic polymers currently observed: tangled strands electrons compounds, more or less 'overentangled' linking atoms and molecules.

We give the name of **neomolecules**, a term used in technical texts for groups of various molecules. They are studied particularly in Nanoscience.

**Macromolecules** are polymers of similar chemical compounds and (single) **molecules** of similar atom groups.

The connection of atoms with one another, alike or not, is **always made by their nuclei**. This results in more or less complete interpenetration of their gravitic clouds.

These links are not necessarily entanglements that would mean irreversibility with increased thermic agitation.

The molecules created by interpenetration of gravitic clouds do not necessarily create increased thermic agitation, since there is no entanglement of electrons. They come apart easily.

The **gravitic clouds of molecules are less bulky** than those of separated components. During the creation of all molecules with the binding of nuclei, free electron compounds that may have specific uses are released.

We still have a lot to understand, such the more or less rapid formation of material known as amorphous or crystals that are realised in the forms that we can encourage with difficulty.

This is the case for speeding up or slowing transformations of material, such as in catalysis, the slowing down of explosions or heat generation.

Recent observations suggest that in specific systems, relatively well-defined, electron bonds create disturbances of the available electrons ether, with transfer of information and new actions in this internal space.

It is a phenomenon comparable to the transfer of information in the nervous systems of living things. Which would confirm that everything works the same way in living matter and mineral.

### **3,8,e - The Death of Stars, Matter and Living Beings**

The creation of matter from the bonds of electrons explains the death of stars, by excessive thermic agitation.

In the Universe, all free objects and all those involved in the creation of other bodies in all matters have their "life" limited in the same way by increasing the thermic agitation which would be blocked by their environment.

This would explain the forms and dimensions of all objects and the death of living beings, even if the excess thermic agitation is not manifested by a feeling of warmth.

## **3,9 - The Creation of objects in space**

### **3,9,a - Observations of space**

In this early 21st century, new observations with ever improved processes, enable us to see more and differently some structures and objects in space, casting doubt on previous theories.

In 2015, even the big bang and the expansion of the Universe are questioned by some physicists, which could result in a very different way of seeing the Universe and all physics.

In the year 2014, astronomers discovered that our Milky Way galaxy is part of a much larger structure called Laniakea. They simultaneously observed that problems of gravitational attraction, or gravity, within such a system could change the perception of the space expansion.

Which is confirmed by other recent observations. A team of researchers, led by astronomers from the Strasbourg Astronomical Observatory found that small galaxies' satellites, around the "big", move like in rotating disks. We interpret them as areas of stellar winds that influence each other in galaxies.

Already in 2013, it was reported that the Andromeda galaxy was surrounded by a disk formed by a multitude of small dwarf galaxies. This structure, extremely flat, extends over a million light years and seems to revolve around the galaxy.

At the release of this information, the only technical comments indicated that **"Newton gravitational attraction and Einstein's theory of relativity may not be accurate"**.

### **3,9,b - Galaxies**

The gravitic cloud of objects could also explain that the **orbits of planets around the Sun** are all in the same plane, which was discovered in 2008.

Wind particles, around stars and planets, match their gravitic clouds we explain here above. We may think that the first orbital plane of a planet around a star causes the other planets to move in the same orbital plane.

**The shape of galaxies** may depend on the same phenomena.

The volume of stars winds changes constantly as contacts more or less marked with those of near and remote stars in their galaxies.

It is very understandable that stellar winds develop and move further in the area of the diameter of faster rotation of the stars, and the accumulation of all these flat atmospheres creates similar galaxies with growths of atmospheres formed by additional stars therein creating or agglomerating in different orientations.

Disturbances of the inner space of the different atmospheres could make objects even more difficult to understand.

Other recent astronomical observations, in intergalactic space, give images of more or less structured light clouds, forming the WHIM - an acronym of English words meaning Intergalactic Medium to high temperature -. They would consist of very scattered small elements and particles created from electrons of Ether *in outside galaxy areas*.

They could form objects classified as orphans that are the beginning of new galaxies.

While most of the material of current objects are formed from atoms created in stars and other objects that have preceded them in space. This would correspond to the permanent and logical creation, in our theory, of new objects anywhere in the Ether of space.

But these "first" objects have a relatively short life because they **would not have atoms**, since protons and atomic nuclei are formed in the high thermic agitation of star, as explained above.

### 3,10 - Electron' Life Cycle

By accident - called a singularity in physics - some electrons bound together, form compounds, some of which indestructible, creating stars and their planets, and other objects that are invisible to us. After billions of years, compounds reappear to us, scattered in vast nebulae and dark clouds in galaxies or free space objects.

**It is an endless cycle of indestructible electrons.**

We'll tell a possible version of this cycle, despite all the unknowns of what we see and do not yet understand, constantly evolving.

We start the description **in a nebula**.

There are very many nebulas in the galaxies, and probably outside them. These are huge expanses of clouds, with shifting boundaries, more or less transparent and difficult to observe because they are visible only under very specific conditions connected to their level of evolution and to the creation of perturbations in the Space Ether.

The observations of nebulae and other space objects also depends on the quality of our vision and complementary observations materials for radio frequencies, infra-red light and others to ultraviolet radiation, X or gamma.

These nebulae are usually composed of remains, very scattered, of stars and other objects in space, **in the form of bodies that are visible only when sufficient activity is developing**, that is to say that small compounds bind together creating disturbances of space; as we explain in the following chapters.

**All nebulae** are different from each other and contain the "diluted" material, considered "dust and gas." These terms do not correspond to what we know on Earth where they are ill defined elements of various materials.

The dust in the nebulae seems made of large particles and other bodies, like protons and atomic nuclei, not yet combined into matter.

In some areas, the temperature begins to rise, following slightly more numerous bonds of various compounds, triggered by radiation from other objects or elec-

trons of the disturbances of space. Everything is still very scattered, but the objects are formed and move, increasing the links and movements.

A gravitational collapse is often given as responsible for the formation of stars in the nebulae. This is not right because there could not be any attraction of masses, as explained earlier in this chapter.

**Radioactive material** could be formed at this stage in the nebulae. They are at the basis of phenomena we study further, water (5.2, d) and the energy (5.3) we call 'nuclear', in chapter V.

Millions or billions of years after the "disappearance" of stars in clouds of un-constituted matter, nuclei coming from atoms from the previous objects begin the creation of a wide range of materials.

In some areas, heavy and very heavy nuclei composed of many protons possess a relatively high gravity and can agglomerate with different atoms to form molecules surrounded by many compounds in large gravitic clouds.

Since all the nuclei of these atoms are not "fused", they create various molecules and compounds which form clumps of easily fissionable material.

In the nebula, these «**massives**» are scattered throughout objects being formed. This was the case for our Sun, its planets and other objects.

All objects remain for a long time dependent on the temperature of the nebula and space of the galaxy where they exist.

After the creation of the first objects, accretions of other bodies continue. Meetings of compounds of different sizes, moving in different directions, cause the rotation of some of them. Internal gravity increases by a continued series of bonds of various compounds.

All these actions are carried out depending on the size of the element and the outside temperature that can stop the phenomena or otherwise accelerate them.

Current observations (2014 and 2015) of the comet 67P/Churyumov–Gerasimenko, on which Rosetta laid the mini lab Philea, show matter that would be similar to that of Earth, but much lighter, as if there were much room between constituent compounds. We may think that the material of the (only) planet we really know, ours, would be made of the same material as the comet but was modified over a long period by a sequence of movements and other internal events, which we forecast in our study of the composition of matter in the present chapter.

We have also different categories of objects because their formation was stopped after varying times depending on the size of objects and the temperature of the environment

- Asteroids, comets with a very different shape and a material whose evolution stopped fairly early,
- Generally spherical planets,

- Stars whose volume is very much larger than previous objects; their evolution depends on the material of which they are formed.

In stars, materials and their compounds continue groupings with electrons binding while creating at the same time an increase in thermic agitation.

Initially, according to the materials, thermic agitation destroys the bonds of electrons while forming new compounds, which create a new increase of thermic agitation.

Heat increases again and the whole of material is converted into plasma, which becomes the non-matter of the whole object. In several billion years, new protons are created and many of them are merged into atomic nuclei, stably formed by entangled electrons.

Light waves reach us from bright stars during the main sequences. We only "see" the outer part that hides everything that happens inside where the temperature is much higher.

Thermic agitation increases continuously with the frequency of the electron bonds and therefore of the disturbances of space Ether electrons. At a certain level, our tools, vision and observation equipment, no longer allow us to see them. The stars are still there, but the frequencies of the disturbances are too high for our vision. We cannot see them, they have become a black space, a **black hole** for us.

These **black holes** are objects in which the electron links and temperature continue to grow normally. They can become very large and their density can become very strong. The compounds can move no further. There are no more electron bonds and therefore no more increase of thermic agitation.

They can hide other objects and grow by absorbing free electrons in space and stellar winds from other objects in the galaxy.

That's then the real death of the star that has become a black hole.

With the reduction of electron bonds, the temperature decreases and, at a certain level, the object reappears to us, huge and very bright. **That is a quasar**, or other similar object that will evolve to be invisible to us again, turning into dark matter, dark clouds, in compounds what are «un-constituted» and incorporated in invisible but existing nebula.

This can last a very long time, billions or tens of billions of years, during which materials continue to change or fall apart slowly by the action of electron vibrations.

It's a long phase of in-constituted matter imperceptible for us.

Objects break up and scatter in dark clouds, while their material begins to reform new compounds. It is the evaporation observed by Stephen Hawking.

Then their «life» slowly returns, probably induced by electron disturbances in space, that may trigger new electron bonds. Clouds of **black or dark matter** then appear as **nebulae** of different colour according to the speed of their evolution,

when the intricacies of electrons are realised at frequencies that make them visible to us.

Before this period of life, the nebulae could be perceptible to us by "radio" waves at lower frequencies than light. They could explain "the sounds of the depths of space," instead of the diffuse cosmological background.

And so new stars are reborn!

The life cycle of an electron is completed. Another begins...

## CHAPTER IV

### THE WAVES OF SPACE LIGHT AND OTHER USES

- 4.1 - Disturbances of electrons in the Ether of Space,
- 4.2 - Independence of Disturbances,
- 4.3 - Waves from space, 4,4 - Their Qualities,
- 4,5 - The Photon,
- 4,6 - Lighting, Images and Sight, 4,7 - Other Phenomena

October 2016

#### **4,1 - Electrons Disturbances in Space Ether**

We saw in the previous chapters that, upon binding, electrons could not develop fully. The volume of a new compound is lower than the sum total of its aggregate components.

This causes various phenomena, some of which have been studied in chapter III, such as internal gravity, gravitic clouds and increased thermic agitation. A disturbance in the arrangement of electrons in the Ether of space does also take place. We quickly studied in the previous chapter.

We refer here to explain more fully the light and other phenomena.

Let us consider this latter phenomenon.

Reducing the volume of compounds with respect to individual components, could create a vacuum in space.

This vacuum is unacceptable and neighbouring electrons automatically change their movements - encouraged by their vibrations - to prevent this vacuum.

As soon as the volume of these volume reductions is "sufficient" in a specific place, neighbouring electrons are moving to this potentially empty place before it could become empty.

