

Particlist Theory for Support of Combined Theory for Everything

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Abstract— The paper supports the Combined Theory for atomic structures. The new theory is called Particlist Theory which states that movement of atomic particles is governed by helical inertial forces which moves atomic particles in such a way that they appear to move like Wave. The theory also describes how double slit Young's Experiment can be described by Particle nature of light alone. The Author supports the Einstein's and Bohr's initial opposition to dual nature of Light. Author proposes that Particlist Theory which supports Combined Theory for everything can explain everything from accelerated Expansion of Universe to discoveries of new generations of subatomic particles like quarks and leptons.

Index Terms— Universe, Atom, Electron, Combined theory, Everything, Einstein, Standard Model, Particlist Theory.

1 INTRODUCTION

THIS paper is in continuation of Combined Theory for Everything written by Author with Title "Combined Theory for Everything"[1]. The particlist theory support the Combined Theory by showing that to understand sub-atomic structure we may only need to see the sub-atomic constituents as particles with mass instead of waves.

In the early nineties the output of double slit experiment or Young's Experiment by Thomas young indicated that light (Photons), electrons etc. are behaving as wave as well as particle. Schrodinger then made it a law with Mathematics equation that light behaves both as particle as well as Wave. But we have never seen it happening anywhere in our daily life. And infact no one has ever seen it with naked eyes. But still because it explained the double slit experiment, the science from that year diverted its attention to Field theory and started to study Atoms purely as Fields of Waves. In this paper we will describe a theory that will show that particles can seem to behave as Wave. We will also show how by still remaining particle, how double slit experiment can be explained.

The Author by describing this theory does not state that he is right. But states that we might have missed a direction of science which should have been studied in more depth than other directions. Because it explains Sub-Atomic structure in more digestible phenomenon's then shocking scenarios created by Quantum Study.

Scientist studying subatomic structure are called particle physicist. But actually they had been studying the sub-atomic structure through Standard Model which sees all of them as fields of Waves. So Author states that they should actually be called Field physicist. While particle physicist should be termed to person that actually presents and supports theories like the one that is going to be presented in this paper.

The Author may not be right. But we should still give it a shot to study the pure particlist theory. Because that is what we have always observed in normal world around us. That any particle with mass do not behave as wave. Instead we will

show that the motion of these particles makes it appear as moving as Wave but infact they still are particle.

2 COMBINED THEORY FOR EVERYTHING

Before moving to describing particlist first we should learn about Combined Theory.

In 1911 Rutherford had described Rutherford Atomic Model. He in his Atomic Model had described that atoms can be represented as a diffused cloud of negatively charged electrons that surrounds a dense, small and positively charged nucleus.[1] Given this experimental data, Rutherford described a planetary-model of Atom. He described that electrons orbits around the solar nucleus just like how Planets move around Sun or Star. However, said planetary-model atom had a technical difficulty. The Larmor formula based on the laws of classical mechanics predicted that the electron would then release electromagnetic radiation while orbiting the nucleus. And because the electron would continuously lose its energy, it would rapidly spiral inwards and will collapse into the nucleus on a timescale of around 16 picoseconds.[2] This atomic model was hence considered disastrous, because it predicted that all atoms are unstable.[3]

To overcome this difficulty, Niels Bohr proposed, in 1913, what is now called the Bohr model of the atom. He suggested that electrons could only have certain classical motions:

1. Electrons in atoms orbit the nucleus.
2. The electrons can only orbit stably, without radiating, in certain orbits (called by Bohr the "stationary orbits"[4]) at a certain discrete set of distances from the nucleus.
3. Electrons can only gain and lose energy by jumping from one allowed orbit to another, absorbing or emitting electromagnetic radiation with a frequency ν determined by the energy difference of the levels according to the Planck relation.

After that came the double slit Experiment, the diffraction pattern of which made the world believe that sub-atomic particles behaves as wave as well. Schrodinger turned it into law and a mathematical equation. But Einstein and Bohr opposed that model and opposed it for long time. But in the end they

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gave up their defense.

