

INFINITE QUANTUM THEORY

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Abstract: Scientists began quantifying their theories in relation to time, space, mass, and energy since the early 20th century. Quantum mechanics ensued after the theories of quantum theory took hold and became more prominent. Although the formulation of quantum theory and quantum mechanics has had many successes over the last thirty years, at the same time physicists have trouble with trying to relate and understand the aspect of time, energy, and space in relation to infinity. The correlation in connecting infinity to quantum theory and quantum mechanics may lie within the difference of understanding to a better extent the energy to mass relation factors at the level of the atom and beyond. This research paper proposes that quantum theory and quantum mechanics in which it's dynamics and function would be better described if the theory of quantum physics was renamed Infinite Quantum Theory, as explained and described in this research paper.

Key words: Physics, Quantum, Mechanics.

1 Introduction and Background

All time, space, mass, and energy has an inner convergence of energy at the macro level for example as far as outer space and the cosmology is concerned and that; this is constantly expanding. Therefore the convergence of all mass and energy in the macro universe is expanding in a balance of all mass and energy in the form of "A Curvature" inherently connected to the microscopic universe, and at the atomic, sub-atomic, levels and beyond. However, at the same time below the sub atomic levels there are sub-atomic magnetic fields of negative and positive energies of different types and ratios

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that counterbalance one another and there is "curvature" in the microscopic universe in like manner in just a much infinitely smaller scale. It is here within the microscopic and macroscopic universes a extremely fine line of balance is maintained. Therefore, the connection to infinity and quantum theory and quantum mechanics is that both are interconnected by infinity between the balances of both universes on a "Infinite Quantum Theory" scale.

Infinite quantum theory does not seem to have predominance over Krauss [4] in relation to his research paper that the late time behavior of the universe produces a possible vacuum decay ratio in a metastable inflating state of the macro universe. The vacuum decay ratio has a resonance condition at the pole as seen in the mathematical equation in Figure 1 below, which is also the energy difference between the unstable state and the state into which it decays. Khalfin [3] bases his theory with Krauss that long time ex potential gravitational effects may have this type of an effect upon the universe.

$$z = E_0 - \frac{i}{2}\Gamma, \text{ WITH } E_0 \gg \Gamma \quad (1)$$

Senthil [8] defines quantum critical points, and showed that the theory of condensed matter instead is on an infinite scale. Therefore that in at least (as far as mankind is currently aware of) that theory of condensed matter when applicable to the microscopic dimensions may also almost be on an infinite level as well. This would end in a final result than that quantum theory is much more diverse and may be on almost an infinite level . This is why this paper proposes that as far as quantum theory is concerned, that quantum theory should more accurately be re-explained, defined, and re-described being: "Infinite Quantum Theory" instead. This gives the above mathematical equation described as quantum chromodynamics (QCD), the theory of strong interactions, may undergo phase transitions when its temperature and the chemical potentials are varied.

QCD has been studied under laboratory conditions at the atomic levels by colliding heavy ions at varying beam energies resulting in a thermodynamic fluctuations, and predictable in computations involving baryon numbers high-energy heavy ion collisions. Thermalization allows the crossover temperatures between normal nuclear matter.

It is here that on the microscopy scale that this research paper proposes that not only is there an expansion of the macro universe around us, however, that the micro universe is expanding as well, , however, in just the opposite direction on the microscopic scale. Rather, just on such a small infinite scale that when getting into microscopic measurements less than one Ångström that past the point of 0.005 Ångström or in a conversional scale into hypothetical Planck lengths that any organic or inorganic matter converts into Planck length measurements of about $3.093963677 \times 10^{21}$ hypothetical (Planck Length Measurements). As also further discussed and described by Stewart [9], this aforementioned conversion that the author of this paper has produced imaging evidence of an atom and an electron from a deceased inactive microorganism that demonstrates what may be a second form of energy beyond the atomic and sub atomic positive charged energy that in theory is referred to as "dark energy" exists. It is known that such dark energy exists in the macroscopic universe in outer space beyond Earth. However, its never been proposed until the writing and publishing of this paper that it theoretically could exist at the microscopic atomic to sub-atomic levels as well.