It is a "negative" movement, to a specific place.

In ongoing studies on the behaviour of sound waves, teams of researchers in Paris, Bordeaux and Winnipeg in Canada were surprised by a phenomenon that had already been observed in 2001 in what is usually called "electromagnetic" waves and "microwaves". This phenomenon had not been explained:

In the researchers' text, we read: "The material developed in Bordeaux provides, in addition, another remarkable property: the waves are progressing backwards. The sound, which is a sound wave, has its energy spreading as it should from the source to the receiver, but the oscillations constitute it are propagated in opposite direction. Specialists call this "negative phase velocity".

**These observations could be a validation of our theory of disturbance waves in a given environment.**

**And, going further, of our whole theory of Électronisme.**

The elements of the environment, **from all around**, accumulate and become too many, and turned immediately to the outside where the phenomenon occurs again.

Since their departure, they were replaced by electrons from all around. There is therefore a **very brief immobile** accumulation all around, a little further away.

The phenomenon is repeated without interruption and moved very rapidly until the end of the environment concerned, where it then lacked of elements of the environment and **the phenomenon stops**.

These displacements, negative, and "normal" are carried out at the **speed of the vibration expansion movements** of the electrons, everywhere, even in the materials of the space objects where Ether electrons always exist.

Consequently that speed is always the same in space.

We will see further on that it is the speed of light.

We have seen in previous chapters that it is extremely fast, corresponding to the instantaneous movements of electrons one after the other, which are differentiated only by the different vibrations disturbances.

These disturbances of space electrons, with their accumulation that moves, are not visible to us, but ALL living things feel them unconsciously.

## **4.2 - Independence of disturbances**

We have seen in previous chapters, that according to the operating rules of electrons, all events in the Universe occur randomly and are not related to each other in any way. This is the case of the first entanglement of electrons into space to form disturbances.

These disturbances are all independent of each other. So are therefore the waves that we observe.

This is an important phenomenon that explains that the waves never interfere with each other.

All actions of the waves-disturbances are independent both in space in general, and in the space of materials, with in particular the internal space of living beings, as explained in Chapter VI, for the transfer of information through their nervous system.

This does not preclude that similar phenomena are realised in limited areas of very variable dimensions.

Our quality of living beings has accustomed us to accept them as different perceptions of almost similar phenomena.

### 4.3 - Waves of space

So we know that a phenomenon exists in space: the disruption of the arrangement of electrons in the Ether of space. We cannot see these disruptions, but they are noticed by some of the senses of all living beings.

We will see in chapter VI that these disturbances affect mainly touch and vision.

These senses do not allow us to understand disturbances properly, because the events are too fast and too numerous.

We only perceive of them a picture that regroups, as far as our senses are concerned, the most important characteristics of these events:

- The number of events in a given period, That is to say the frequency of such events,
- The dimension of the elements, i.e., their amplitude.

**This is a wave or a waves train** which moves very rapidly to the end of the concerned environment.

To our senses, and to adapted material that enables us to increase our perception, the wave is characteristic of the event that formed it and lasts a more or less long time. For light, for example, this may be the time of a spark or flame of a candle, or millions or billions years of the brightness of a star.

Other events may cause waves in space at different frequencies, radio, odours, etc.

Since the 19th century, scientists have explained waves, including light waves, as analogous to the ripples on a pond when a stone is thrown in it.

So they knew that **waves require a concrete environment.**

**The waves on the surface of a pond have never been explained.**

They are directly related to disturbances created in the liquid medium, by a pebble thrown into it.

The pebble slips quickly into the water of the pond and could create a vacuum of "water" if this void was not avoided by the rapid movement of a quantum of water all around, as we have explained above for the electrons of space. The elements

that move to the place of potential emptiness or void are in higher number than necessary. They are turned back immediately. The phenomenon is repeated constantly.

**An accumulation wave** is thus created, that seems to move away, around the crashing point of the stone, always at the same speed which is that of the movement of the quanta of water in their liquid environment.

The total amount of water displaced, on a very long distance, can be **much greater** than the volume of the thrown stone.

It is the movement of the stone in the water, at a certain speed, which creates a wave in the pond; **if it is slowly put down, the water is not disturbed, there are no wavelets.**

If the pond has a certain depth the stone can cause several successive waves.

A handful of small stones can cause waves that we perceive as a momentary wave.

We find this function in **tsunami**. It is a very special event to which Japanese fishermen have given a name that means "harbour wave". On their way home, they found their home town destroyed by a massive or very massive short-term increase of the level of the water, though the weather was calm and could not explain such a disaster.

Tsunami is a particular wave by its way of formation.

During a **sea or ocean earthquake**, the sudden collapse of tectonic plates create in the body of water, a vacuum which cannot exist.

To prevent this, the "quanta" of water all around move towards the collapsed area, and others follow to fill the new holes by their movements, and so on until the end of the ocean.

That's how accumulations of water are formed, instantaneous, successive, similar, of the same height, which come one after the other and get away from the event, to the end of the ocean, at the speed of movements of quanta of water in their fluid medium.

The arrival of a tsunami on the coasts, even thousands miles from the starting point of the wave, is always and everywhere preceded by **a slight decrease in the level of the ocean**. This is the negative displacement observed by researchers of Bordeaux.

The height of the accumulation waves is the same near the scene of the collapse of tectonic plates, and at the end of the ocean, far away all around, and consequently with a displaced volume of water which is globally **much larger** than that of the collapsed area.

Therefore the arrival of the tsunami at the « end » of the sea stops the phenomenon due to the fact that no more quanta of matter exist that would maintain the moving accumulation.

Thus, on coasts, any provoked damage is due only to the natural sagging of the wave that is stopping and disasters are more or less massive depending on the topography of the coast and the presence of people.

Not all great waves are tsunamis, many are not, such as rogue waves and those, huge ones, created by major collapses in the ocean of glaciers or cliffs, or those formed by surface winds and sea swell. The current huge subsidence of Arctic and Antarctic polar cap ice sheets have never created a tsunami.

In July 2012, experts said they had discovered why the earthquake of magnitude 8.6, off the coast of Indonesia, on 11 April 2012, did not create the predicted tsunami. The movement of tectonic plates was supposed to have been slow and horizontal, contrary to the usual vertical movements.

In current modern physics, there is no understandable explanation of the so-called electromagnetic waves.

We find everywhere the same definition for them: it is "the spread of a perturbation producing on its passage a reversible variation of local physical properties of its medium. It moves with a certain speed which depends on the characteristics of the propagation medium. A wave carries energy without transporting any matter." (Wikipedia French Version).

All this corresponds to the observations, but it lacks the continuation of the explanations:

The word "disturbance" can be translated as "disorder in a mechanism." Thus, to understand the disturbance, it is necessary to know the disorder and the mechanism or environment.

"Reversible variation" of physical properties: therefore there is a real provisional modification of the "medium", which is recognisable by its "physical properties".

### **This would confirm the existence of the Ether of space.**

Furthermore, it is surprising that since the 18th century, particles have been considered to possess a frequency, with no indication of its nature, and without physicists considering this, until Louis de Broglie attributed to them the singularity of being both "wave" and particle at the same time. He gave no explanation of this physical phenomenon, while countless mathematical developments were leading to quantum mechanics and the theory of the Standard Model that has never shown how matter could be generated

The wave-particle duality is used only in this physics, with unconvincing explanations, such as the metaphor of the cylinder which is nothing but a special case of the normal observation of a three dimensional object.

After Newton, different physicists, in particular, Huygens, Fresnel and Hertz, were interested in the variations of light, seen as a wave in space and in the matter of our planet.

Maxwell and Lorentz have assimilated it to electromagnetic phenomena that have never been seriously analysed and explained.

Depending on the quality of the waves, especially their frequency, contact with other objects can simply make them bypass more or less obstacles; this is how waves called "radio waves" have different behaviours depending on their wavelength and the environment.

This is also the explanation of phenomena called "**gravitational lenses**" that can "receive" bundled information coming from an object whose wave disturbances bypass an obstacle, which in this case may be an entire galaxy.

Considering the limits of the frequency variations, we have on one hand very fast disturbances of compounds radiation at the same speed as disturbance of space. They merge to form X-rays, gamma rays and others.

On the other hand, with a minimum of disturbances, the intricacies are infrequent. This is the case of all those at the beginning of the formation of objects in nebulae, at the very low temperature of space and all modifications, not perceivable or barely perceptible in the matter constituting our planet.

At a certain frequency of electron compounds creation, in a given area of a nebula where matter is formed, the "radio" waves could signal us with suitable receiving equipment, the beginning of the formation of protostars.

This is a possible explanation of the "background noise", discovered by Penzias and Wilson in 1964, which was utilised by the Standard Model of cosmology and designated as the "cosmic microwave background", which has no reasonable explanation.

#### **4,4 - Wave qualities**

Physicists know how to represent waves of all disturbances of space objects, and those of so-called empty space. They can establish their **observation spectra**.

Newton was the first scientist to use light diffusion to study different types of waves.

In the following centuries, spectrometry was applied to all the waves of space and all the materials in different environments. They were distinguished by their wavelength or the frequency of their disturbances.

The researchers observed that the speed of their movement is invariable in a given environment, the "vacuum" of space for example. It is almost the same in objects, because the disturbances concern the space itself, Ether, which also exists in all objects.

Spectrography of the group of all the waves shows, in each category of disturbances and their environment, a gradation frequency from the very low (high or very high wavelengths), to very fast.

A specific part of them is considered to be light waves, and they are not different from others, but some living beings know how to use them.

They have never been considered dangerous. There is no reason to think that those of the telephone could be. There are the "electric shocks" in the atmosphere too close to them that would be harmful to users of mobile phones.

Waves of space have the same behaviour everywhere, which depend only on the frequency of the disturbances.

These manifestations have especially been studied for waves of light: reflection and refraction, diffusion, diffraction and absorption, but they exist for all wave types, from those at very low frequency such as radio waves, to the ultraviolet waves that mix with the particles radiations.

For all the phenomena explained above, the speed of the movement of disturbances corresponds to those of the **movements of the quanta of their matter** in the matter itself. It therefore varies with this matter.

This is how human beings can recognise the quality of matter of the Earth's crust by observing the speed of the travelling movement of a shock wave from an explosion-disturbance created in the matter to study.

For space waves, the travel speed of disturbances and those of their waves, corresponds to **the speed of vibration of electrons**.

In the Universe, it is the only invariable speed.

**In a given medium**, all waves have **the same amplitude**, because they are always and only due to movement of medium quanta, like electrons for space: this amplitude is close to the diameter of an electron, that is to say an attometer, a millionth of a billionth of a millimetre.

This low amplitude and the extremely high speed of movement of all disturbances, allows for some overlapping or encounters of disturbances without significantly changing these disturbances.

The frequency of electron entanglements gives the frequency of intricacies of disturbances and is never regular because creations and modifications of compounds are always random.

Space objects are in a state of permanent modification with (relatively) many electron intricacies. Disturbances are therefore generally numerous in specific areas, and spread more or less over time. That is the reason why stars send, for a long time, in the space that surrounds them, perturbations due to the entanglement of electrons **in their periphery**, at frequencies that make them visible to us.

