How “SU” Levels Are Imply For Life & Consciousness

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Abstract
We study a new structural model of high energies with high frequencies but short wave-lengths of an atomic world of wave-structured from the primary stages of the Universe to the Super Unified Gaussian Energy Group “SU(11)⊃SU(6)×SU(5)×U(1)” beyond the Standard Model of Physics or GUT of SU(5)⊃SU(3)×SU(2)×U(1). In this new structural model having infinite number of various symmetry groups, can be explained mathematically as: “SU (11) ⊃ SU (6) × SU (5) × U (1); SU (23) ⊃ SU (12) × SU (11) × U (1); SU (47) ⊃ SU (24) × SU (23) × U (1)”; so on. There may be created various new unknown particle-likes in wave status are caused for variety of lives with electromagnetic force-field of various frequencies formed consciousness. The analogy may be illustrated with an example that there exists various water-waves in different forms of wave-lengths are found in the ocean of earth where short wave lengths of water are very much related to the gradually increasing various long wave-lengths of water.

There may be created electromagnetic force-fields with several short wave-lengths of “Invisible Rays” together with “Fluxes of Rays” or “Packet of New Energy” by the energy groups of SU(6), SU(12), SU(24), etc. simultaneously in their respective framework of “SU(6) × U(1); SU(12) × U(1); SU(24) × U(1)” etc. with strengthen current and may also new unknown bosons of SU(6) are tightly binding by the lepton-likes were formed a large number of “New Unknown Particle-Likes” in wave status which are directly or indirectly linked to the formation of matter elements constituted by quarks for the existences of Life, Consciousness, Sense Datum and all other Biological Phenomena etc. and are given many more answers to the unsolvable questions about the mysterious universe regarding variety of lives etc. Thus we found a new world of primary atoms or elements in the wave status of energies maintain the theory of Quantum-Entanglement of Wave-Wave duality other than the existing secondary material worlds and hence opened a “Pandora Box” for our future generations. These new unknown Atomic-Worlds and Energy Packages with various short wave lengths creates consciousness etc. are now essential for the discussion.

Keyword: Consciousness, New Energy, Unified Groups, Neutrinos.

Introduction
There is no consensus yet on how the universe initially came to be, the general assumption is that perhaps an energetic fluctuation caused the universe to tunnel into existence from quantum foam. According to the famous scientist Albert Einstein that our “Universe” appeared from nothing. The question of why the large energy of the universe is in a dark, i.e. not found in practical? The observed vacuum energy is so small in comparison to the scales of particle physics, why it is simply known as cosmological constant problem? According to the famous scientist Ludwig Boltzmann in 1870 that the Entropy of the universe always increased. But he did not explain how “Entropy” increased before Big-Bang?

A popular concept of consciousness is an emergent property. According to Murphy, 2007, 2011, Auletta et al, Clayton and Davies, 2006, anybody who thinks that consciousness is an emergent property is possible in physics could simplify their search for consciousness by accepting the idea of dualistic spirits. Quanta are unlike any particles or objects that are encountered in the large scale world. When it is isolated from their environment they are conceived as having the property of waves, but when they are brought into contact with the environment, there is a process of de-coherence, in which the wave function is described as collapsing into a particle.

One of the exciting discoveries of 20th century is the Unified Theory of the Quantum Fields such as GUT or Unified Gaussian Energy Theory of the Standard Model of Physics. There is a natural query about the earlier situation of GUT unification? As there were discovered “Higgs Bosons” in the 21th century at LHC. The symmetry breaking of the Unified Gaussian Energy Group SU (5), we found three energy forces such as SU (3), the strong force; SU (2), the weak force; and the electrodynamics U (1) those are naturally formed matter particle’s atoms by the quarks & leptons are tightly binding by the bosons of SU (3), there also found fermion, baryon, many more other matter particles. In the theory of SU (5), we cannot find the proper clarification of gravitational forces etc. also not discussed the proper function of electro-weak force of SU (2) in the frame-work of SU (2) × U (1) when it creates weak current. It does not explain how Consciousness arises in the Universe as well as lives and not discussed clearly the other biological phenomena etc.
We introduced a series of new energy sources of SU(6), SU(12), SU(24), etc. in my all previous articles with unknown bosons, where the bosons of SU(6) are tightly binding by the lepton-likes & quark-likes formed a large number of “New Unknown Particle-Likes” in wave status are caused for the existences of Lives and there created several short wave-lengths of electromagnetic forces & fields with “Invisible Rays” or “Fluxes of Rays” are caused for consciousness etc. We assumed that variety of these new energy frequencies together is called Narayan and with new unknown particle-likes bhadras will be created as Life, Consciousness, Sense Datum and all other Biological Phenomena etc.

**Link between All “Su” Levels**

**Super Unified Group SU (11)**

We consider a special unitary group of degree n as SU(n) ⊂ U(n), where U(n) is a n×n unitary matrices with determinant 1, which is a sub-set of the general linear group GL(n, C), where “C” is a classical lie group.