However, this paper also proposes that while this energy holds what is known in physics and the universe mankind is aware of, that inorganic and organic matter do not exist at this point in time that is known. Rather, what exists is just energy at this infinitely small level. Past the existence of dark energy are other gravitational and magnetic fields of energy that in the event were manipulated and became out of balance, that the ratio of balance compared to energy loss is reformulated into a recycling of several energy magnetic related and interconnected fields that produce themselves into exotic quantum critical phases.

2 Methodology Getting into Measurements Involving Hypothetical Measurements Smaller than One Ångström (1 Å)

In March, 2011 the science of microscopy attained greater scientific achievement by being able to view and image a part of an object at 50 nm. This new technology is known as "Optical Virtual Imaging" [11].

The introduction of this technology is considerable in the science of microscopy considering that objects below 100 μm in microscopic measurement

scale sizes were hard to image. This technology was able to image inside the grooves of a "Blu-Ray Disc" as small as 50 nm. However, the problem of being able to microscopically image under medical conditions for instance a cell, standard microscopic measurement scale sizes at best could image with combination Scanning Electron Microscope (SEM) when combined with a Tunneling Electron Microscope (TEM) could image a cell at 700 μm and on very rare conditions at 200 μm which would allow a cell to be viewed, but not even the best microscopes in the world could not see smaller than this when it came to seeing for example the structure of a cell, or it's inner working components. Not even when it came to the latest "Optical Virtual Imaging" could do no better than 700 μm when viewing a cell in like manner.

However, Stewart [10] presents and demonstrates that the Infinite Microscopic-Macroscopic Imaging (IMMI) imaging technological process when compared to the "Optical Virtual Imaging system" not only was able to improve and show a significant amount more detail in the same images that the "Optical Virtual Imaging system at 50 nm" was able to attain, but the IMMI system was able to attain microscopic measurement scale sizes within these same images far, far, smaller than the "Optical Virtual Imaging system at 50 nm" could ever hope to attain.

However, not only was the IMMI was able to accomplish this, but it was also able to repeat the same results in a separate study using a "Memorex DVD" far, far, below the cost it took to develop the "Optical Virtual Imaging system at 50 nm" microscopic imaging technology. Including that the IMMI technology when developed into a software package has the capability of being able to turn even an average home computer into the world's most powerful microscope to see into the microscopic universe, and to see far into the macroscopic universe out into outer space that the most powerful telescope also known to man. The IMMI imaging technology is ahead of it's time.

Again, the reason the IMMI technological process is mentioned in this scientific research paper, is also because of another one of it's capabilities to be able to see into the microscopic world at far smaller microscopic measurement scales than have ever been attained by any microscopy instrumentation anywhere in the world, and reverse additional capability to see into outer space, for instance farther than any known telescope can attain at the present time. Because this paper is examining infinite quantum theory in relation to mass, time, and space in the physical known universe, this type of technology is

instrumental in being also capable of increasing science's knowledge in both the microscopic and macroscopic universes mankind is both subject to and being able to understand how what we currently know and could still learn more through the IMMI technology could improve our understanding of how not just quantum theory and mechanics fit into our understanding of both the microscopic and macroscopic universes. The title "Quantum Theory" is not descriptive enough. It should be entitled: "Infinite Quantum Theory".

Therefore never in the history of science has a microscopic magnification measuring scale system attained the smallest microscopic measurements used known as an Ångström. Because this is currently the smallest microscopic measurement accepted in the in the science of microscopy, and because before the IMMI technology became available the microscopic magnification scale level had instrumentation that could attain such small microscopic measurements, never before in the history of science have such small microscopic scale measurements ever been attained before, not only in assessing parts of objects far below the 50 nm microscopic measurement scale, but the IMMI technology has also been able to do this with organic cells as well. To what extent?