We receive thus those of our star, the Sun.

## **4,5 - The Photon**

In the early 20th century, Einstein, Planck and de Broglie invent the photon, light particle, which would be simultaneously wave and particle, then scientists declare that all elementary particles - and others - have the same duality and invent the wave function which has never been explained, except by the proponents of quantum mechanics. Their explanations are difficult to understand.

As a result of these proposals, the photon, which should be the size of an electron, is manipulated, utilised without reservation by physicists, with the qualities they need.

In current physics, the photon is supposed to be created from naught - in an uninterrupted manner to provide all information that we perceive - wherever it appears to be necessary. Its qualities are not constant, with low or high energy, low mass or no mass at all. Current physicists are still discussing this mass, its possibilities of action and life span, and the reasons for its occurrence and disappearance in structures we still need to understand.

There is no explanation for their transfer to "electromagnetic waves", including light, and their use by living beings for light and images.

## **4,6 - Lighting, Images and Sight**

### **Light does not exist in the Universe.**

If this entity - which is not a substance - was continually manifesting itself everywhere, why and how would it move and how would our nights be possible?

For us, on Earth, space is black, out of the light "sent" by our Sun. If it was not black, our telescopes could not observe the very little light coming from remote stars.

**Light** is a particular phenomena known to everybody, because it is always there, around us, as if it were part of ourselves or part of the Universe...

Then, surprisingly, there is no study of its origin, the reason why it is there or the usefulness of its presence, the quality of its substance, if it has one, the way it moves and how it "brings" to us images of objects we watch.

The "Fiat Lux" of the big bang dates back from a speech of Pope Pius XII in 1954. Before that date, Georges Lemaître had explained his theory of the original atom, without mentioning particularly light, as if light existed in the Universe as a given and that it could not be otherwise... except, according to Gamow, at some particular times, during which it would "decide" to be or not to be. Gamow did not mention it any more: light is there and that's it.

This was the case for all scientists of earlier centuries. And for cosmologists nowadays.

**Its speed** is considered a **fundamental constant** of the Universe without explaining the reasons why this is.

Its speed is constant only in a vacuum it is said, but in the "official" theory it is not well known what a vacuum in the Universe is.

Some documents indicate that Einstein gave light this character of invariable and unsurpassable speed. This does not seem right: Einstein used it because its qualities were known to him and he needed them for his theory of relativity.

But neither Einstein nor previous physicists have explained why it had these qualities, in particular that of constant speed.

Living beings on Earth know how to use some phenomena of their environment to facilitate their way of living. They know how to use the waves of space in different ways that we still do not know well.

Some beings have developed tools to use those disturbance waves at very rapid frequencies. We know especially those of human beings and other organised animals. These are **eyes and sight**.

The sense of touch is also involved, permanently, both for individual beings equipped with organs like eyes than others, for example in the plant kingdom.

We do not perceive space disturbances separately, because their frequencies are too high, but the sensitives nervous organs of living beings are able to differentiate them according to those they receive.

The information gathered by the eyes is interpreted by the nervous system and appears to us as reflexes and memory, that we use to make us images of objects, more or less detailed, without distinguishing all the information provided by the waves.

We see and recognise objects that we have already seen.

In our environment on Earth, - our atmosphere-electrons of the disturbances meet small compounds which absorb few of them, reflect others away, and after

numerous reflections, reach our visual systems which create a particular environment called light.

The rays of what is remaining of this light, and other more direct rays, reached the objects of our immediate environment, on which they are reflected and diffused, or refracted and partially absorbed, according to the shape and the matter of objects.

These objects absorb more or less easily electrons spread by disturbances according to frequency.

The light waves reaching our eyes have been modified by the objects we look at. The quality of their surface that determines the colour of the objects, due to the quality of disturbances they receive and they send back to us.

The colour and shape of objects, the quality of their matter are visible by what is remaining of the “light” we receive.

The remaining electrons modify, by links, small proteins of dendrites of the senses of beings who are susceptible to the phenomenon. See chapter VI.

Below a certain frequency, our eyes are no more able to perceive the “luminous” rays. Above we are dazzled, or even injured.

In case of lack or reduced “ambient” light, our eyes can perceive remote rays, according to their strength or what is remaining when they reach to us. Thus, we do not see easily a candle at the bottom of the garden, but the light of some big stars can reach us from distances greater than tens of billions light years.

**The quality of the vision** depends of the way the living beings are functioning. All of them have their particular way to register and interpret the parts of the objects they are looking at.

Certain living beings recognise disturbances at frequencies different to those we human beings use for sight or radio. They are able to “see” their environment in their own way, and have at their disposal benchmarks invisible for us.

#### **4,7 - Other Phenomena**

Electrons of disturbances remain electrons of the Ether of space and are likely to entangle with one another. That is how under certain conditions, in the motion zone of the wave, the same phenomena can take place like elsewhere in the space void of objects.

The electrons of the waves entangle themselves with other electrons, free or already participant in compounds and objects. The disturbance disappears, absorbed for the creation or modification of a compound.

This is how the interference of light waves from distant stars gradually diminish in number. Absorption takes place as a function of frequencies; the strongest

frequencies, those who show the highest number of disturbances due to a largest number of possible entanglements in a given time are absorbed first.

The remaining waves are therefore formed of frequencies which are closer to those of infra-red and thus indicate the age or distance from the source of disturbance of waves. This is the explanation of the **shifting towards the red area of the spectrum of "star light"**, the "redshift". Its quality allows astronomers to calculate our distance from the source of observed light.

The disturbances formed by bounding and fusion of compounds in the centre of the stars are not "visible" for us, because their frequency is too high.

We cannot see them, therefore **the matter of these objects is black for us.**

We can see only the peripheral part of the stars, between the core and the areas where start the stellar winds which are going outward.

**We normally call black or dark** all the objects and other structures that we know exist but we cannot see because they do not create space disturbances **at the frequencies forming waves called "light waves"**.

That concerns practically all the space objects, except stars during their principal sequence. The duration of the succession of the different objects that follow the stars can be very long. Then, after billions or dozens of billions of years, the elements are visible to us in the nebula when the frequency of the electrons entanglements, to form and modify components have become fast enough, or slow enough, like in the end of star lives, that we consider in chapter I, in particular quasars.

**Photovoltaics** is a technic employed by human beings to retrieve electrons coming from disturbances of what we call light waves and turn them into electric current.

In order to achieve this, they use a variety of materials, some of which are called semiconductors. Their components have the capacity to bind relatively easily with free electrons (disturbances of space) or small compounds. Thus they include additional "constituents" of an electrical current in the "photovoltaic cell" concerned, that will be connected to an electrical network containing the using or accumulator equipment.

This phenomenon depends on the qualities of the materials used.

We study it more fully in the next chapter.

We know how **to create waves for our needs**—radio, radar, telephones, various gadgets—by broadcasting in the space of our planet, some "electric discharges" through an antenna or another control device.

These "discharges" are the release in the free "environment", that is to say the air in our atmosphere, of (electron) compounds of a certain value, for their connection with the compounds of the environment by entanglement

with the usual consequences: reduction volume of compounds and creation disturbances in space.

The intricacies depend on the quality of the electrical current used, which can be modulated or a "bearer" of information.

They move like all other waves of space, with the same speed of movement and the same "weak power".

**All the hertz waves** that we use are created in this way. Technicians know how to transmit electrical signals creating waves corresponding to their particular needs. The principle is the same for **long distance communications** towards satellites, for example, radar, mobile phones or gadgets that have a very short range. These disturbances and their waves are also created in special areas of fibre optics.

All areas of space, free and within objects, are permanently "disturbed" by numerous waves at various frequencies, which could, individually, be independently recognised by suitable detection equipment, which is their current use for "**passive radars**".

Like all other phenomena and events in the Universe, disturbances of space, isolated or perceived as waves, have **no particular purpose in the Universe**, but different consequences depending on the media crossed.

They could participate in the "evaporation" of black holes observed by Stephen Hawking, and in the creation of new objects in WHIM, clouds and nebulae, increasing the frequency of electron entanglements with no need of "gravitational collapse", frequently mentioned for the creation of the stars in the nebulae.

## CHAPTER V

### AIR, WATER, ENERGY ON EARTH

- 5,1 - On Earth,
  - 5,1,a - Matter, 5,1,b - Gravitic clouds,
  - 5,1,c - Air, 5,1,d, - Water, 5,2 - The Sun's Radiation,
  - 5,3 - Nuclear Energy,
    - 5,3,a - Theory, 5,3,b - Current Nuclear Energy, 5,3,c - Electric Plant,
    - 5,4 - Electricity
      - 5,4,a - Theory, 5,4,b - Systems, 5,4,c - Current, 5,4,d - Other Actions

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#### 5,1 - On the Earth

##### 5,1,a - Matter

**The matter of our Earth** was constituted during the formation of stellar systems, 4.8 billion years ago. All atoms and molecules of different masses of matter existed at the time of the differentiation between our star and its small planets.

Since, in the Earth, **there has never been a creation of new atoms** and the matter has not evolved much.

The astrophysics observations show that, although the same rules are applied everywhere, trillions of objects that exist and are created continuously in space, are all made of different materials, with atoms and probably other various compounds of which we cannot imagine the existence and shape...

Some features are determined by the environments in which they are formed where they exist and evolve and renew themselves.

Our understanding of **materials** depends primarily on the way we see them. It is we, Human Beings, who classify and differentiate them and consider **exotic** all elements in our constituted matter that we do not know that much. We are allowed to think that those of our galaxy may have common features, whereas in other star clusters, near or far, elements that we cannot even imagine would form. From there sometimes a ray could reach us that we call a cosmic ray...

On Earth and in every object at medium temperature, matter is constituted, and is supposed to represent **less than one percent** of what is called matter in the observable Universe. This constituted matter exists only for a relatively very short period of the life of objects in space

Within our value system, we can distinguish different situations.

1 - The "cold" environments at a temperature below approximately 200 kelvins. This situation is mainly found in space, nebulae and other objects which are barely visible or not visible to us, containing widely scattered compounds or diluted materials. As we cannot see them, we know nothing about their values, amounts or simply if they exist.

2 - Moderate areas for us, living beings, where we live and we developed in a given range of thermic agitation - which we call heat - approximately between 200 and 2000 degrees Kelvin.

3 - Environments with a higher thermic agitation, continually increasing in its objects, like our Sun, The gravity also increases.

At certain levels of heat and gravity, important compounds are created. These materials are plasmas that have no tangible reality as we know it on our planet.

Matter consisting of atoms and molecules, as we know it on Earth and other planets exists only in a very small period of the life of objects in space, between the cold of relative vacuum of space and the glowing heat of the stars.

But we are allowed to think it is very important to us!

### **5,1,b - Atmospheres**

The atmosphere of stars and planets corresponds to gravitic clouds of objects. In galaxies and other groupings of objects in space, the atmospheres between stellar systems are formed of similar winds much less dense of particles.

They consist of various small compounds. Their various features and peculiarities are dependent on movement and permanent modifications in the materials, creating the gravity of these objects. All the radiation of matter on the limits of these objects form their atmospheres.

