

Title: ANTHROPOCENTRISM OF THE PHYSICAL UNIVERSE

Abstract:

It is interesting to answer to the question: What are the most important, the most general Principles in physics? Considering the importance of the Theory of Relativity and of Quantum theory, we could guess that the main Principles of those theories are also the most important in physics. But we will propose a new principle, called Principle of Anthropocentrism in Sciences (PAS), that appears to be more important. Indeed we will see how all fields of physics appear to be consequences of the PAS. We then will show that an analysis of the most important Principles of physics leads to the conclusion that Universe is anthropocentric, which involves that the apparition of human being was programmed since the beginning of the Universe, 15 billion years before the apparition of mankind.

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1.INTRODUCTION

In this article, we will first consider the question: “What are the most fundamental Principles in physics?”.

After having reminded 2 Principles in Relativity and Quantum physics, that are very important, we will propose a third new Principle, called Principle of Anthropocentrism in Science (PAS), that appears to be more important and more general than the 2 previous Principle. We will see that from the PAS, we can deduce aspects and properties of the physical Universe, in particular the form of the physical laws and the 1st Principle of Relativity itself.

After having analyzed the 3 previous Principles, we will show that it appears a common point, very important, to those 3 Principles. We will show that this leads to the conclusion that the Universe is anthropocentric, and also to the conclusion that the apparition of human being in the Universe was programmed since the beginning of the Universe.

2.THE PRINCIPLE OF ANTHROPOCENTRISM IN SCIENCE (PAS)

Presently, Physics are built on 2 main pillars, the first being the Theory of Relativity and the second one being Quantum Theory.

We remind that the 1st Principle of Relativity expresses that all the physical laws remain the same for any observer at rest in a Galilean Referential (renamed “inertial Referential by Einstein). The main Principle of Quantum Physics expresses that systems are in indeterminate state before being observed, but that after having been observed, a physical variable is determinate.

We could think that those 2 Principles are the most general and the most important. It is not the case: Indeed, a third Principle, called Principle of anthropocentrism in the Universe (PAS, we will see further the origin of its name), is more general and more important:

PRINCIPLE OF ANTHROPOCENTRISM IN SCIENCE:

Physical Universe is constituted in a way that permits to an observer to predict in a very easy way (among and in comparison with all the ways that could have existed) the result of his observations.

All physical laws and physical Principles appear to be consequences of the PAS.

For instance, we saw that according to the 1st Principle of Relativity, an observer at rest in a Galilean Referential can always apply the same physical laws, whatever be the Galilean Referential, in order to predict the result of his observations. So it is clear that this 1st Principle of Relativity implies a very easy way for an observer at rest in a Galilean Referential to predict the results of his observations (among and in comparison with an infinity of ways that could have existed with the 1st Principle of Relativity being no valid). So the 1st Principle of Relativity appears to be a consequence of the PAS. It is also the case, for the same reason, for the 1st Principle of the modern theory of ether ⁽¹⁾⁽²⁾, that is the only alternative to Relativity theory. We remind that this Principle is: “An absolute Referential, called Ether, exists. But laws of the Universe are such that they tend to prevent an observer in a Galilean Referential to detect its motion relative to the Ether.”

We remind the word of Albert EINSTEIN: “What is not understandable is that the Universe is understandable”. The existence of equations itself permitting to predict the result of physical observations appears also to be a consequence of the PAS. The existence of those equations is the origin of what makes the Universe understandable. So the word of Albert EINSTEIN illustrates the importance of the PAS, that itself gives an answer to this question.

The mathematical simplicity of physical laws appears also as a consequence of the PAS. For instance in gravitation, the law of Gravitational attraction: $\mathbf{F} = GMm/r^2 \mathbf{u}$ is very simple among and in comparison with the infinity of laws that could have existed as for instance $\mathbf{F} = G(Mm)^{1/2}/r^{3/2} \mathbf{u}$.

The fundamental law of dynamics $\Sigma \mathbf{F} = m\mathbf{v}$ is very simple among and in comparison with all laws that could have existed as for instance $\Sigma \mathbf{F} = m\mathbf{v} + \mathbf{v} \dots$ (v velocity)

In thermodynamics the law of ideal gas $PV = nRT$ is very simple among and in comparison with all laws that could have existed as for instance $P^{1/3}V^2 = nRT^3$..

In electricity the thermal power (Joule effect) $P = RI^2$ is very simple among and in comparison with all laws that could have existed for instance $P = RI^{1/3}$..

In quantum physics, the wave equation $H\Psi = E\Psi$ (Schrodinger’s equation), H being the Hamiltonian is also obviously very simple among all wave equations that could have existed.

In fluid mechanics, equations also are very simple, among and in comparison with all equations that could have existed.

In electromagnetism, some equations appear to be consequences of the 1st Principle of Relativity, but we have seen that this Principle was also a consequence of the PAS.

In general Relativity, the Einstein’s tensor is also very simple among and in comparison with all tensors that could have been valid.

So simplicity of physical laws implies for an observer a very simple way, (among and in comparison with the infinity of other ways that could have existed if the physical laws had been more complicated) in discovering them and applying them and consequently in predicting the results of his observations (trajectories of planets, variables of ideal gas,

thermal power dissipated, energy of an excited electron in an atom, trajectory of a rocket, trajectory of an electron in a magnetic field...)