In another scientific research Resnick and Stewart [6] propose, present, and demonstrate a detailed explanation of this imaging technology and gives a number of examples where the IMMI technology attained microscopic measurement scale levels much smaller than even 1.0 nm in being able to see what certain "objects" look like at this microscopic measurement scale level, which is at least already at this point 50 (fifty) times smaller than what was attained by Zengbo [11]. However, this type of microscopic measurement scale level has never been accomplished as described in their paper. Therefore, what the IMMI technology seen unprecedented, and although there is a considerable amount of microscopic imaging evidence, for the most part it is also projected in new hypotheses and theories, in order to be able to connect as much as possible what is known in microscopy compared to what has never been seen before at these smaller microscopic measurement scale levels connecting the known to the unknown.

Stewart [9] describes and presents the IMMI technology utilizing it's microscopic capability, was able to captivate and attain microscopic measurement scale sizes inside of a deceased Hadrosaur dinosaur cell at the atomic and sub-atomic levels. Not only was IMMI able to capture on film and image what an atom looks like, but was also able to capture on film and image

what an electron of this atom looks like as well. Because of this, when looking at an atom and electron at this level allows more data to be acquired not only being able to view an atom and electron but also being able to image these phenomenon is a significant advance in the science of microscopy. This also allows the study of how an atom and electrons orbit and revolve around each other in a counter-clock-wise rotational pattern. This also helps the researcher to appreciate that there is much more to the microscopic universe than what science is currently aware of.

Therefore, it also effects our overall assessment of how we currently understand or assess the atomic universe as a whole. In like manner this also can effect how we may understand the macroscopic universe around us and how this may actually refer to a similar classification of physics that apply to outer space, and the universe that also holds the confines of the planet we also live upon we name earth, and how this all may equally relate to a rationale of infinite quantum physics, not only at the microscopic level but macroscopic level in like manner. Simply put in theory "In some aspects what we see happening as far as how the microscopic universe functions is how the macroscopic universe also referred to as outer space in some similar aspects functions like the microscopic universe, but on just an enormously and infinitely much, much larger scale".

3 Hypothetical Applications of Smaller Microscopic Measurements in Relation to Infinite Quantum Theory and a Needed Revision of the Planck Length

An explanation is warranted because there are smaller measurements than 1 \AA that can be used. These are known as "Planck Length" measurements. Because these smaller units of measurement are smaller than the microscopic measurement known as smaller than 1 \AA can be referred to they have to be used in scientific hypothetical calculation and/or estimation terms and assumptions since anything in hypothesis is essentially in basic aspects an unproven theory. Or may also be referred to a proposition, or set of propositions, set forth as an explanation for the occurrence of some specified phenomena, which is either asserted merely as a provisional conjecture to guide investigation, such as would be seen in a working hypothesis or accepted as highly probable in the light of established facts. Furthermore, even with the mea-

surement of the Planck length, there is a limitation on how small something may be. Therefore, this is why when the measurement of Planck lengths are presented it will be in hypothetical measurement terms. The measurements explained in text in this technical paper will use a conversion as to what the Planck-length measurements are using a conversion scale from 1 Å or less converted to a Planck length microscopic magnification measurement scale [6].

3.1 Planck Length Revised Re-Definition is in Order

A revised definition are in order in terms of what the hypothetical measurement applications regarding the Planck length. Because IMMI has been able to capture images of atoms and electrons far below 1 Å microscopic magnification scale levels hypothetically the Planck length is the smallest measurement thought of and conceived yet, when it comes to the science of microscopy. The author of this research paper proposes that a revision in at least some of the understanding of the Planck length needs re-assessment. This is proposed and presented in the following terms:

1. That under current accepted terms, the Planck length is the scale at which classical ideas about gravity and space-time cease to be valid, and quantum effects dominate. This is the "quantum of length", the smallest measurement of length with any meaning. And roughly equal to 1.6×10^{-35} m or about 10-20 times the size of a proton;
2. The Planck time is the time it would take a photon traveling at the speed of light to across a distance equal to the Planck length. This is the "quantum of time", the smallest measurement of time that has any meaning, and is equal to 10^{-43} s. No smaller division of time has any meaning. With in the framework of the laws of physics as we understand them today, we can say only that the universe came into existence when it already had an age of 10^{-43} s. Although this is a measurement methodology it finds a transcending concept that anything in the universe this small is most likely not applicable to the laws of physics. Therefore, some of this needs discussion to put into practical analysis as to making such measurements more of a potential possibility, instead as it is now viewed scientific ally as being more of an impossibility of measurements this small;
3. Therefore, in the science of microscopy the discipline has established already through physicists that there is a realistic limitation to how