Physicists know that the **gravity in and around Earth** varies with the qualities of the matter near the site of the measurement.

The shape of the gravitic field of our star depends on the particles winds around other large objects in our galaxy. Many other star systems exist in the space of our galaxy.

"**Sunspots**" we can observe on the Sun and all its granulations might correspond to particular gravitic environments, different from that of the complete one of the star. All events in these spots locally modify stellar winds with rapid repercussions on the winds and climate of the planets, in the whole solar system, and elsewhere in the galaxy.

### **5,1,c - Air**

**The air in our atmosphere** corresponds to "winds of particles", as we have just explained.

This is a particular *no constituted* matter, existing in varying quantities in all the gravitic environment of Earth, up to the Earth's magnetosphere, including, and this does not come as a surprise to us, in all the interstices of the solid matter of our sphere, to the interior of all mines and natural deep galleries, including the chimneys of the deep seabed. Air always has the same composition in all those places, although oxygen or nitrogen act in the matter that seems to contain them.

Like other gravitic clouds around all objects in space, «Earth winds» are a mixture of atoms, reduced to their nucleus, and other very varied small compounds moving side by side and which, in the atmosphere or "on Earth" cannot naturally bind to others.

Different elements form inside the cloud more or less stable materials.

The influence of "sunspots" is transmitted to us through our atmosphere and that of the Sun.

Pollution in some areas of the atmosphere, by dust or soot or ozone, for example, is not moved by currents of the lower atmosphere, but by "planetary" winds, which concern the totality of the gravitic field of Earth, continuously influenced by solar wind.

### **5,1,d - Water**

In our planet, and all the objects in our solar system, another important quasi-matter is to be considered differently from the said constituted material. This is **water**.

It exists mainly in liquid form.

**It is present everywhere** in quantities that are more or less large, especially in vapour form in "solid" material and in the air. Water vapour is not a gas, but a bursting of liquid water into fine droplets, which cannot turn into gas without dissociation of its components.

These droplets can be extremely fine. Would these droplets correspond to molecules?

Water dissolves products without incorporating them and can dissociate them into their components without modifying them.

Water fills oceans, which account for **71% of the earth's surface**, but only 0.23% of its volume, because we know only the water which is present in the outer crust.

In early 2014, scientists have discovered that there is an "ocean" **in the mantle between 400 and 600 kilometres deep**. See below.

**It is not present in nebulae.** But it exists, a few billion years later, in the matter constituting planets. It therefore appears at some stage between the accretion of compounds in the nebulae and the planetary formation. Its origin is not yet well understood.

**Électronisme Physics** allows us to attempt an explanation.

### **Its creation**

At the beginning of this chapter we have seen that the nuclei of atoms are formed in stars with high thermic agitation, before they turn into other objects, in which the formation of nuclei can continue. After passing through these objects and a number of billion years, these nuclei are found scattered in a nebula at low temperature.

In these nebulae, when the material begins to move and creates new compounds, nuclei reshape their gravitic clouds to complete the atoms. Among them, some particularly heavy ones, **composed by numerous protons**, have a significant gravity. They create **major gravitic clouds** and the created matter is considered **easily fissile and radioactive**.

At the same time are formed a certain number of **neutrons**, probably in connection with the creation of atoms as they never exist free in any type of matter.

In one of these nebulae a material is formed which has evolved into various objects like our Sun and its system including different objects, planets, comets and smaller other objects. The temperature of the mass of these objects increases, causing the destruction of certain bonds in the materials and especially in the molecules formed of heavy atoms. As we saw they are readily fissile, like their gravitic clouds and nuclei.

Protons are released in the material and in the atmosphere around. Atoms are formed with broken nuclei and new gravitic clouds are formed.

Some of these **free protons** act as **hydrogen nuclei**, and bind to oxygen atoms present in the air. They form water vapour, made of water molecules which seem independent from each other, despite the molecular bonds that create large "bulk" or "masses of water", solid, liquid or as vapour, passing from one stage to the next depending on temperature.

In millions of years, **much of fissile material mass in our planet is thus transformed into water**.

This concerns mainly massifs located in the outer part of the Earth's crust.

This phenomenon continues during the entire lifetime of the planet, depending on the external temperature, especially in proximity of the uranium masses. Easily fissile material (radioactive) inside the globe can be transformed into water depending on its environment, principally, depending on increases in temperature at the same time than having more contacts with the oxygen of the air.

This is probably how immense **underground water reservoirs of very pure water** have come into existence. These water tables were discovered in recent years mainly in Canada and in some areas of Africa where there are great massifs of uranium ore.

**Hydro thermic high temperature springs springing in seabed** could correspond to the formation of water from solid to easily fissile material massifs around volcanic chain structures located in marine shallows.

There exists, at a certain depth in our planet, a significant "ocean" whose creation could be related to the temperature of the planet.

The current increase in global temperature of the Earth consequently could create patches of almost - water - vapour in all areas where massifs of fissile material exist and could create an increase in the overall volume of "**atmospheric rivers**"

Meteorologists call "atmospheric rivers" bands of water vapour moving between one and ten kilometres in altitude in the troposphere. They are very movable and can be extended to several thousand kilometres.

They could be fuelled by ongoing transformations of fissile material.

Sometimes they provoke heavy rains with exceptional floods, anywhere in the world.

## **Quasi-matter**

The water forms therefore a **quasi-matter** that exists in the **other quasi-matter** of the planet, the **air of its atmosphere**.

**We can consider that water is dissolved in the air**, with very large variations in concentrations due to the difference of gravity. This allows the formation of "massifs" of this quasi-matter in the air.

Water exists mainly in the liquid state, with a particular kind of bond between molecules. It thus forms a uniform material, with a density higher than that of air. It then fills the lower parts of the structure of the planet and compresses under its own weight.

Steam (water vapour) exists permanently with or without the presence of liquid water. The transition from one state to the other is easily achieved. It is always linked to temperature and relative to the state of the surrounding air.

**It "evaporates" easily** at the whim of the winds of the Earth.

It has a great importance in all weather phenomena.

### **Its peculiarities**

1. **Water can be heated quickly**, only in a container which limits the dispersion of its components. The increased thermic agitation comes from outside, and increases the relative shifting of all its elements of water and air.

In spite of the temperature augmentation, the relative density of the components air and water do not change. In an increasing thermic agitation, air elements are eliminated in the atmosphere, which is realised only in a fairly complicated process, because of the permanent presence of air.

Boiled water, cooled without movement, does not taste the same as running water, because it contains little air.

This also explains the variations of the boiling point, depending on the pressure in the surrounding environment.

2. **At much higher temperature**, the bonds in the water molecules are destroyed and gases, hydrogen and oxygen are released into the air where they already exist.

That explains:

**Mtembo effect.** It is an observed fact (and used by cooks): hot water freezes faster than cold water, when placed in contact with a source of cold. In the hottest water, the elements of water are mixed with more air, allowing a modification of the thermic agitation, the surface faster than the elements of water, tightly packed upon each other.

**Supercooling.** It is due to the same phenomenon and would be destroyed as soon as the motion changes the disposition of water and air molecules adjacent to each other.

2. **For the cold the situation is similar.** Because of the large difference in density between water and air, all changes in the environmental temperature, air - water, have immediate consequences, even if these variations are not very large.

Cold influences matter when thermic agitation is decreasing that is to say when the displacement of the elements of a compound from its compound to another decreases. At a certain value, the water mass changes status, it becomes solid. This change applies only to water. The greater part of the air,

around the water molecules, remains very free even if it still supports a certain quantity of water vapour.

At low temperature in the atmosphere, cold moves from the open air, outside, to water, by first reaching the surface particles that are lighter than the in depth particles.

This is why **ice forms first in surface** and as frozen molecules contain a certain amount of air, they are lighter than those in depth, and **ice remains on the surface**.

That is also the reason why they occupy a larger volume. This is found to be the case in closed containers, pipes in particular. This could be due to the fact that molecules are unable to move further, vibrating only one next to the other, occupying their full natural volume, like free electrons in the Ether of Space.

Formation of **rain, snow and hail** in the clouds in the atmosphere. It depends on the relative temperature of the water vapour, which will be more or less high in the movement of air. Frequent supercooling of the water vapour in clouds is destroyed by different air movement.

External elements, primers or condensation nuclei, are not useful for triggering these events in the clouds.

Air pollution above cities worldwide turns mist into "smog", not into rain.

In very many countries for several decades, tests on products dispersed into clouds to prevent hail and cause rains never give conclusive results.

Formation or gathering of electrical charges in clouds with creation of systems and circuits that are manifested by movements or discharges.

**They are accompanied by lightning and thunder. These phenomena should be studied further since that could help us understand "our" electricity.**

It would be also useful to include the 'will-o'-the-wisp' (ghost light) and other events that seem to occur more frequently in humid atmospheres.

## 5,2 - The Sun's Radiations

On Earth, we receive **radiations originating from the Sun**.

The main two types for us living beings are **heat and light**. These are different phenomena. They are related for us only because they affect us together when "the Sun is up", but the heat comes to us only an hour, approximately, after the light.

**Heat** is created by electron links that bind together to form progressively larger compounds, up to protons and their fusion into atomic nuclei that happened only inside the stars.

The heat that concerns us comes from the outer part of the star, and spreads throughout the entire solar system. It arrives to us on Earth in about an hour, by convection at a speed of 7 to 900 kilometres per second, through the elements of solar winds, then through the Earth's atmosphere.

It is our distance from our star that determines the heat we receive.

Life, whose origin we do not know, was originated and evolved based on this temperature. Changes, even small, like those we currently fear such as global warming, could well hinder or worse, the existence of all or almost all living beings.

**Light** is equally a consequence of very numerous entanglements of electrons in a certain period in the life of the star (main sequence) forming disturbances of space at frequencies that living beings have learned use.

"Light" waves reach us... at light speed, in about eight minutes from the outer regions of the star, where **entanglements of electrons take place at frequencies corresponding to these waves**, called 'luminous' or 'light' carrying for some living beings.

The electrons of the space waves allow us to create the lighting environment. The images are formed by our nervous system that interprets the information provided by the "light rays" **remaining** after refraction and absorption by them on surrounding objects.

## 5,3 - Nuclear Energy

### 5,3,a - Theory

The current exploitation of what we know as nuclear energy is based on observations made in the middle of the 20th century. They appeared to show that the fission of the nuclei of radioactive material produced heat. This operation would produce elements with lighter nuclei, still more or less radioactive, and some heat, whose amount was estimated using formulas like Einstein's  $E = mc^2$ , that were rather approximate.

All phenomena are currently being explained by the early 20th century physics, mixing the "chemistry" of the Mendeleev elements table, with equations of protons and neutrons manipulated with different forces of Standard Model of particles and with quantum mechanics.

The observations seem misinterpreted because it is difficult to determine if the heat is due to:

- The **breaking** of atoms of radioactive materials, as interpreted by the current physicists; or

- The creation immediately afterwards - almost simultaneously - of new compounds with elements coming from this breaking, as explained in Chapter III.

In ordinary chemistry on Earth, changes and destruction of compounds are difficult, if not impossible, and are always **endothermic**.

All-bonds-intricacies are indestructible.