In Particlist Theory and Combined Theory we will study Atoms purely on the lines of what Einstein and Bohrs believed. Which is sub-atom has particles only and everything is particle.

In Combined theory (CT - In rest of paper we will be referring Combined theory as CT only) it was stated to stop thinking atomic structure only in terms of +ve and -ve charges. Instead we should be considering them as Star and Planetary System with respective mass. And apply theory that we apply in Universe into the Atomic structure. And vice-versa apply the theories of Atom to Universe.

More elaborately. The CT describes how Atoms should be studied as Solar and planetary System. The CT describes how the Atoms, Molecules and its Structures mimic Stars, Planets, Solar System and Universe. And hence gives rise to theory that they infact are planet and stars. Which further have atoms which further are planets and stars to infinity. Another major postulates the CT presented is that Atom should be studied from Quantum Physics Time Dilation side as well. Using Time dilation the paper describes that how when looking at Atom we should not consider Human clock. Because clock at Atom will be ticking too much faster than clock at Human level. The CT described how 1 second for human might mean many thousand years at sub-Atomic level.

3 PARTICLIST THEORY ANSWER TO DOUBLE SLIT EXPERIMENT

The double slit experiment was first conducted by Thomas Young. He made a monochromatic light pass through two different slits. If light was made of particle and travelled in straight lines then it was obvious that two slits should have caused two lines on the wall placed at some distance after the slit. But to contrary it was observed that a diffraction pattern was observed. This pattern had many lines. The lines were where there was more detection of photons hitting the wall. And in between there was a gap where there was relativistically less numbers of protons reported hit. This caused a great perplex in scientific community. They tried to find many reasons for it. But the only reason that made sense then was the way waves of water worked.

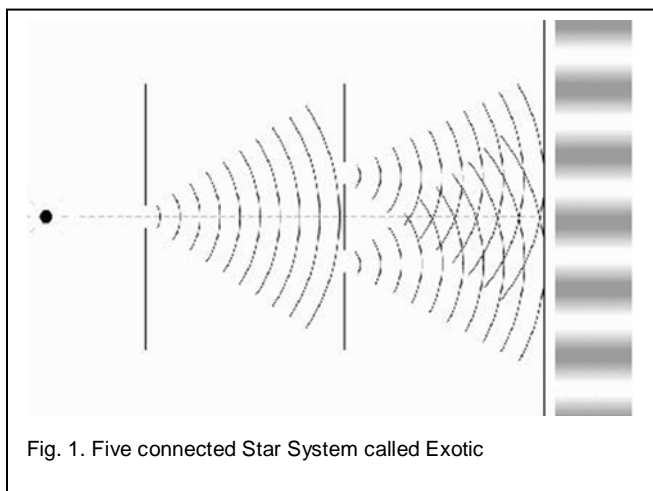


Fig. 1. Five connected Star System called Exotic

If there is a still water and you create two ripples. Then the intersection of these two waves creates bigger troughs just like the diffraction pattern of double slit. This made the analogy that light do behaves as wave as well. Looking at diffraction pattern you can see that the empty spaces between lines is not actually empty. It just has less hits. This again created new