small an object can be whether it be mass or energy that can exist in physics. The reason for this is because especially since about 2004 physicists have set a limit on the smallest length that can ever be measured and have determined any device attempting to beat the limit will be crushed into a black hole of its own making. The finding is based on an analysis of interferometry, a technique that uses interference of waves to measure small lengths. Quantum theory says that the more accurate the measurement you want, the more massive the interferometer you need. This also goes hand in hand with quantum mechanics. However, the California Institute of Technology in Pasadena points out that any very massive interferometer would have to be spread over an extremely large region of space in order to establish any smaller size of mass or energy. Therefore, otherwise the large mass concentrated in a small area would produce strong enough gravity to form a black hole, sucking in the interferometer; and

4. However, although what has been written above in the present understanding, the writing of this research paper has discovered that microscopic magnification measurement scale sizes are more than possible, they are probable, and the matter of the fact imaging evidence of this is provided in Resnick and Stewart paper [6]. This is one of the reasons why this research paper is written, in order to a new quantum theory that takes quantum theory to the next generation where microscopic measurement scales are presented and demonstrated at the sub-atomic scale at 0.006 \AA . This research paper therefore entitled "Infinite Quantum Theory", is based upon the fact that once attaining sizes smaller than 0.005 \AA or when converted into Planck lengths smaller than $-3.093963677 \times 10^{22}$ Planck lengths, what happens is that there are what seem to be bands of positive energy this research paper will refer to a "white energy". "White Energy" is the energy that first presents itself when seen under for instance an electron microscope at very high microscopic magnification levels. However, although this is the case there is yet a much more powerful concentrated form of energy, that in previous microscopic instrumentation was invisible and could not be seen with even an electron or even a Atomic Force Microscope (AFM). On second and third occurrences IMMI has been able to capture a secondary source of energy, as explained in detail in Stewart paper entitled "Atomic-Paleontology" [9].

Stewart shows a figure [9], what was able to captivate with IMMI, is an image of an atom and electron that are as if : "Frozen In Time". Because

IMMI was able to attain a much higher magnification than any microscopic instrumentation available today, IMMI was able to captivate in a series of micrographs an atom and electron from a deceased cell from what is known as a typical Hadrosaur, the *Brachyophosaurus canadensis*. Evidently when this dinosaur died long ago, eventually all of the Hadrosaur's cellular activity ceased to function in like manner. Therefore, when all the atoms and electrons were alive, energized, and in a state of moving activity, the organic atoms and electrons also died. Loosing their energy, ceased moving, became inactive, destabilized, and became stationary fixed objects with the Hadrosaur's microorganism itself just if earth's moon stopped moving.

In like manner this is also what happened to these organic atoms within the Hadrosaur. The atoms and electrons also stopped and are now in the same position they were when the molecules within the Hadrosaur died. This is why these atoms are able to be imaged with IMMI and studied. In the study of one of these atoms and an electron as well, the author of this paper also observed that what seemed to be past magnetic field fluctuation patterns were also left in an imprint pattern around the immobilized electron. It is here that the same energy states of both positive and negative knowledge that is currently known in how atoms and electrons function did the author most likely was able to capture evidence of biological geo-chemical evidence and in micrograph imaging captured these probable conditions. The images in this other paper this author has just aforementioned are best exemplified in that figure [9] where the dark areas in and around the solidified electron is seen. Therefore, these dark areas around the solidified immobilized electron are what has also been referred to on earlier pages of this research paper as Dark Energy. Scientists have seen this for instance in outer space on the macro measurement scale level and scientists know it exists. However, this is the first a scientific research paper has given imaging evidence of this existing at the atomic to sub-atomic microscopic levels.

Although this is presently accurate, scientific history has demonstrated that as microscopy science and technology advances, that the precision of microscopy methodologies, and instruments have become more precise being able to measure smaller and smaller objects as well. The acceptance of whether or not that the Planck length will become a more internationally accepted standard of the smallest microscopic length instead of an Ångström will depend on the revision and progress in microscopic technologies in the years to come. Since this concept of the smallest measurement is based upon what is known as far as energy and the speed of light, this could change when

particle accelerators show that the atomic and sub atomic particles of the atom move faster than the speed of light itself.