A relative increase in heat can help to break gravitic links.

All syntheses or chemical compositions, including electron bonds **are exothermic**.

During the creation of our planet, many masses of fissile material were created, as we explain earlier in the text above in paragraph 1.11,c (the electron cycle), in Chapter I.

Thereafter, some are degraded by an increase of environmental thermic agitation that destroys gravitic bonds, then everything continues as in the case of Nuclear plants covered below.

Everywhere on our planet, disintegrations take place all the time, without stopping, that are perceptible to us by their emission of radon gas.

Others turned into water, as explained in section 5,1,d, earlier in this text.

Some, on the surface of our planet, are exploited for our nuclear power.

In the mines, the uranium material that contains **easily fissile elements in very small quantities**, is concentrated for uranium and transported as "Yellow Cake" to the plants where it is used.

### **5,3,b - Current Nuclear Energy**

In "nuclear plants", the exploitation of radio active material starts with the preparation, from the yellow concentrate, of **bars of "fuel"**, adapted to the needs of the equipment.

For the operation of the plant, these bars are lowered into tanks filled with water (pressurised or not) where they come **into contact with neutrons and small free compounds** existing in water and the air from the tank.

**Links are realised immediately** between electrons of compounds from neutrons, and the free compounds in the tank.

**They lead to a first increase in the thermic agitation** which triggers the entire operation.

We saw in Chapter III, that the formation of compounds by binding together of atoms that are different or of the same type, releases elements of gravitic clouds which come together: the gravitic clouds of the compounds are always smaller than the sum of those components.

This thermic agitation is a supply of charges for heavy elements that were "broken" in 2 (or 3) main pieces and many small ones.

The pieces seem predetermined. They certainly correspond to pre-nuclei of atoms created in stars at end of their life

The released compounds, and those of the atoms gravitic clouds existing in the tank, **immediately bind** with free or not elements of the fuel, **creating new compounds that are radioactive by-products** (undesirable) and cause a second and **strong increase in thermic agitation**.

It is the **production of heat**, which is sought.

It is transported into no "nuclear" areas of the plant and used for mechanical movements which cause electric generators to function. See section 5.4, here below, concerning electricity.

According to these explanations, the heat is therefore **not produced by the fission** of heavy atoms, but by the **links, just after, to create or modify compounds**.

Could this be the process called **cold fusion** or LENR (English: Low Energy Nuclear Reactions)?

### **5,3,c - Nuclear (and thermic) Electric Plant**

Currently, all thermic (combustion) and nuclear power plants that generate electricity operate on the same principle:

1. Performing one or more **chemical syntheses** of elements to create heat, and all-together forming as well useable or undesirable by-products.
2. The heat is converted into mechanical movements,
3. To turn a generator,
4. And pick up the "electrical charges" in the air to in-put them in electric systems.

It would be useful to try to remove the phases 2 and 3, by creating in phase 1 of molecules of products that are not (too) undesirable AND free compounds otherwise called "electric current" that are created directly in the electrical systems.

It would, according to what we describe below for electricity, to place in the tank of the nuclear plant, a generator rotor - or similar device - which would be fixed, built-in "electrical system" and able to provide free electron or already compounds of components to be transferred by disturbances of the internal space of the electrical system, to the user system.

## **5.4 - Electricity**

## 5.4,a - Theory

In the Universe, and therefore on Earth, all events, creations or transformations of materials and objects are achieved by electron bonds, free or already participating in compounds of materials, following contacts, as explained in previous chapters.

**Electricity is this ‘possibility of action’ for all free elements of the Universe in the space free of objects and in materials and atmospheres pertaining to these objects.**

It always exists for all electrons and objects in the Universe, **without special features or special provisions** in these elements. **No force or energy** is associated or necessary to the electrons to bind.

It has no particular force and its action is always adapted to the volumes and other qualities of compounds in contact. Electricity is in the same way, suitable for transistor, handheld gadget or high voltage transmission and use of "energy."

It leads always and at all levels of importance of the matter, the realization of all phenomena explained in previous chapters:

- Disturbances of electrons in space and creating waves used immediately for their operation,
- Increasing the thermic agitation, with modification of the movements of electrons and free compounds,
- Gravity in all compounds, with gravitic clouds and atmosphere around all objects.

## 5.4,b - Electric systems

These are areas in which an electric current is created, and appears to move between multiple tools at least together a user and a 'supplier' of electrons (electric charge =).

These zones are well defined and isolated electrically, allowing free movement of electrons disturbances of the internal space. They exist from the smallest structures like single molecule of an electronic component, to larger volumes, load and size of their zone of action.

Tools are varied depending on the quality of the materials forming them and the work required.

## 5.4,c - Electric Current

It is a phenomenon that creates a job in a specific location.

This work is always an electron binding components specific objects connected to the electrical system.

In an 'electrical system' always exist the following places or objects, specific:

- Supplier of "charges", generator or battery;
- User which has to perform the work involved: lighting, heating, telecommunications, motion, ...

It must transfer the charges of the provider to the user.

This operation is performed by electrons disturbances in the internal space of the electric system:

- When a user is logged into the system, it is ready to receive an electron or free compound for one or more links that realize the work required; sometimes it takes an "instigator" (starter).

- These connections create disturbances electrons from the internal space of the electric system: "Electromagnetic waves » as called.

- They move in the internal space and meet suppliers of charges corresponding to their qualifications, ie those of the user;

- They immediately create new disturbance-waves that carry the information to the user, and the phenomenon is repeated.

All happen at the speed of light, but the connections of the electrons are not always immediate (hysteresis).

This operation explains different phenomena:

- It is the user tool that triggers the action; use before the filing of charges;

- The charge of "battery" or other power suppliers is never scattered in the electrical system; the charge left in the battery;

- In the circuit or electrical system, only move the free electrons, - larger or smaller in number -, disruption of the internal space; it allows us to understand the qualities required for superconducting systems.

All operation is to study more fully.

5.4, d - Special cases.

### **Photovoltaic**

Our theoretical explanation shows that in this technique the charges supplied (waves "visible" space) does not always match the needs of the user tool.

To try to know if the use of photovoltaics would be improved with:

- Permanent use of a battery suitable for frequencies of light, rather than the needs of the use;

- Good insulation complete the entire system (?).

### **Superconductivity**

It is a difficult problem because the electrical phenomenon still exists when electrons are in contact, for example those of the "electricity" that is to say disturbances of the internal space of the system; and those of the electrical insulated system.

### **Electronic components, diodes ...**

Transistors, diodes and many other electronics devices are explained by basic phenomena of electricity in power systems consist of the component itself, and the balance of entropy in all relevant areas.

### **Clouds storm, hurricanes and other natural events**

Our theory best explains the accumulation of "electric charges" in the storm clouds.

Does the knowledge of the limits of power systems dry or wet cyclones would better understand and explore interventions?

## CHAPTER VI

### LIFE ON EARTH

6,1 The Origin of Life, 6,2 - The Features of Life,  
6,3 - Organs and organisms,  
6,4 - The Nervous System,  
6,4,a - Different systems, 6,4,b - The Action Potential,  
6,4,c - The Nervous influx, 6,4,d - The Senses, 6,4,e - Other actions,  
6,4,f - Ghost Signs,  
6,5 - Life in Society

October 2016

#### 6,1 - The Origin of Life

The latest hypotheses about **the origin of life** on Earth bring into play specific elements present in the space of our galaxy. Their molecules are close to the molecules of carbon compounds, and close to organic, mineral, matter on Earth, whether dead or or living.

Life on our planet has appeared in locations distant from each other, with no connection between them. According to some current observations, microbial life was already flourishing and quite widespread, 3.5 billions years ago, or a billion years after the formation of the Sun and its planets..

The first living cells, usually grouped in colonies, seem to have been alike. They probably originate from the same compound that could have be created, have grown and multiplied in the matter that was being formed in order to create the whole solar system.

What follows is one possible explanation, among many others, for **the development of life on Earth**.

In the nebula in which the solar system was forming, a particular compound or an unusual new molecule might have existed—probably created within a previous object in our galaxy, star or otherwise, or constituted inside this nebula—forming a small unusual body...

We find it very difficult to imagine and we call it **Life**.

By an abnormality, it would have multiplied itself in elements like itself, and these new elements would have dispersed in materials that were being formed. Many examples of this Life-object might then have been found in many bodies, in-

cluding the Sun and its planets. On our planet Earth, they could have been able to maintain themselves and then develop all the way up to us, given particular environmental conditions, such as water and oxygen, in the external areas of our planet. These early Life objects might still exist in the deeper layers of our Earth, probably in different forms.

Astronomers will one day probably find signs of life on all the planets in our solar system, as they have recently found on Mars and lately on Titan, a moon of Saturn. With the discovery, which was to be expected, of planets **around all stars in our galaxy**—and in others—it is very possible that Life particles existed and still exist in some of them.

It is not the presence of conditions that now seem to us favourable to life as we know it on Earth, which determined its installation on our planet. A particular Life cell came across to our planet randomly, as it may have done, and probably has done, **elsewhere in the Universe** and it developed according to the conditions that it encountered.

"Life" comparable to ours could therefore exist anywhere on our planet or in other stellar systems. It would be visible or identifiable on the surface of space objects or within certain materials. But only groups of cells under specific conditions could develop, adapting to the environment. The environment in question is not necessarily essentially oxygen and water, but could be quite different media, as shown by some extremophile organisms that are installed on Earth in unusual environments compared to life as we know it.

Even if there were somewhere a life almost similar to ours, considering which cell Life we come from, with an evolution of 4.8 billion years,- and closer to us that of modern man, appeared 200,000 years ago - it is not reasonable to think that we could meet one day living beings in a stage of development allowing mutual understanding.

How were human beings, 2 billion years ago?

Could we understand a man coming from some 20 thousand years ago, or living at 20 or 20 thousand years light from us?

## **6,2 - The features of the Life**

It is difficult to determine what differentiates inert matter from that of the living beings. Among the peculiarities of it, identified by philosophers, we retain self-reproduction, a faculty for all living individuals to create others like them.

But it is not certain that this characteristic is specific to life. Some current observations in nano sciences show some reflex natural reproductions or reflex "repairs" in certain mineral neo-molecules.

Another feature of living matter is that all living organs and organisms are surrounded by **an envelope, participating in their functioning**, involved in the development of certain phenomena.

All compounds of mineral organic matter, as well as all the other elements, the cristallogenic elements in particular, have structures that can suggest a skeleton or shell or a more or less solid envelope. These structures give them characteristics that are the subject of special studies in the field of nano science.

However, *in our current observations*, none of these mineral structures, even those structures that contain other structures, participate in their own modifications.

The substance of living beings is created and evolves exactly like all other materials in the Universe, with the same phenomena and the same rules, even if the envelopes of organs and organisms create unusual events and objects.

### 6,3 - Organs and Organisms

**The outer envelopes** of living beings, skin, peel, membrane, shell, or other, serve to protect them and limit their environment. Their permeability to internal or external elements, physical or seemingly intangible elements, is highly variable, from an individual to another, according to classes or species.

We can consider as an organism, a group of unicellular individuals, enough pressed tight together to avoid any way or contact with outside except those necessary to their existence.

