

In defence of classical physics

Abstract

Classical physics seeks to find and describe the laws of nature. I am of the opinion that classical Newtonian physics is “real” physics. This is in the sense that it relates to mechanical physics. I suggest that if physics is ever to succeed in determining a theory of everything it needs to introduce a more satisfactory invariant medium in order to do this. This is a nature given ontological, temporal and mechanical definitions as theorised by Isaac Newton. I believe that the foundational conditions of nature can be demonstrated by the fractional dimensions of algebra and geometry. This is through the invariant medium of Bohm’s Infinite Potential model. In this model classical physics describes time and space homogeneously. This is that the laws of nature [Universal Reality] is an invariance of the Infinite Potential.

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I say that mechanical physics is real because it relates to the mechanical conditions of all that “IS”. This is in a homogeneous sense where the laws of nature are of the same type. However, just as Albert Einstein’s theories are devoid of an invariant medium that describes the laws of nature, so does Newtonian mechanical physics. What I suggest is missing from all the fundamental conditions from within each are derived. This is like Lorentz ether Model as broadly discussed in Reference 13. This quotation clarifies this point. Where it relates to zero I say that this word relates to the Infinite Potential.

Quote:

“Classical physics describes an inertial frame of reference within which bodies (objects) whose net force acting upon them is zero. These objects are not accelerated. They are either at rest or they move at a constant velocity in a straight line” [1]

In summary classical physics seeks to find and describe the laws of nature. Experiments and testing have traditionally found it difficult to isolate the conditions, influences and effects to achieve this objective. If scientists could do this they would discover the laws of nature and be able to describe these laws.

Today I will discuss the relationship between classical Newtonian physics and Einstein's Special and General Relativity models. I will share ideas as to why some scientists suggests there may be shortcomings in both of Einstein's theories that might be able to be successfully addressed. This is by using my interpretation of both of these theories. In turn these can be related to Bohm's Infinite Potential theory. I have not specifically discussed this relationship.

The properties of the laws of nature are the most important invariants [2] of the universe and universal reality. In contemporary physics, the traditional Newtonian invariance has been conjunctionally embedded in Einstein's Special Relativity and General Relativity theories which, as combined systems, remain incomplete. In other words, the discovery of the laws of nature remains elusive to science. Nature means the laws of everything. In my opinion the laws of nature are embodied in the hidden information of Bohm's Infinite Potential model.

I believe that Einstein erred in his mission to develop a law of everything. This is when he set aside traditional classical relativity physics in lieu of space/time physics whereby motion became, as described in General Relativity theory, merely being relative to a frame of reference at rest (something). From my reading of secondary literature, it seems as though motion is not broadly described in Einstein's Special Relativity theory, but it is more so in his General Relativity theory. I have determined that motion is the absolute frame of reference for Special Relativity theory. From my readings, most physical conditions and their associated effects seem to relate back to it. The evolution of relativity physics seems to suggest that Einstein's theory of Special Relativity is the special relativity of the Newtonian relativity model.

It is my opinion that object displacement [3] with respect to time and space should not be the natural point of invariance for the further development and evolution of universal physics. For example, some physicists still believe that the universe is homogeneous [4] but there is no conclusive mechanical evidence of this. If the universe is not homogeneous then the universe would not be a stationary one. If this is the case, scientists would never be able to determine where the edges of the universe are, where the middle of the universe might be, and where our earth might be configured within the universe. In other words, over time I feel that it would be inevitable that the laws of physics relating to nature would progressively change. This means that both Einstein's Relativity theories may become meaningless and therefore invalid. This means the Classical Physics model as well.

I suggest that a new point of invariance needs to be described and mathematically tested, capable of moving around this invariant problem. I believe that this can be achieved by physicists moving back to classical Newtonian theories and creating a new invariant point [like the Infinite Potential] that need not necessarily mean the traditional Newtonian ether theory. It could be a more dynamic ether theory that could then be conjunctionally embodied within the field of earth/space gravitation. These effects may change when wider natural laws of nature may necessitate them to do so in order to retain the elementary foundational conditions of universal symmetry [5] of the universe at any given time (if this were not the case, we would not be here today). This is so that they may be progressively built upon, so that scientists may be able to understand the laws of nature - which in turn means a theory of everything.