When this happens the Planck length will have to be re-thought, contemplated, assessed, and revised to the new understandings attained. Kirshner [2] asserts that based upon observation when in application to the macro universe and supernova observations that the expansion of the universe has been speeding up. This unexpected acceleration is ascribed to a dark energy that pervades space. Presently, scientists like Kirshner [2] believe that dark energy when combined with other observations in outer space, that dark energy is composed of about 30% matter and 70% dark energy. New observational programs and understandings when studying the cosmos is a modern version of Einstein's cosmological constant or another form of dark energy that changes with time. Either conclusion points to gaps in our fundamental understanding of gravity. Gravity is usually thought in terms of "Gravitational Force" with gravity. However, current understandings of what scientists refer to a gravitational force may be the incorrect terminology used for this phenomenon. The question has to be asked: What is forced?

When taking any and all magnetic forces that act on negative and positive field like on any type of a magnet or even the most complex and sophisticated magnetic fields in the world there could be the factor that gravity is a constant. The most likely reason that we cannot understand the substantive force of gravity per say, is because subjectively it does not exist as we perceive it.

Furthermore the cause of the space-time distortion is also because of the need for the negative and positive balances that are needed in the universe between mass and energy themselves there is a constant ongoing never stopping balancing and counter-balancing of these balances at all times. A continuum of time and space distortion itself could be expressed in the Amici Band recycling system where bands of recycling waves of all of these negative and positive forces cause distortions between mass and energy in the universe on a constant basis. Within the infinitely applied quantum physics and mechanical mechanisms that the universe itself exists upon is what is really in truth what any and all "Gravitational force" is truly all about that mass necessitates in order to exist in a field of energy, in the case of most of the universe dark energy.

Therefore based upon the same data and evidence the same applied as far as the microscopic universe is concerned, however on just in the microscopic universe the difference in respect to energy, mass, on the microscopic scale in composed of white energy, and dark energy makes up the foundation to white energy and a balance between the two which effects everything in both the micro and macro universes. However, that behind dark energy there are additional forms of energy in which dark energy derives it's source of energy from and all of thee recycle within each other in gravitational and magnetic field cycles in an infinite never ending source of regenerating all energy in both the microscopic and macroscopic universes.

4 Conclusion

Therefore, this is where infinite quantum theory and infinite quantum mechanics apply. Whereas Krauss [4], Laughlin [5], Schopf [7] and last "The Landau paradigm" [1] agree more with the description and terms that quantum mechanics should be re-assessed that the theory of quantum theory, should be re-explained, described, and re-defined with a more accurate title known as: "Infinite Quantum Theory" instead.

However, how does this effect the hypotheses of the Planck length? Again, as a matter of reference in getting involved in measuring from internationally current accepted smallest microscopic magnification scale measurement known as an Ångström and because this technical paper presents for the first time in scientific history where the measurement of an Ångström has been attained investigating not only an atom and electron of a microorganism, and because some of the microscopic magnification scale measurements attained are so small.

The Planck length is based upon hypothetical assertions because until IMMI no other microscopic magnification measurement scale instrumentation has been able to attain these levels of magnification. Therefore, since this has been the case the hypothetical terms in which this is applied in this paper which further proposes new infinite quantum and infinite quantum mechanics theories this research paper proposes that because there are several sources of energy in both the micro and macro universes around us that constantly draw and regenerate each other the Planck length does not need to be deduced from the speed of light, mass, and energy in outer space, but needs to be based upon the sub-atomic particles of energy itself in a now advanced accelerated state, and such acceleration makes the Planck length

to be more accepted in science as more of a "probable realistic" means smaller measurements instead, of a hypothetical measurement. Based foundationally on that sub-atomic particle acceleration capabilities faster than the speed of light in the universe. In like manner similar to what may be seen and measured in a "massive particle accelerator". Such are the complexities when dealing with what likely in the macroscopic universe being applicable to "Infinite Quantum Theory".

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