It was probably from those agglomerates that multicellular organisms began.

Inside the organisms, envelopes or membranes surround all the organs, different each from others by their matters or functions. They are often inside each other, and interact.

**The contacts of the living beings with their outside** happen in two ways:

- **Physical actions, that seem easy to observe**, for ingesting food and air and for evacuating products of dis-assimilation and proteins destroyed during internal functioning of organs.

- **By their senses**, which allow the coming into the organisms of all the events from their environment, with sensations for sounds or noise, odours, vision, touch...

- We will see below, § 6.4, d, that a selective permeability could exist in outer envelopes, enabling valuable or accessories connections of these organisms, of the same genera or animal or plant kingdoms without clear separation. Thus plants and animals can cooperate in their defence or development.

The **envelopes and membranes** could be considered as a part of the cytoskeleton of the cells of all living beings.

## 6,4 - Nervous Systems

### 6,4,a - Different systems

All operations of life are similar in all living organisms, some of which are much more complicated than others. But the level of complexity is difficult to define, as well as the differentiation between the 3 kingdoms, animal, vegetable and mineral.

Is a plant body that has memory, reflexes and centralised actions, without brain, less complex than an animal that seems to think or a colony of bacteria that seems to choose its food?

We shall study here-below the nervous systems of living creatures called superior. Other organisms are provided with simpler devices with relatively comparable results.

All events in the life of all individuals, considered as being alive, and in their organs are dependent on a nervous system - even without visible physical elements such as neurons - in which all actions stem from each other **without any choice or program**.

The system can be reduced to a more or less important specialised network of specialised proteins whose permanent changes may be due to disturbances of the internal space. This is particularly the case for more complex (superior) plants for which any bark injury happening to it must be repaired quickly.

Physiologists who are specialised in plants know the phenomena of information transfer between vegetal elements located at a more or less distant point, but do not seem to explain them yet. Important connections seem to exist in the soil between the plant and animal, fungi, insects organisms, for example.

A nervous system usually consists of cells of very variable size, of neurones, with their various extensions, such as dendrites, synapses and other structures still not well understood such as nodes and the brain.

In our study we completely separate the action potential and nerve impulses, considering that:

- The **action potential** is the material part of the nervous system, ensuring its vital maintenance,
- The **nerve impulses** are the way the system itself functions, particularly the transmission of signals for actions at all levels.

### **6,4,b - The action potential**

It corresponds to the material component of neurones with proteins that allow the functioning of nerve impulses.

This is the "vegetative" system of the neurones and glial cells and the whole system, with, for example, the assimilation of molecules conveyed by nutrients, based on changes or creations of proteins and the need to evacuate those destroyed by the normal operation in the entire system.

The modifications of value of different ions in the cytoplasm of nerve cells, are regulated by variations in the selective permeability of plasma membranes, induced by the nutrients and the disturbances within the internal space through the **nervous influx**.

This is why the quality of the nutrients can be relevant in the organs, in spite of all the changes they undergo before reaching the cells.

### **6,4,c - The Nervous influx**

It's a seemingly immaterial part, using proteins of neurones and the disturbance of electrons of the inner space of the entire nervous system.

Overall, its functioning is already well known but no explanation is given as to the practical realisation of protein modification following the transmission of information by the senses, or other neurones in the internal nervous system.

Research is intense in this field and new ideas have appeared in recent years in connection with the "brain waves" used since the 1930s for electrical measurements in conjunction with health problems or a very varied range of research.

We offer below a mode of action, similar to that of waves in the space, which helps to explain and justify the perturbation waves existing in the internal space of all living beings with an apparent nervous system. They could also exist in other living organisms.

**Sensations or "sense"** are the contacts, some appearing intangible, of living organisms with their environment and surroundings. We explain these in detail here below.

It is through them that information enters organisms.

**This information is collected in the external environment** by the special extremities of the nervous systems. They are **dendrites** composed of very numerous small proteins, modified continuously by electrons, free or already connected to

others, and particularly those of disturbances of space, such as the "light waves", concerning the optic nerve. See Chapter IV.

For example, with respect to vision, the electrons of the disturbances of space, - the Sun light, after being partially absorbed, and returned by reflection on the object, therefore what remains after reflection - come into contact with proteins of the dendrites of the retina. Some are modified or newly created and **at the same time new disturbances and waves in the interior of the nervous system and organs** are formed.

There could be a long series of modifications of proteins and thus a series of disturbances with various uninterrupted activities, despite the independence of all events.

**New space disturbances** are created only if the modifications of proteins correspond to a certain volume of electrons.

These waves have **specific frequencies**, different of those of the Ether of space generally.

They relate to the internal space of the organisms up to their outer envelope and would therefore always be **specific to each living being** bounded by its outer envelope.

They move **more or less far in the organs concerned**, according to:

- The importance or the "strength" of the signal, which could concern the whole body or only a few cells or organs more or less distant from the point of creation of the signal.

- The quality of the envelope of organs, or nervous sites such as the brain, which, for vision, recognises images registered or creates new ones.

All operations are carried out **instantly** but still one after the other, depending on the importance of modifications of proteins involved in precise specific sites or specific systems, with important synapses interventions that could carry the particularities of the genome.

Proteins of the cells are permanently changed. These are accumulations of amino acids with a very short life duration and are reconstituted immediately with elements of destroyed peptides, modified by disturbances of the internal space according to their importance.

Only significant events, - at different levels - coming from dendrites, synapses, or other places of the creation or modification of compounds may affect and modify proteins in more or less numerous organs or cells.

Disturbances, and information, always move at the speed of light, with more or less great participation of the hysteresis, because of the very large diversity of the range of proteins.

Recent ideas and discoveries could be a first step towards this theory of information transfer in nervous systems by disturbances of the internal space of organs and organisms.

In early 2014, a team from the "University of Freiburg" and of the French National Centre for Scientific Research (CNRS) in Gif-sur-Yvette" studied the movement of a "resonance" that could be responsible for the transfer of information into nerve impulses.

This **resonance** corresponds to such disturbances recovered, partially or otherwise, by changes in protein ready to receive them.

All these provisions could suggest that all systems are similar. However, as we have seen from the first chapter of this essay, all events are always randomly performed in systems which are, in turn, already randomly constituted in the first place.

The presence of some elements may be accidental and in this case lead to specific events, materials or sometimes apparently psychological.

#### **6,4,d - The Senses**

From the beginning of their presence on Earth, and during many billions years of evolution, all living beings have created for themselves tools to facilitate and guarantee their material life and to use the phenomena of their environment for more or less important or necessary functions. We are far from knowing all of them yet.

All the contacts or "connections" between living beings and their environment are realised through these envelopes by their "**senses**."

**Touch** seems necessary for all living organisms, while the sense of **taste** is unique to some. **Sight, smell, hearing** are phenomena carried by space waves, and atmospheric waves, and are more or less developed depending on the individuals. Other relevant waves for some other organisms may exist, radio waves, for example, whose frequency of disturbance are similar to the waves called olfactory and luminous.

All the senses are "exploited" in the same way inside bodies, by **nervous systems**, centralised or not. But according to the organisms' needs, the waves of space can be used for different phenomena that can vary from one type of organism to another.

For example, so called light waves are used by "superior" (more complex) animals for sight thanks to their eyes, but plants and other organisms which do not possess any "ocular" tools, could still be using those same waves for some phenomena whose consequences are similar.

This is how an ivy 'sees' the wall, a little further away, on which it is going to climb with roots that it prepares the correct side and the sunflower turns towards the Sun!

Current studies by the Teams of Pr Steven Lockley, Brigham and Women's Hospital of Boston and of the Université de Montréal, show that... "Light doesn't just allow us to see objects and the environment, it tells the brain whether it is night or day which in turn ensures that our physiology, metabolism and behaviour are synchronised with temporal fluctuations our "environment".

"For diurnal species like ours, light stimulates day-like brain activity, improving alertness and mood, and enhancing performance on many cognitive tasks," explained senior co-author Julie Carrier. "This theory may explain why the brain's performance is improved when light is present during tasks."

The researchers also show that light stimulates brain activity during a cognitive task even in blind people. It would be interesting to know which nerve endings are in charge of transmitting information to specialised sites in the brain that detect this activity.

Studies in Canada have shown that plants are sensitive to music.

Numerous other recent searches and observations identify varied phenomena with environmental influences on the behaviour of plants and other organisms without differentiated nervous systems. The life of these living beings is organised with many phenomena and devices that we believe are normally reserved for living "superior" beings, such as touch, light, smells, sounds, memories and even apparent choices!

Colonies of unicellular protozoa might perhaps have the sense of touch, and contacts would allow the functioning in them, as explained above, of a primitive nervous system.

For smells and sounds, there are probably different levels of formation, movement and detection, depending respectively one on the Ether of space and the other on the surrounding environment, with air as its main component.

As far as smell is concerned, an important part could be conducted as for vision, with waves of disturbances of space generated by creations or modifications of compounds.

Scientists have just discovered (in early 2011) that the smell of odour molecules is modified by variations in their shape. These modifications can cause disturbances of the electrons of the Ether of space—by electron entanglement or other connections of compounds in the "aromatic" molecules—with a diffusion and a perception that can take place at a more or less close or far range, according to the quality of molecules and receptors. We should be able to position them in the overall spectrum of perturbations of space. They could be located in the sub-millimetre band waves, not well known and close to the infrared and light waves, which are perceptible by living beings.

The latest observations, in particular the importance of nostrils in the orientation of pigeons, or dissemination of pheromones by sparrows, allow us to explain very numerous phenomena.

For their migration numerous living beings seem to be attracted and guided by odours emanating from "places" of destination, at more or less precise times in their lives. The hibernation of mammals and other terrestrial animals may be decided by the "smell of the seasons," both for the beginning and for the waking up at the end, while individuals are still "asleep".

It would be interesting and useful to know the importance of odours in the lives of butterflies and other insects, especially those who live within a society, or partially in the ground and their hosts they might parasite or not.

Marine animals, such as turtles, eels, salmon, and perhaps the great cetaceans might be guided by smell, despite the presence of the marine environment which only has a small influence on disturbances and waves of space.

But there could also exist a different and complementary process concerning, among other phenomena, the "odour trails" with the sense of smell of some living organisms or short range odours, carried in the air of the atmosphere.

The sense of hearing is not very different.

Sound waves could be of two kinds. Disturbance of the atmosphere moving at the "speed of sound" like waves of the vibrations of the air, and a more general mechanism involving the disruption of space at particular frequencies.

Is the guiding system of bats sound driven or is it similar to radio interference or radar waves?

The current scientific evidence may let us think «the five senses» could derive, or have evolved from the touch which could be the first sensation or use of their environment by colonies of primitive unicellular organisms.

#### **6.4,e - Other actions**

These perturbations of the internal space of the organs and organisms could explain the replication of genetic material, keeping in mind that everything is done very quickly when the necessary conditions, - that we do not know - are met, even for chromosomes and all the DNA.

In vitro studies are very important for all physiologists, biologists and other researchers concerned with the phenomena of life. They work on samples, larger or smaller parts of organisms, using materials and techniques that they are able to invent and adapt.