In particle physics, we know that all interactions (electromagnetic, weak and strong) have the same mathematical frame (Gauge theories). This permits to an observer knowing only the simplest interaction (electromagnetic), to generalize its mathematical frame in order to obtain the mathematical frame of other interactions. This implies a very easy way to discover them (among and in comparison with all the ways that could have existed if the 3 interactions had not the same mathematical frame (Gauge theory)). So the unity of the mathematical frame of the 3 interactions appears also as a consequence of the PAS, because it permits a very easy way (among and in comparison with all ways that could have been possible if this mathematical unity did not exist) to predict observations connected to those interactions (scattering of particles, disintegration of particles...).

4. THE ANTHROPOCENTRISM OF THE UNIVERSE

We remark that the PAS was valid since the beginning of the Universe, because as we remarked previously the physical laws do not change with time. And we have the fundamental remark concerning the 3 fundamental Principles that we proposed:

“The 1st Principle of Relativity, the Principle of quantum Physics that we reminded in Section 2., and the PAS have something in common: They use and they are based on the concept of **observer**.”

(It could be possible to express the 1st Principle of Relativity without using explicitly the concept of observer, but this concept would be implicitly used, because an observer is the only one that can apply laws. Moreover, we have seen that this Principle is a consequence of the PAS, which is explicitly based on the concept of observer).

But we cannot conceive an observer without life and the only living being that is able to observe the Universe, and that is consequently able to apply physical laws, is the human being. Indeed, an observer must own a conscience, and moreover he must be enough intelligent to conceive and solve mathematical equations and to build some devices (complex) in order to make observations. Obviously the human being is the only one living being (known) that owns the required intelligence to be an observer.

So we see that from the beginning of the Universe, all physical laws were in agreement with a Principle based on the existence of an observer identified with a human being, who finally appeared 15 billion years after the beginning of the Universe. Even when baryonic particles did not exist, the physical laws of the Universe were based on an observer identified to the human being, who is the only living being that is able to apply physical laws and to find them in order to observe the Universe.

The only explanation of the validity from the beginning of the Universe of the PAS and of other fundamental Principles based on the concept of observer is that from the beginning of the Universe, the destiny of the Universe was to be observed by an observer, which means by the human being, which is the only observer of the Universe.

Consequently the existence of the human being was programmed from the beginning of the Universe. This programming of the existence of human being appears to contradict the Darwinist theory of evolution, and in particular the point that the apparition of human being is the result of random evolution.

It is a common idea to say that human beings are completely insignificant compared with all galaxies of the Universe. But this common idea is only partly true: If we consider the volume, the mass of human beings, or even the time since they exist, those values are clearly

insignificant compared with the mass, the volume and the time since exist galaxies. But we saw that according to the validity of PAS, the constitution of the Universe is not based on galaxies, but on the concept of “observer” identified to the human being.

In order to live the observer-human being needs to be at a defined temperature. Consequently he cannot live on stars, because otherwise he would burn. But he needs to live sufficiently close to a source of heat to be at the required temperature. So it appears that stars and planets were necessary to the apparition of human being. Consequently, because the existence of the observer-human being was programmed since the beginning of the Universe, the existence of stars and planets, necessary for the existence of the observer-human being, were also programmed since the beginning of the Universe.

5. RELATIVITY AND MOFERN THEORY OF ETHER

We have reminded that Special Relativity was based on the fundamental Principle: “Physical laws are the same for any observer at rest in an inertial frame”. Modern Theory of Ether is based on the fundamental Principle: “An absolute frame (called Ether) exists. Physical laws in the Universe are such that they tend to prevent an observer at rest in a Galilean frame to detect its own motion relative to the ether”.⁽¹⁾⁽²⁾⁽³⁾

We have remarked that those Principles own a signification only if something called “observer”, that can observe physical laws, exist, and the only one know entity that can be considered as an observer of physical laws is the human being.

Both previous theories can interpret most of physical and astrophysical observations. But according to Special Relativity, none information, none physical objects can move at a velocity superior to the speed of light, which implies that neither instantaneous interaction nor instantaneous transportation of physical objects can exist, whatever be the future scientific discoveries. On the contrary according to the modern theory of Ether, instantaneous transmission of information or transportation of physical objects could be theoretically possible with future development of sciences.

So if Special Relativity was true, the quasi totality of the Universe will remain inaccessible to human being forever, which would not necessary be the case in Modern Theory of Ether was true. Consequently if Universe was really anthropocentric then Modern Theory of Ether should be the good one theory.

We remind that some physical experiments confirm the possibility of instantaneous interaction at distance (The first of those physical experiments was realized by Alain Aspect, Nobel Prize⁽²⁾⁽³⁾), and that many astrophysical observations confirm also the Modern theory of Ether, for instance the established existence of a special frame (Cosmic Microwave Background rest frame) and also the interpretation by the Modern Theory of Ether of all observations connected to dark matter an dark energy, not interpreted by the Standard Cosmological model based on Relativity

6.CONCLUSION

So we have proposed a new and fundamental Principle, the PAS, which seems to be the most important and general Principle in physics. We saw that the laws of Universe, in their expression and in their existence, appear to be consequences of the PAS. We have seen that not only the PAS, but also the most important Principles of Relativity and Quantum theory are based on the existence of an observer identified to a human being, because in the Universe, only the human being has a conscience and the faculty of solving and discovering mathematical equations and also the faculty to build some devices (complex) that are necessary to make observations. We saw that the fact that the Universe was based on the

concept of an observer identified to a human being since its beginning led firstly to the conclusion that the physical Universe was anthropocentric and secondly that the existence of human being was programmed also since the beginning of the Universe (Big-Bang). We saw that those conclusions contradicted the very largely admitted idea that human kind was the result of random evolution (as according to the Darwin's theory).

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