The natural principles of Newtonian physics say that all observers see the same thing and that this common observation is the foundational inertial frame from which testable physics and predictions may occur. With respect to motion, (unlike Einstein's theory that motion is relative to space and objects in space) configured Newtonian physics says that movement is not a condition and effect in its own right. Newtonian physics is only relative to other mechanical physics. For example the physics inside a moving spaceship is different from one that is moving according to Newton. The inside of a rocket is a frame at rest according to Einstein's Special Relativity theory. It says that a passenger in a rocket would not be aware of acceleration within the rocket until there was turbulence of some kind affecting it, such as the rocket colliding with a meteor.

I understand that Newtonian physics theory (within such a turbulent rocket frame of reference) would describe the physical reality of the reference frame of the rocket experiences as also being in relation to the intuitive reference frame of the meteor at the point of the collision where they would be in the same frame of reference. In other words I am suggesting that classical Newtonian physics seems to be demonstrably more 'real' than in Einstein's Special Relativity model.

If one were to say that the traditional Newtonian principle of physics [1] is the classical basis upon which Einstein constructed his Special Relativity theory, then this means that Einstein re-framed classical Newtonian physics theory in order to make it 'work'. Accordingly, this means that Einstein's principle of motion with respect to space/time in his Special Relativity theory is merely a notional one, with little or no physical meaning. I believe that when Einstein takes motion as being relative to objects at rest in an inertia frame [6], he has ignored the inter-dependent relationship that motion has with clocks. This inter-dependence is necessary because without it, neither time nor

motion (as separate units) would not make physical sense. Furthermore, and this is my principal point, by Einstein doing what he did means that his theory of Special Relativity violates the classical Newtonian principle of relativity [1] by differentiating physics between different frames, such as the frame of a stationary rocket with that of a rocket that is in motion.

I think what Einstein has done is to render motion as being absolute in relation to clocks that independently have no relevant meaning. Based upon my secondary readings Einstein does not seem to descriptively explain what a rest frame for spaceships may be in his Special Relativity model. In my mind, this raises the question as to whether Einstein intuitively knew that it was possible for him to describe how the local earth gravity field may have been a frame of reference option relating to movement, if he had decided to use it this way? Why did he do this instead of employing a nebulous reference frame of an object at rest as he did in his model? As a result, I believe that in physics today, time and motion should be seen as a single indivisible unit in Special Relativity theory. Alternatively, time and motion can be seen as two separate units in Newtonian physics.

This means that the relationship between time and an object in motion is measured by clocks in relation to time dilation theory. This is by means of measuring the degrees of contraction of rods (like the hands of clocks) in relation to clocks in the inertial frame of Newtonian ether theory. I wonder why Einstein did not consider earth space gravitation as an absolute frame of reference to which motion could be defined? Is it also possible he could have considered the surface of the earth as such a reference frame as well? If he did, I am not aware of this.

I feel that Einstein need not have rendered motion as being obsolete if he had linked it with the other inertial frame of a conjunctive ether and earth gravitational theory as I suggested earlier - or the two alternative frames I have just talked about.

Furthermore Einstein could have linked his Special Relativity theory with another relativity theory that already existed at the turn of the twentieth century. This is Lorentz's electron-ether theory which is mathematically almost the same as Einstein's Special Relativity model [7]. Furthermore Lorentz' theory was developed along the lines of the traditional principles of classical Newtonian physics but there were variations with respect to the incorporation of Maxwell's electromagnetic theory. Newton's physics embraces gravitation, so does Lorentz's. A successful gravitational theory in relation to Einstein's Special Relativity and General Relativity theories remains elusive to

physicists to this day. I wonder why this is? Throughout his career Einstein was determined to construct a local (physical) relativity theory as distinct from a non-local (unknowable, metaphysical-like) absolute reference frame. Newtonian classical physics rests upon such an unknowable frame.

I propose that the following text is appropriate for concluding this presentation. I quote from a paper that I recently completed.

Quote:

“Within these words I feel that none of us should forget that Quantum theory has not yet been found to be compatible with Einstein’s General Relativity and Special Relativity theories. This is with respect to scientists being able to say that they are close to having formed and tested a theory of everything. This means reality. I do not feel that there will be a theory of everything until such time as the cosmological invariance of the universe is agreed to by scientists.