But it is possible that some samples will lack the **inductor signals** brought by disturbances of general space coupled with the **internal** space of organs or orga-

nisms that transmit information from one site to one or more others, controlling the entire system.

This is probably one of the reasons why animal experimentation in laboratories is required.

In the same vein, could it be that some unusual envelopes of organs within organisms—or lack of them—may cause defects and malfunctions appearing as diseases?

The inheritance of acquired characteristics can be explained in the same way, repeated peculiarities are incorporated more or less quickly in the proteins that make up the genome.

A similar phenomenon is that of learning. The repetition of actions by limbs or by other organs creates some reflex “memory-sites” that may exist for a long time, and be reactivated after long periods of pause or suspension. This concerns both the learning of physical gestures, sports, the use of instruments, and intellectual activities, and we can add all those activities of ordinary life that are properly working and effective only if the information for the operational functioning is transmitted almost instantly from one neurone to the others with the reactions of memories sites, reflexes and effectors. For example, it is the feet touching the ground, who communicate to the knees how to walk and the information received by the dendrites of the optic nerve are interpreted by the memory sites to create images for us.

#### **6.4,f - Ghost Signs**

Our amazing discovery of «Ghost Signs», not yet explained, could confirm the phenomena detailed above.

By carefully looking at an area free of objects and of a solid colour, paper, a smooth wall, various objects, after a few seconds, "I" see lines of text or drawings of very fine shapes, irregular and moving, a little dark or bright. Everything is sometimes visible or barely perceptible, but always there.

The letters are in constant motion as if the words changed, which prevents reading the texts.

Watched through a magnifying glass, letters and drawings are not changed, but the lens does not enlarge them, as it does for objects around, as if the written lines and signs were insensitive to the magnifying glass, or were between the lens and the eye.

I see them everywhere and even in the stain of my AMD (Age related Macular Degeneration).

It would therefore not be the eyes that see these images!

Everyone can see them. But nobody notices them, probably because they

know, or we think we know, they could be linked to the functioning of the eye...

In recent years, research has shown that the sense of touch is the only one to act within the bodies of living beings. Attributes such as the eyes, nose or tongue are accessories to this sense.

Ghost Signs, lines of text or drawings appear as a visualisation of internal disturbances and letters and words might correspond to thoughts that vary constantly, until an unconscious decision modifies an effector or memory site. The recordings appear not to be made immediately, as if to wait for reflection. Which would confirm that thoughts, like all intellectual acts, are only purely material...

These remarks may seem unrealistic like the fact of believing that we see these disturbances in Ghost Signs...

This would confirm the transfer of all information - even that in progress of being created - by disturbances of the ether of the internal space of the organs and organisms.

Ghost Signs might correspond to particles created in the inner space of organs and around, at their outer limit, to determine this limit, that may vary with the quality of materials.

Similarly that are created all bodies and objects - along with internal gravity - as explained in Chapter III.

Variations of small proteins in organs and organisms would form around them a small gravitic cloud, like the atmosphere around objects.

Ghost Signs do not vary immediately according to activities. That could be the beginning of an explanation of how a quasi nervous system could act in plants and other living things.

## **6,5 - Life in Society**

Touch is a very important sense or tool in the social life of all persons, human and others, belonging to the animal kingdom including insects, especially those that live in colonies.

The imposition of hands is an act that exists within all human groups, and probably corresponds to observations dating back from the beginning of the creation of human beings.

Researchers on vital energy such as Franz-Anton Mesmer, followers of acupuncture or relaxation therapy and other healers should not be regarded as charlatans; there is no fluid, "animal magnetism" or positive or negative energy, but probably specific skills in the permeability of the envelopes of organisms. In 2012, studies of mind controlled games could be an application of these phenomena with the use of headphones creating a communication between the inside and outside of organisms.

Contact between the mucous membranes of certain individuals could be the basis for important social organisations.

Kissing and sexual activity are of great value, apart from the satisfaction of pleasure and reproduction. Frequent and particular contacts, through the mucous membranes, help social relations between partners to evolve.

Some current research shows the value of physical contact between a mother and her child.

Physically, spirit does not exist.

It is a way of using, consciously or not, by living beings, differently according to individuals, very numerous sites of the nervous system. This physiological entity brings closer together some specific phenomena participating in the activities of living beings, aware or not of the presence of this spirit.

Its creation is based on the biological evolution of the formation of individuals since the presence of the first cell of life. Then, in billions of years of evolution, repeated phenomena have created reflexes and memories that would be the beginnings of what we now call the mind.

Some complex living beings, called superior, have created special organs, such as the brain, the nerve ganglia, which gather together the reactions to external and internal events.

Multiple proteins that form the tissues of these sites and all sensitive elements have evolved without any directed intervention, not even directed by the spirit itself, as it goes along while it creates itself. It is also possible that at some point, biological evolution has been guided by decisions that seem conscious, taken by the spirit that was in the process of forming.

The intelligence of some living beings is created exactly as their mind/spirit. It is a specialisation, innate or acquired, involving mainly memory and speed of action, whether they reflex or not, physical or intellectual.

The "form" of the spirit is linked to permanent modifications in synaptic proteins and of other specialised sites, which could be proved by various phenomena including the following three:

- Studies showing the unreliability of memory,
- The fact that some newborns of complex organisms already possess at birth a complete nervous system with specific sites that react to events happening from birth,
- The difficulty, if not the current impossibility to create with a computer an intelligence that would be comparable to the intelligence of living beings. Memories necessary to deduction, are important to digital and information technology. These are less reliable, but much more finely tuned, for living beings.

Artificial Intelligence will never give a doubt or a smile that make us move a step forward.

We must therefore consider that all the phenomena that lead to the formation of the spirit are realised without any intervention of this spirit, even for us human beings. It seems difficult to imagine and understand how proteins neurones, real material elements, can turn into a spirit which feels responsible for living beings of the whole operation.

The decisions taken by this spirit are often unconscious and free will does not exist, if we stay at the level of physical science. But these phenomena have great importance in the lives of individuals and societies. Unconscious decisions can create apparently unforeseeable or unavoidable events.

Fortunately, cognitive relations, social contacts and philosophy have created rules of life in organised societies, which give the illusion to individuals that they are able to intervene in the events of their lives. In the normal frame of reference, this illusion is sufficient, and unconsciously people are happy with it.

Intuition might be a faculty, - more or less developed in contacts between human individuals -, which would short-circuit the sequence of decisions, whether they are expressed or not, the last part being often a hesitation between two or more ideas and how to express them.

This phenomenon would remove an apparently conscious part of reflection and the decision would be taken without this period of consideration that does not in itself bring anything "genetically" more valuable.

This does not alter the fact that free will does not exist, which is hidden to us by our friend, chance.

There is no conscience or other entity controlling a specific program that supposedly controls evolution or some changes. All organs are created and evolve, without consideration of their usefulness to the organism.

Evolution exists, but its results are not always useful for the development of the organism, according to our human appreciation. It moves in all directions, and we can only know the organs or the organisms that have survived their modifications.

This might confirm a current theory which would partially explain why the majority of the dinosaurs would have disappeared in a few million years, 70 or 80 million years ago, with an evolution which was probably inadequate to their way of living or a climatic change, where they existed.

Observed after evolution, all organs and organisms seem to have been created and to have evolved for a specific purpose. There is no such purpose.

There is no mechanism that would correspond to the control or monitoring of an operation. This could take place only in the presence of an entity that would be

conscious of events and would have the means to guide these actions. We have seen that the Universe does not have it.

But in our immediate environment, at our human scale on our planet, living beings, human in particular, were able to use to their benefit naturally occurring genetic modifications, called mutations. These were sometimes beneficial depending on the circumstances of the moment. They subsequently multiplied them, and tried to create more modifications to try to improve their living conditions and, in particular, to fight against seemingly incurable diseases and difficulties of life. They have managed to modify, usually very modestly, organisms that are called GMOs, some of which are poorly understood and variously exploited by political movements or subjective beliefs.

From their appearance, living beings have evolved, in order to enable them to adapt to their environment, with the creation of other individuals and lifestyles. They have advanced together, according to their senses, their environment and contacts with each other, creating and developing cognitive relations that became social.

For some, amongst which Human Beings, the evolution of exchanges has led to language as a tool to make life easier, and enabling communications, whether essential or accessory ones.

When these living beings began to analyse their relationships, philosophy appeared in order to understand that spirit supposedly transforming the realities observed turning them into more complex concepts such as the soul and existence.

It is generally admitted that only human beings have a spirit.

But what do we know of other non-human persons, to whom we recognise a certain level of intelligence as we understand it, and of those who do not seem to need a spirit to exist?

Similar reactions of some individuals to external phenomena depend on acquired reflexes, sometimes imposed by the leaders of these people, for the good of their community or under this pretext. This may involve physical and mental behaviour such as military obedience, and exclusive beliefs, usually religious ones.

## Chapter VII

### OTHER THEORIES & MATHEMATICS

- 7.1 - Knowledge and its diffusion,
- 7.2 - The History of science,
- 7.3 - Big bang, 7.4 - Quantum Mechanics, 7.5 - Antimatter,
- 7.6 - Mathematics and Information Technology

Octobre 2016

#### **7,1 - Knowledge and its diffusion**

It is always difficult to find the origin of ideas and theories in physics and their exact terms that would allow us to understand them well.

Facts are explained by scientists, then some phrases that seem important, are repeated by all popularisers and journalists. They take all or part of a theory - with the very frequent risk of changing its meaning - spectacular or easy to understand formulas even if they are not exact. This is the case of Einstein and his theory of relativity, of antimatter theory appearing with Paul Dirac, light and frequencies of particles, electric and magnetic fields and the last, the Higgs field with its boson.

Popularisers, scientists or journalists write for their readers and their own reputation and to the truth that they know or wish to spread. Some pictures with words or drawings are classics, such as cake and grapes to show some expansion of space, or the light which cannot escape from a black hole despite his good will... certainly.

The deformations of popularisers and journalists become more important than scientific truths that are hidden and disappear. Scholars and other curious persons then build on what seems true because it is known by everybody and new directions, often false, make the whole incomprehensible.

Many scholars and not the least ones, then direct their research to philosophy, a discipline in which what matters is to ask questions, not to find answers, because everyone has his own, indisputably.

No new Physics or new idea can appear because everything is blocked by a complicated system of dissemination of scientific information which was gradually transformed into an economic system that influences all research. This concerns its

organisation and financing, economic and political environment and the lives and careers of scientists.

Scientists aspire to free diffusion of information of research in general, and of its results. Currently, this is not the case, because the agencies that sort, manage and file in archives are too closely related to business-in charge of spreading this knowledge.

Nothing is accepted in archive before control by "peers" secretly chosen by these organisations. Then, additional sorting is done by the "media" that disseminate and publish such information, according to their ideas about topics and taking into account not researchers or even the public, but the need for sensational news and their economic and financial interests.

In early 2016, it appeared, with the LHC of CERN, rumours of a possible major discovery. Two hundred researchers wrote their observations or conclusions. The usual publisher could distribute only four of them. It was he who chose them. This choice was based on criteria defined for him by strangers.

Thus scientific research is oriented.