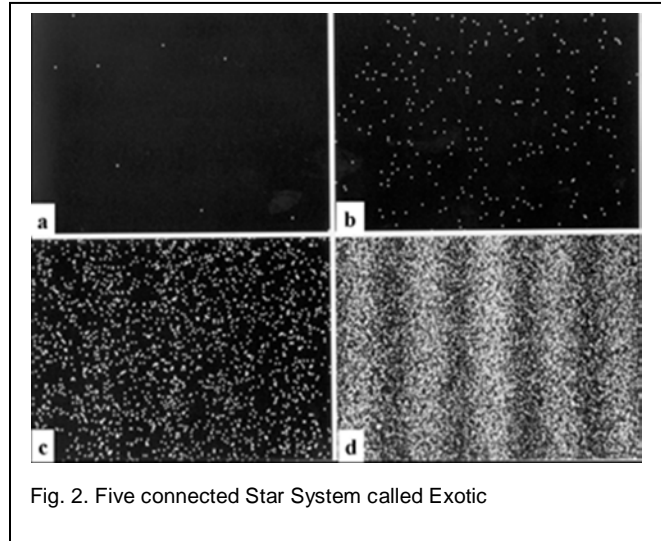


Fig. 2. Five connected Star System called Exotic

debate. And this debate was at last rested in 1926 by a probabilistic equation to find position of particle, the Austrian physicist Erwin Schrödinger posited an equation that predicts both the allowed energies of a system as well as the probability of finding a particle in a given region of space. That describes Light to behave as a wave of probabilities. The lines are where there is maximum probability of photon hitting the screen. However the double slit experiment also showed that light behaves as particle too. Because the photon passed one slit at a time only and not both. Plus the particle hit at one precise position at wall at a time only. If it would have been wave it should have spread out.

According to Author afterwards Scientist started giving too much impetus to wave nature of Light. But the more intuitive model of particle nature was very much rested.

The Einstein and Bohr contested the wave nature for long. But due to big lobby of Scientist and Mathematician that believed in Wave nature actually made them to cease the opposition and accept it. The Einstein always believed that there is not much supernatural going on in Atom. He believed that everything is governed by same laws. Whether big or small. And there is no supernatural thing that makes sub-atomic world work differently than rest.

The Author is of the league that still believes in Einstein that there is not something supernatural going on with light particles. Author's explanation of double slit experiment with particle nature is described below. Author will use Einstein's and Bohr's models and equations to describe it.

We know as per Bohr's Model that electrons are moving around in circular\elliptical orbits around Nucleus. It could definitely be possible that Atoms might be rotating in its own galaxy of atoms may be in circular\elliptical motion. See Fig 3. Along with that this Atom or its galaxy might be moving in

some linear velocity or acceleration.

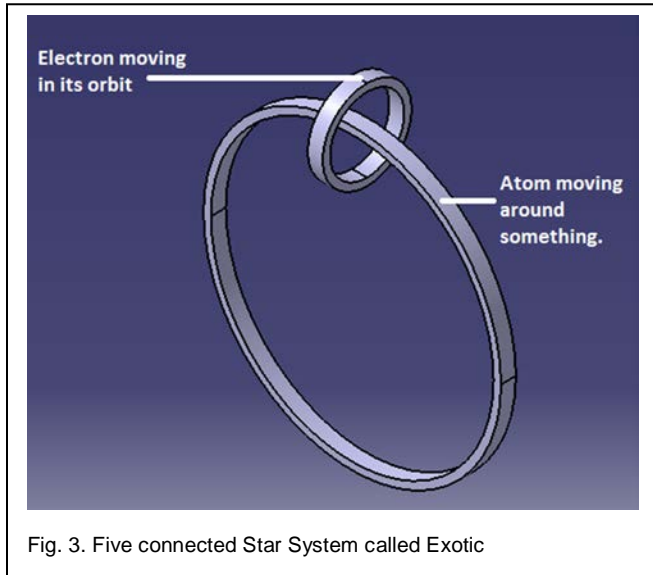


Fig. 3. Five connected Star System called Exotic

Now there is high possibility that electron or photon might leave its orbit in a helix path as shown in Fig 4 below.

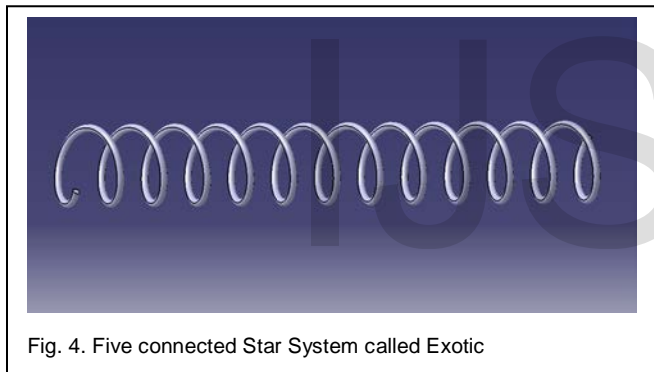


Fig. 4. Five connected Star System called Exotic

If suppose electron\photon moves at very high speed. You can see that the helix appears as a kind of wave. Let us dig more.

