

# Einstein's postulates

Business



As a matter of fact, Einstein had used this fact by applying the Electromagnetic theory of electrons as defined by Lorentz. This subsequently led to the emergence of geometry of space as well as the curvature of space that provided an explanation to the motion of bodies that are in a gravitational field. The first postulate of the Special Relativity theory emphasizes that similar laws of physics as relates to electrodynamics as well as to optics remain valid for all references for which the same equations of mechanics apply.

It also states that any form of co-ordinate system that is undergoing uniform linear movement relative to a system of inertia is itself a system of inertia. In the second postulate, he puts into perspective the idea of constant velocity of light in a vacuum, an idea that actually originates from the works of electrodynamics by Lorentz and to some extent Maxwell. (Einstein, Lorentz, Minkowski and Weyl. 1952). Einstein intelligently used the different works of Faraday, Maxwell as well as Lorentz to give his scientific propositions contained in the " Theory of Special Relativity" that looks at the effects of motion on the various properties of matter. The most significant of his postulations being the law of nature that puts emphasis on the fact that mechanics and thermodynamics are the same for all observers regardless of their relative notions and that the measurements of the speed of light must always be made irrespective of the prevailing motions.

From these arguments, it appears that measuring the velocity of light gives a particular value  $c$  irrespective of the non accelerated inertia that is effective. (Barnett, 1948). This has in fact been proved experimentally as factual. However, it does not in any way mean that light has a constant velocity.

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What has been found to happen is a type of compensating change that occurs in the wavelength of light such that the velocity is persistently found to be the same value. Due to the fact that Albert Einstein had made a scientific assumption that light travels at a constant speed, he always had to make adjustments to his rates of time so as to compensate for the relative difference in the speed of light which is basically the origin of motions.

Ideally, if indeed the velocity of light were constant it would technically mean that the waves of light cannot be able to accelerate which is not true.

(Lackoff, 1980). The spherical shape of matter describes the Pythagoras' Theorem as the spherical wave motion as it occurs in space. This was correctly noted by Einstein as the phenomenon that extends matter spherically and thus enables it interact appropriately with other forms of matter in space thereby forming the basis of the Pythagoras Theorem. In this respect, it becomes quite probable that the dimensional space is actually ideally spherical. In addition, the law regarding the disposition of rigid bodies is not exclusively given by Euclidean geometry but rather by the approximations of the spherical geometry as postulated by Einstein.

However, it has been widely claimed that Albert Einstein did not fully understand matter existing in space. Indeed, in the theory of relativity indirectly leads to the same position as the law of motion without mention of structure or the typical behavior of the electron in question. (Barnett, 1948). Therefore, this theory of Einstein's was founded on the empirical premises from the actual observations of how one form of matter squeezes themselves through matter around them. That was the basis of the representation that he eventually developed concerning spherical fields of

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force. Essentially, his equation is a modification of the Pythagoras Theorem as applicable to a three dimensional co-ordinates where the co-ordinates are intelligently replaced with the displacement caused by the light rays.

This is why they were able to coin the idea that the universe is basically anything that exists either presently or in the past. Indeed, this was an improvement on the previous mathematical fantasies that explained life in two dimensions. (Abbott, 1998). The general theory of relativity confounds on its relations between humans and space. According to this theory, we may never be able to interact physically with certain parts of space within the universe.

This is attributed to finite speed with which light travels and the relative idea of spatial expansions. For instance, certain radio waves sent from any particular region of the world cannot travel to all parts of the world even if time were not limiting, which means the universe has been there forever. Yet still, the principle of relativity as regards the universe considers them a part of the reality. Actually, this brings the idea of observable and non observable universe which essentially depend on the point of the earth where the observer is located. This is in agreement with the idea that long before the Big Bang, there was only a single point in the universe where matter was concentrated.

And that naturally, all humans were there only that none of them had a perception of space. (Italo, 1976). The reason as to why the relativity theory works mathematically is the fact that it assumes the velocity of light to be a constant value. That is why it remains limited to the relative degree of

motion between non accelerating matters. Besides, the displacements occurring on the beam of light is determined by the differentiation of velocity as a function of time. This essentially causes no differences if mathematical principles are applied with the assumption that velocity is constant while time is allowed to change considerably.

However, the second application seems to hold more weight as the changing values of the velocity of light waves is what appears to cause the apparent motion of the wave centers. In his later works, Einstein confirms the assertion that light never really travels at a constant velocity. According to him, the special relativity theory was founded on the assumptions of velocity constant. Nonetheless, the law could not hold any more leading to new inventions that the velocity must remain dependent on the values on the coordinates in case a gravitational field can be located. This according to scientists is a typical case of a life of metaphors.

The idea that our concepts are not purely shaped by matters of intellect alone but also by our perceptions of what exists around us. (Lackoff, 1980). Although Planck had introduced a significant scientific thought, the quantum theory did not gain strong grounds since 1905 when Einstein resurfaced with it from his experimental works. However, according to him all the known forms of radiant energy such as heat, light as well as x-rays travelled in space in a manner that conforms to the idea of energy quanta. Nonetheless, Albert Einstein's work that covered the area of photoelectric effect was largely related to the earlier works of Max Planck.

Planck had earlier proved that light energy is subject to absorption as well as emission in the form of discrete amounts called quanta. In this respect, the radiation of a given frequency would have to be handled as if it was made up of atoms whose individual energy could be estimated as  $hf$  whereby  $h$  is an arbitrary value referred to as Planck's constant. To prove this assertion further, other scientists including Niels Bohr later on came to understand the atom as composed of discrete values of energy. In addition, they made conclusions that the discontinuities that exist between different atoms are linked up with energy emissions or absorptions. (Barnett, 1948).

This served to shed some light to the fact that elements or their compounds undergo radiations in their gaseous states so that they absorb only at specific wavelengths. Indeed, this work is largely accepted especially that no discrete particles actually exist and that a particle of matter can be seen in a small region in space where the energy density is the highest. Still, it holds true that the wave amplitude description of the wave center of a wave standing on a spherical space is what causes the particulate effect of matter. In view of this, it becomes certain in mathematical concepts that there is only a limited number of discrete energy states associated with the electrons within atoms or molecules and that absorption or emission of light is only possible in quantum amounts as the said electrons migrate from one pattern of waves to another. (Italo, 1976). Essentially, the Einstein's law of relativity stresses the idea that everything within the face of the universe is real and that we can actually observe the various components of the universe if we travelled to the specific points where they are located.

However, this is better understood from the stand point that accepts a mathematical description of the environment and the associated nature while giving a wide berth to the ordinary world of perceptions. This is the only way to a perfect understanding of the thin division that exists between physics and the principles of metaphysics.