Now, SU (n) ⊃ SU (p) × SU (n-p) × U (1) putting p = 5, n = 11, where p > 1 and n-p > 1, So that SU (11) ⊃ SU (5) × SU (6) × U (1). For completeness there also the orthogonal and simplistic subgroups “SU (11) ⊃ O (11); SU (22) ⊃ USp (22)” since the rank of SU (11) is 10 and U (1) is 1, a useful check is that the sum of the ranks of the subgroups SU (5) and SU (6) is less than or equal to the rank of the original group.

In the theory of Gauss transformation in physics, the special unitary group is used to represent boson symmetries. In the theories of symmetry breaking, it is important to find the subgroups of special unitary group. Important subgroups of SU (n) that are important in GUT physics (thus, also in the present dissertation). Super unified theory are, For p > 1, n - p > 1 with “SU(n) ⊃ SU (p) × SU(n - p) × U(1)”. For completeness there are also the orthogonal and simplistic subgroups: “SU (n) ⊃ O (n)”; SU (2n) ⊃ USp(2n). Since the rank of SU(n) is n-1 and U(1) is 1, a useful check is that the sum of the ranks of the subgroups is less than or equal to the rank of original group SU(n) which is a subgroup of various other lie group: “SO(2n) ⊃ SU(n)”. From the symmetry breaking of SU(11), we find SU(6) and SU(5) as the subgroups of SU(11), where p (= 5) > 1; n - p (= 11 - 5 = 6) > 1, so that “SU(n) ⊃ SU (p) × SU(n - p) × U(1), i.e. SU (11) ⊃ SU (5) × SU (6) × U(1)”.

For completeness there are also the orthogonal and simplistic subgroups: “SU (11) ⊃ O (11); SU (22) ⊃ USp (22)”. Since the rank of “SU (11) is 10 and U (1) is 1”, a useful check is that the sum of the ranks of the subgroups SU (5) and SU (6) is less than or equal to the rank of the original group. Thus, we have from SU (11), the Hermitian matrix ‘H’ has 120 arbitrary constants which are correspond to 120 bosons that now mediate between the different basic entities. Of these we already have 24 from SU (5) and 35 from SU (6) and 1 from U (1). Thus, 120 - (24 + 35 + 1) = 60 more bosons are needed to make up the list of 120. For want of any specific designation, they are referred to simply as the J bosons. The J bosons are expected to link the participant of SU (6) with SU (5) i.e. with SU (2), SU (3) and U (1). There is emitted and absorbed anti J-particles.

We may explain SU (11) in the similar manner of the GUT symmetry breaking of SU (5). Therefore, in the theory of SU (11), it is possible to change any of 30 (thirty) latent energy bosons of SU (6) into any of the 30(thirty) matter energy bosons of SU (5) or vice-versa by the exchange of the J-bosons of SU (11). So at this stage, by the symmetry breaking of SU (11) created an amount of matter energy found after the symmetry breaking of SU (5) by the latent energy group SU (6). When we consider several unified groups with interlink between each other we can discuss the following Unified Group SU (23); Unified Group SU (47) and so on. Are as in the similar manner of SU (11).

**Sub Group SU (6)**

In the transformations under the energy group SU (6), the basic fields here are the latent energy field and we have U = exp (-iH), Where “H” is a 6 × 6 Hermitian matrix of zero-trace. The matrix ‘H’ now has 35 independent components. In the weak interaction SU (2), we have, H has 2 × 2 Hermitian matrix of zero-trace and the most general form of such matrix. Thus, like above, we have 35 matrix charges J1, J2, J3, ..., J35 out of which five matrices are diagonal. Corresponding to this, we have 35 bosons. For want of any specific designation, they are referred to simply as Jk. There were no change takes place for exchanging the bosons namely Jk3, Jk8, Jk15, Jk24, Jk35, corresponding to the said five diagonal matrices. We expect the participating interactions of the bosons Jk to have comparable strength. The Jk bosons are expected to generate a latent force. This force is believed to be potentially so large that the exotic matter fluid are expected to transfer into the ordinary matter field constituting like black-hole may at the centre region. Similarly we can discuss the Sub group SU (12); Sub group SU (24)... etc. in the same process. We found a large number of unknown new particles which are directly involved with life, consciousness etc.

**Frame-Work of SU (6) × U (1), etc.**

We consider strictly the three phases of the Universe such as “Material Universe” means Liquid Phase starting from the symmetry breaking of the GUT of SU(5) [⊃ U(1) × SU(5) × SU(6)], “Exotic Matter Fluid Universe” means Vapor Phase starting from the symmetry breaking of the SUT of SU(11) [⊃ U(1) × SU(5) × SU(6)] then “Empty or Vacuum” spaces means Gaseous Phases starting beyond SU(11) means the infinite number of symmetries like SU(23), SU(47),......, etc.