If we consider the motion of atom in helix as well. Then that motion will also add up to this motion. Now just like to determine trajectory of objects fired from gun we consider inertial direction of bullet in X Direction and Gravity in Y direction. We may have to add initial motion of Atoms into picture as well. Suppose Atom provides it helix motion longitudinal to its path as shown in Fig 5. The motion of the photon\electron will be the addition of these two inertial forces. There can be additional linear forces as well. But let's keep it simple and consider these two forces only.

The Author proposes that in double slit Experiment. The slits acted as filter and filtered out the photons\electrons having inertial motion of Atom or Photon\Electron tp having plane of helix movement in single plane only. This made to cancel out one of the inertial force direction. So now movement happened in other inertial motion direction only. This made the photons to travel as helix longitudinal to its direction of linear motion. This create a helical probability of finding the position

of hit of photon\electron just as shown in Fig. 4. When lots of

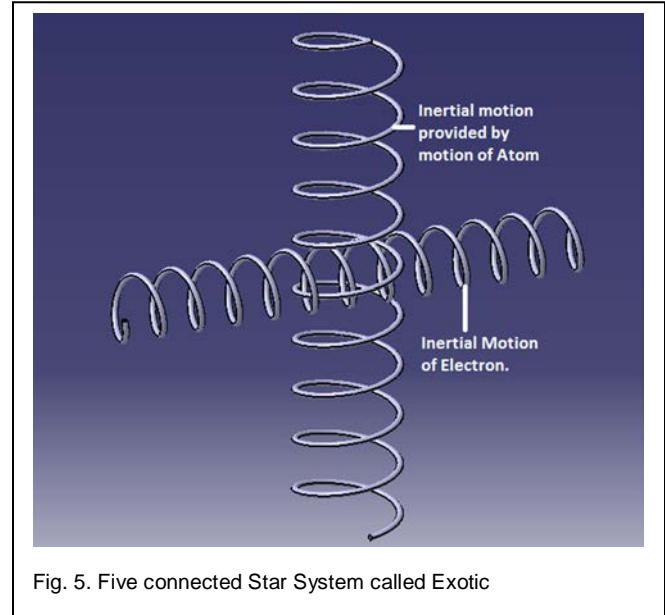


Fig. 5. Five connected Star System called Exotic

photon\electrons are passed through slits. These all photons\electrons are proposed to have same helix motion filtered out. And they all transpose on each other. And hence create a diffraction pattern which appears as lines.

4 STANDARD MODEL

The Democritus is remembered as first to predict that everything is made of smallest constituents called Atoms. In early part of 20th century with Rutherford, Laplace and Bohr it was believed that Atoms are further made up of electrons and Nucleus. And then Nucleus is further made up of Proton and Neutron. It was all simple till then. But with advent of particle accelerator physicist started to notice newer and newer sub particles. By 1950 there was kind of Zoo of sub-atomic particles creating a very complex perplex. To answer existence of all these particles observed a Standard Model was created. The Standard model thinks of all sub-particle arena as combinations of fields. The arena is thought to be made of Fermions and Bossons. The fermions are supposed to be all particles observed. And bossons are the fields. The fields are thought to be either weak, strong, electromagnetic or gravitational. Apart from that there was one more field called Higgs Field that was proposed to exist even in complete Vacuum. And this field is supposed to be the field that creates or de-creates particles. This field is supposed to create up or down quarks. The up or down quarks are then supposed to form protons and neutrons. Two up and one down quark makes up one proton with +1 charge. And two down and one up quark is supposed to make up one neutron with 0 charge. The Higgs field is also supposed to create leptons which are supposed to create electrons with negative charge. The standard model is completely based on this field. Without this field (which no one ever observed before), the electrons, protons, neutrons, quarks, leptons won't exist and hence the Standard Model will crumble.