To try to mitigate all or part of the disadvantages of this system, research or educational organisations create their own open archive system under their control, available to certain categories of researchers and technicians chosen by well-established standards that give the scientific orientation of the current moment **inside these organisms**. Each implicitly sets its scientific criteria, and knowledge is dispersed in countless places, independent from each other or from centralising agencies, to which technicians and scientists that are out of their norms cannot participate.

This results in an impoverishment of all scientific research.

Rules and barriers are necessary, but they cannot be fixed by private or state companies that broadcast or otherwise their information and medals according to their reputation or according to their personal criteria that are not necessarily scientific.

It is a difficult and very vast global problem, and all scientists are aware of it, but nobody feels empowered to resolve it or has the necessary capacity have this problem studied.

An archive organisation that would allow everyone to easily find the latest research on specific topics in the various sciences does not appear to exist. This entity could list all available free archives including scientific results, according to internationally established criteria.

Only a United Nations agency could create an institution of this kind. This might be asked of UNESCO, already in charge of Science and Education.

## 7,2 - The History of Science

Studies by ancient philosophers and physicists have to be put back in the context of their time and we have to accept to review their results based on what we have learned since.

The history of scientific discoveries is very important. It must be written by historians, neutral, that is to say, not militants supporting any scientific or political positions.

The use of dictionaries, encyclopaedias and scientific archives has evolved markedly in recent years.

Encyclopaedias disappear or become unusable directly: classical encyclopaedias become obsolete because the dates of the articles are never mentioned, and no reference exists that would point towards up to date theories with the latest research recognised by a leading authority which would be a guarantee in its field, if such an authority exists.

Wikipedia has limitations because all information is regularly "updated" by unknown scientists who bring their latest findings, marked and limited by their ideas that become The Truth.

There are experts who could write reliable articles for Wikipedia.

In the years 2,000, there was talk of the Hubble constant, the value of which varied greatly, and had then been abandoned. That was only 10 years ago...

Now it is said that Hubble discovered the expansion of the Universe that was not mentioned before.

In his time Newton's ideas about gravitational attraction, were not accepted and have been fished back and used, two centuries later, by Einstein with the theory of relativity that has never been fully proven, despite cosmologists statements to the contrary.

Moreover, this theory uses the speed of light, which is not constant, and no one has ever explained seriously either light, or its speed, or the creation from nothing of photons and other virtual particles.

The definition of antimatter indicates that it cannot exist and is used in some experiments, in particular in colliders. Some "particles" are made to rotate into them, forgetting that no element can move in any way other than in a straight line, even with the help of magnetism that has never been explained either.

Physics becomes the philosophy of nature, as in its infancy, 2,500 years ago, when everything had to be learned and known.

There is always as much to invent, discover and learn.

### 7,3 - Big Bang

In 2005, the age of the Universe was 12 billion years. Astronomers have continued to observe the Universe with constantly improving devices and they found older galaxies. So, the age of the Universe was put back, first by a billion years and then another billion.

Then, it was blocked at 13.8 billion years and astronomers do not dare suggest the discovery of older galaxies anymore.

Nowadays, in 2016, with the significant improvement of observation equipment, astronomers observe other galaxies that were fully mature a few million years after the birth of the Universe. One wonders. When would they have been created then?

How can we observe variations in the cosmic microwave background, 300 million years after the big bang when the galaxies of the same era are barely visible with the current sophisticated equipment?

In March 2013, some astrophysicists declared to have observed gravitational wave vibrations in the "cosmic background space" during the first second of the Universe, thereby confirming, they say, the validity of the Big Bang. It is amazing that an observation piece of equipment has "seen" the vibrations of what was space, through waves, due to disturbances that we have not been able to observe on Earth despite many attempts during the last twenty years.

So, somebody decided that galaxies were being made faster in the "beginning" of the Universe, without explaining for what reason this happened... Probably because everything was there and it was enough to make them grow, a theory that Gamow developed 20 years after the presentation of a theory of a primordial atom by Georges Lemaitre. It was a large atom of which nobody showed the origin or the very reason for its existence in who knows what, probably a chaos, exceedingly full of everything... Then Lemaître's atom was reduced to a point without specific dimension containing no one knows precisely what.

Gamow described the beginnings of the Universe of the Big Bang, based on what he knew of the physics of his time. This is quite normal and understandable, but how can he explain the transformation of matter and antimatter, the creation of photons for a light that no one has ever explained and so accurate a timing of all events in such a short time...

Since then, astronomers have observed that new stars are created with the remains of dead ones. That seems natural because in the nebulae, where new stars are created, some heavy nuclei of atoms that have been created in a very high thermic agitation are present. We might also deduce from the above that dark matter could be the matter of dead stars, which transforms gradually in order to be used in the nebulae to make new stars.

Many physicists do not believe any more in the Big Bang theory, a doctrine that seems official, or at least so strong that nobody dares to offer an alternative theory.

Many Nobel Price winners have tried to do so, but have not been followed.

At the beginning of 2015, some scientists, after mathematical studies, dared to question the validity of the Big Bang, saying that the Universe always existed and will last forever, and others, with different developments and arguments indicate that the expansion of space could not exist.

Further studies are in progress.

Results are expected by many scientists.

## 7,4 - Quantum Mechanics

**Quantum mechanics** is a speculation that developed when mathematicians and physicists, at the beginning of the 20th century, tried to observe, with the equipment they had, objects of nanometric dimensions. As they could not see them, they replaced them with mathematical factors. As they could not see the results either they declared, with the school of Copenhagen, that they had no importance if the calculations were made.

Following some observations, a physics theory was materialised in the Standard Model of particles of cosmology. This doctrine describes the forces and particles, including the Higgs boson. It is difficult to understand how this theory explains anything about the matter of our Earth and all the other elements of the Universe.

According to their own rules, some physicists tried to analyse everything including the wave-particle duality, a theory confirmed by de Broglie, that has never satisfactorily explained the reality of either waves, or other elements to which a frequency of a no explained event was attached. We have seen these issues in Chapter IV.

Schrödinger indicated the atom as the upper limit for the application of quantum mechanics. It is surprising that this area corresponds to a very human development of scientific knowledge or of the quality of the observation equipment, without any meaning for the Universe. Nothing explains why, at this undefined stage of matter, there would exist a break or a change in the normal functioning of particles, forces and materials.

Below this vague boundary, a different theoretical framework for physics seems to apply, based on electron clouds, wave functions, Planck dimensions, standard model particles and the intricacies of certain particles without indicating limits that, without them, could lead to a general incomprehensible and absurd entanglement.

Apparently, quantum mechanics would only affect this part of physics.

Has any physicist, quantum physicist or otherwise, tried to imagine how matter could pass from one physical domain to another, or how could an ob-

ject, such as a human being, for example, depend on different sets of rules of both physics at the same time?

To provide a solidity to mathematical studies, quantum physicists and others before them, used to give new names to different forms of quasi-forces and to ephemeral particles, which enabled the progress of their research. With time and dissemination of studies, taken up by all researchers and students in physics, mathematics results were transformed into laws of quantum mechanics.

Elements of this physics, resulting from it, are possible by chance. Some so-called elementary particles of the Standard Model are likely to exist as being composed of electrons. But no indication is ever given for their implication in the creation of matter in any form whatsoever.

The **Planck dimensions** are based on so-called fundamental constants. They are very human indeed because they depend only on observations that have supposedly been made, and with measures put into numbers, varying with the units of measuring they decided to use.

In quantum mechanics, the mass or energy quanta replace particles and the **renormalisation** is a surprising mathematical technique that allows researchers to change mathematical results that appear to be incorrect, according to no determined criteria, varying with their users.

Infinities are impossible in physics, and a mathematical sense to particles have been applied, which led bizarrely to the concept of antimatter.

## 7,5 - Antimatter

This "substance" was born in 1928, out of an equation by Paul Dirac, as much a physicist as a mathematician. He believed that the Universe was subject to mathematical rules. While others also believed it, no one ever found a mathematical sense of the Universe and all the objects it contains, including the Earth and ourselves.

Antimatter is supposed to have been another state of matter in the early phase of the Big Bang Universe.

How do we know this? No observation has been made of it, either in the period of the Big Bang, or currently...

This is the concretisation of a mathematical tool that has no physical justification.

In our Universe, the one we can touch, of which we are component parts, there is a very wide variety of materials. We can wonder why would any of them be incompatible with others and would make them disappear according to rules that can not exist in a Universe in which we know neither a conscience nor an established programme.

It is surprising that physicists working with particle colliders explain that they use positrons, of which the usual theory explains that they can not exist in our actual normal matter, the one that exists in and around in colliders.

Some physicists say they have found antimatter.

Explanations are difficult. To form any of it, some "anti" element, more primordial, would have been needed, existing or created without encountering components of "normal" matter. Is this possible?

But antimatter has been observed, according to scientists, and biologists make some use of it in medicine.

We think that they create some compounds that are almost similar to what would be their anti compounds. Combined with other elements, they form bodies whose characteristics suit these researchers. It is a natural and understandable phenomenon in the constitution of any material, and in particular the matter constituting living beings in which excessively varied proteins are continuously created, which are only slightly different from each other.

## **7,7 - Mathematics and Information Technology**

Mathematic Science is a range of tools created by human beings, according to their reasoning and habits of thought, which has changed little since the philosophers of 2,000 years ago.

Nothing in our observations or reasoning has ever indicated that mathematical rules could control or direct the phenomena of the Universe as we know it by direct observations of random facts.

The most comprehensive mathematical studies of the phenomena observed in the Universe, or the reflections on the same subjects, were used by Galileo and Newton, Descartes and Pascal. They have become more difficult to understand especially with Maxwell and Einstein. Then the School of Copenhagen has transformed physics mainly into mathematical studies, bringing nothing to physics.

Difficult mathematic studies have established around the physics of the Universe, the feeling that a strong knowledge in mathematics was needed to understand it. This is not exact, Einstein was not a mathematician, he obtained help when this was necessary.

In the twentieth century Edward Lorenz, an American meteorologist physicist studied the chaotic system of the Universe, explaining the difficulty, or rather impossibility of forecasting based on observations of figures of randomly made events. He confirmed the impossibility of weather forecasting despite the use of very powerful and sophisticated equipment.

All the items of information we are able to collect do not allow us to predict any events. We explain this in the first chapter of this essay with the study of chance.

In recent years, with very powerful information technology, simulations are carried out to explain certain phenomena or predict other.

The information used is the same as that of mathematics, that is to say, numbers or other factors observed as a result of new events that are all made randomly.

Despite extensive studies, the results are never satisfactory, both in physics and in every other science of the phenomena of the Universe, such as astronomy, biology, and those relating to the material functioning of the humanities, economics, psychology and other related sciences.

All research results and reflections of researchers, and powerful machines such as the LHC, are accumulated in the archives. They cannot be used for further studies or significant forecasts of phenomena such as meteorology, economics or biology, useful if not essential to the life of living beings.

For the moment they can give, sometimes, only some general trends of certain events.

They can only be used effectively when they have been purged of all information about random phenomena.

The tools for this do not exist yet.

Their difficult research should be an important part of studies in mathematics and computer technology.

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oooOO The End OOooo