The theory of everything must be a theory that can describe and test a hypothesis of everything whereby all energy types, conditions, influences and effects of universal reality are defined. This also applies to their respective averages, densities and ratios to each other. I also feel that the isotropic effect of light must eventually play a very important role in the highly complex and challenging cosmological effort

For the reasons above, I am of the opinion that the notion of Relativity physics being relative to Quantum physics is best described by means of Quantum entanglement and hidden variables theory. This may then mean by unknowable metaphysics. Einstein’s General Relativity and Special Relativity theories do not allow for such unknowable physical conditions.”

I am a concept scientist. There is far greater physical detail entwined within my words than I have briefly alluded to today. The contexting of my words and their associated relevance and meaning do not necessarily conform to traditional scientific theories and research methodologies either. Many of the ideas presented in this presentation are ideas that I have further built upon have been derived from a diverse range of mostly secondary sources. You will note that I have incorporated many of my own unusual ideas and theories as well.

References:

1. Wikipedia
2. The property of a physics system which remains unchanged under some formation such as light isotropy.
3. How far removed an object is from something.
4. Similar, parallel to, or equivalent.
5. A descriptive quote from Weyl. "A thing is symmetrical if there is something you can do with it, it looks the same as before"
6. Is a frame of reference that describes time and space homogeneously.
7. In theoretical physics, an invariant is an observable of a physical system which remains unchanged under some transformation. Invariance, as a broader term, also applies to the no change of form of physical laws under a transformation, and is closer in scope to the mathematical definition.
8. Fractional dimensions can be described as "the degree of irregularity corresponded to the efficiency of the object in taking up space".
9. Thus, any division through the centre point of the organism creates two halves that mirror one another.
10. Invariant theory is concerned with functions that do not change under the action of a given group.
11. A Fractal is a type of mathematical shape that are infinitely complex. In essence, a Fractal is a pattern that repeats forever, and every part of the Fractal, regardless of how zoomed in, or zoomed out you are, it looks very similar to the whole image. Fractals surround us in so many different aspects of life.

12. The potential infinite is a group of numbers or group of “things” that continues without terminating, going on or repeating itself over and over again with no recognisable ending point. [As per Bohm’s theory].

13. Lorentz ether theory, as follows:

From Wikipedia, the free encyclopedia

Quote:

“What is now often called Lorentz ether theory (LET) has its roots in Hendrik Lorentz's "theory of electrons", which was the final point in the development of the classical ether theories at the end of the 19th and at the beginning of the 20th century.

Lorentz's initial theory was created between 1892 and 1895 and was based on a completely motionless ether. It explained the failure of the negative ether drift experiments to first order in v/c by introducing an auxiliary variable called "local time" for connecting systems at rest and in motion in the ether. In addition, the negative result of the Michelson–Morley experiment led to the introduction of the hypothesis of length contraction in 1892. However, other experiments also produced negative results and (guided by Henri Poincaré's principle of relativity) Lorentz tried in 1899 and 1904 to expand his theory to all orders in v/c by introducing the Lorentz transformation. In addition, he assumed that also non-electromagnetic forces (if they exist) transform like electric forces. However, Lorentz's expression for charge density and current were incorrect, so his theory did not fully exclude the possibility of detecting the ether. Eventually, it was Henri Poincaré who in 1905 corrected the errors in Lorentz's paper and actually incorporated non-electromagnetic forces (including gravitation) within the theory, which he called "The New Mechanics". Many aspects of Lorentz's theory were incorporated into special relativity (SR) with the works of Albert Einstein and Hermann Minkowski.

Today LET is often treated as some sort of "Lorentzian" or "neo-Lorentzian" interpretation of special relativity. The introduction of length contraction and time dilation for all phenomena in a "preferred" frame of reference, which plays the role of Lorentz's immobile ether, leads to the complete Lorentz transformation (see the Robertson–Mansouri–Sexl test theory as an example).

Because the same mathematical formalism occurs in both, it is not possible to distinguish between LET and SR by experiment. However, in LET the existence of an undetectable ether is assumed and the validity of the relativity principle seems to be only coincidental, which is one reason why SR is commonly preferred over LET.”

https://en.wikipedia.org/wiki/Lorentz_ether_theory