No one ever saw Higgs field or Boson ever. But according to mathematical equations to satisfy standard model it must

exist. And to prove its existence after many decades the Large Hedron Collider (LHC) was created by CERN. They bombarded two photons to observe what gets out of it. Which will help out to see all the particles and fields and hence show them ever so elusive God Particle Higgs Boson. And they found an energy level at around 125GeV at which Higgs Boson is supposed to be created before it decayed into other particles as photons or leptons. This was repeated in two different chambers. Which was then is thought to infer that higgs boson and hence field do exist. The Author does not believe the LHC scientists are wrong. But is still skeptical that it still appears to be very crude of way of predicting thing still not seen precisely. In our urge and excitement to see this particle. We may be starting to believe in crude data sets that it must be higgs bos-

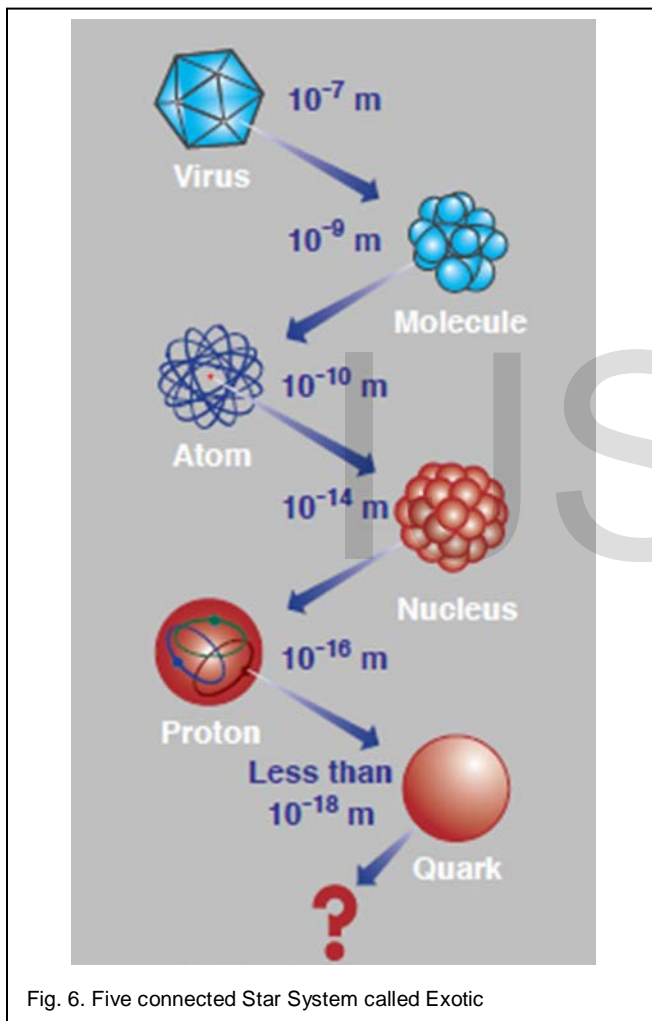


Fig. 6. Five connected Star System called Exotic

on.

Author does not propose to say that Standard Model is wrong or Higgs Boson is wrong. But it says that way of looking at sub-atomic particles purely from the wave or field view is wrong. We may have missed a pure particle type behavior direction totally.

Author proposes that as per CT. If you suppose are flown into Atom. You will see the electrons orbiting around Nucleus as planets. And Nucleus is sun\star. We have never seen sub-atomic structure we have just experiments like double slit experiment, particle accelerator, LHC which bombards atoms to

get an output observed. And based on that output they predict how Sub-Atomic structure may look like.

The Author believes there is no final particle of which everything is made up of. If you dig more into sub-Particles, you will find more and then more till infinity. To not be able to see directly into sub-atom is human limitation. And due to this Human limitation we suppose that we are made of Molecules then Atoms, then Nucleus, Then Protons\Neutrons, then quarks. And because we are not able to go beyond quarks due to human limitation it might rest there. But Author believes we will always be observing more and more deep. The atoms behave as planetary System in itself. In CT Author has given lots of proof about why Atoms behaves as planetary System and Universe behaves as Gas of Atoms. For a moment suppose atoms are indeed planetary system. Then electrons are planets. If we will bombard planet with planet lots of asteroids, meteors etc. will form. Author believes that particle accelerators had been detecting them and call them quarks, leptons, muons etc.

The Author in CT has also described that time at atomic level passes too faster than human level so finding the exact location of electron which is moving at very high speed may not be humanly possible with present technology. Until we have halted it at some place.

5 ELECTRO-MAGNETISM

Michael Faraday in mid 19th century showed that light and electromagnetism has relation. This effect was called Faraday Effect. A polarized light plane was observed to rotate under the field of magnetism.

So Light or photon\electrons are supposed to have some charge. But planets don't have charges. But however just think w bit deep. But planets due have magnetic field although they are not charged. And this magnetic field is due to rotation of planets.

So author believes that anything moving will produce magnetism. The electricity is electrons moving and hence produce magnetism. Planets are rotating so produce magnetism. So an electron moving helical will also produce magnetism. However if this helical movement is in single plane. And then if we introduce it to greater magnetic field the plane is bound to change. And author proposes that charge is not a good way of looking at electrons. They move and hence have magnetism. This magnetism is bound to interact with any external magnetism. Hence Electro-Magnetism must be made obsolete.

6 EXPANSION OF UNIVERSE

Alan Harvey Ruth pioneered the theory of cosmic inflation. In 1981 he proposed that the nascent universe passed through a phase of exponential expansion that was driven by a positive vacuum energy density (negative vacuum pressure). The results of the WMAP mission in 2006 made the case for cosmic inflation very compelling.

Saul Perlmutter then pioneered to measure the rate of this expansion. Initially everyone thought that expansion and inflation would eventually die out and after that the universe will start to collapse back due to gravity. For this Saul needed

some fixed pointers in space which will let him measure their dimness and hence whether accelerating or decelerating. The Supernovas made the best possible choice for such pointers. But to catch a supernova is very very rare in probability. Saul pioneered to create infrastructure for this measurement with Computer Software and Data collected from various observatories. And at end with all the effort, the result was something that no one ever expected. Everyone expected that Universe will eventually cool down and then will deflate due to gravity. But instead his observations showed time and again and back that instead the Universe is expanding and this expansion is accelerating. This means that in some time all the galaxies will eventually get so far from each other that inter galaxy travel will become very impossible.

The Author in CT has given various proofs that Universe behaves as a gas of atoms. Take the case of LANIAKEA which vindicates that Universe is behaving like a Gas r liquid. The atoms re planetary systems. So the Author proposes that answer to accelerated expansion of Universe lies in entropy instead of gravity. When we pass a gas into chamber or let it out free from some chamber to atmosphere, the gas goes through accelerated expansion. According to the second law of thermodynamics the entropy of an isolated system never decreases; such a system will spontaneously proceed towards thermodynamic equilibrium, the configuration with maximum entropy. A system loses entropy only if heat escapes out of the system. Author proposes that Universe is infact some gas of some planet or star or asteroid or Meteor. And it has found a bigger space and hence is entropy is increasing giving it accelerated expansion.

9 CONCLUSION

The Author has proposed a new Particle Theory. Author has stated that Sub-Atomic structure has not been studied from particle point of view enough. Most of the effort has been spent by scientist on Wave nature. But very less concerted effort has been spent on particle nature. The Author believes in the school of thought of Einstein and Bohrs that believes that no supernatural forces governs the sub-atomic structure but ordinary physics. If we will try to study atoms from Einstein and Bohr's point of View then Quantum Theory will not shock you as much as it did today.

The Author has described how experiments which postulates that particles behave as Wave can be described completely by just particle nature alone. Because electrons moves due to helical inertial forces, the motion of electrons appear as wave but infact is not.

Author has further proposed that all electrical and magnetic and other supernatural phenomenon can be described by particle nature. The CT and Particle theory can explain how everything works. From how Universe is in accelerating expansion mode to why we keep on observing more and more sub-atomic particles etc.

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