We have the five bosons Jk3, Jk8, Jk15, Jk24, Jk35 with respect to the five diagonal matrices I3, I8, I15, I24, I35 of SU(6) having zero mass and charge, just like as photon. However, the photon does not interact with the neutrino, while Jk3, Jk8, Jk15, Jk24, Jk35 does & accelerates the neutrinos and created strong neutral current & “Gravity”. The exchange of any Jk3, Jk8, Jk15, Jk24, Jk35 does not alter the electric charge, although the strong interaction of SU (6) does not directly involve the electric charge, it still seems to demand the charge bosons of Jk1, Jk2, Jk4, Jk5, Jk6,.....Jk34 with respect to the no diagonal matrices I1, I2, I4,....I33 are permit an interchange of wave functions that means electron and neutrino can interchange. This circumstances prompted efforts to link it with the electromagnetic interaction that means an electro-strong interaction. The link SU (6) × U (1) brings the photon of U (1) [the electrodynamics U (1), which are inevitable arises particles that have the characteristics of a magnetic monopole. Monopoles are highly stable particles and once created they are not destructible. And so they would survive as relics to the present epoch] which is responsible for electromagnetic forces between charge particles are closer to all bosons of SU (6). Similarly, the same will be possible for all other links, such as for SU(12) × U(1), where we can assume 11-bosons
are found with respect to the diagonal matrices and 132-number of bosons with respect to the no diagonal matrices and in the link SU(24) × U(1),...etc. where we can assume 23-bosons are found with respect to the diagonal matrices and 552-number of bosons with respect to the no diagonal matrices, therefore a large number of photon-like bosons “Narayan” found with respect to the diagonal matrices and another kind of bosons may also create electromagnetic forces with respect to the no diagonal matrices, all are belongs to the gaseous-like phases as explained before means empty or vacuum spaces which may involve with the creations of new unknown particles formed by lepton-like or quark-like bhadras are tightly binding by the bosons of SU(6) in the link of U(1) × SU(5) × SU(6), since in the theory of SU(11), it is possible to change any of six lepton-likes bhadras assuming each of having five sub-units into any of six quark-likes also each of having five sub-units or vice versa by the exchange of J-bosons of SU(11). For SU(23), it is possible to change any of six lepton-likes bhadras assuming each of having 11 × 2 = 22 sub-units into any of six quark-likes also each of having 22 sub-units or vice versa by the exchanging the bosons of SU(23) and for SU(47) it is possible to change any of six lepton-likes bhadras assuming each of having 23 × 2 × 2 = 92 sub-units into any of six quark-likes also each of having 92 sub-units or vice versa by the exchanging the bosons of SU(47) and so on. But all are belongs to the gaseous-like phases and hence its involvements may be indirectly. Thus we found a large number of neutrinos are as 6 × 5 = 30, 6 × 11 × 2 = 132, 6 × 23 × 2 × 2 = 552,........etc. after the symmetry breakings in the links “SU(6) × U(1), SU(12) × U(1), SU(24) × U(1)”,.....etc. simultaneously beyond the Standard Model of Physics that means neutrinos other than electro-weak symmetry breaking in the link SU(2) × U(1) or beyond Paul Dirac fermions. It may be compared like Majorana Fermions which was explained first by the Italian physicist Ettore Majorana in 1937 or in condensed matter physics, where the bound Majorana fermions can appeared as quasiparticle excitations-the collective movement of several individual particles, not a single one, and they may governed by non-abelian statistics. Ultimately, we found an ocean of neutrinos with various kind of electromagnetic forces of high frequencies & short wave lengths where it is possible to assumed as packages of energies containing large number of photon-like bosons Narayan created packets of energy filled with variety of frequencies are responsible for the creation like “Consciousness” etc. and quark-likes or lepton-likes bhadras(a set or bunch may be as five at a time etc.) are tightly binding by the bosons of SU(6) created new unknown particles which are directed by the energy groups SU(12), SU(24),...etc. formed living elements and non-living elements etc. after the symmetry breaking of the matter energy group SU(5), thus we found a variety of lives which may be appeared due to the aforesaid variation of high energy frequencies.

From the hypotheses it is clear, that in the framework of U(1) × “SU(5) × SU(6) × SU(12) × SU(24) × SU(48) × ...” after the symmetry breaking of SU(11) formed various packets of photon-like Narayan interacted neutrinos and all other bosons created electromagnetic forces maintaining the laws of mathematics like Permutations & Combinations, Set Theories and the laws of Probability, etc. which are therefore applicable for the computations of consciousness etc. and the variety of lives may be created by the randomly variations of frequencies of the aforesaid high energies. These unknown energies were controlled the formation of matter energies and hence these are responsible for all material parts of the universe as well as for living bodies etc.

Sub Group SU (5)

In the theory of SU (5) it was shown in normal laboratory that energies of strong interaction by SU(3) (quantum chromo dynamics) is most powerful, followed by electrodynamics and then by the weak interaction. Theoretical considerations suggest that if we extrapolate to considerably higher energies, the strong interaction reduces in strength, while the electro-weak interaction gains. It is possible to change any of six quarks (u, d, c, s, t, b) into any of the six leptons or vice-versa by the exchange the X-boson of SU (5).

This is where it becomes possible to create or destroy baryons.

Significance of various “SU” levels

The GUT theory of SU(5) shows matter worlds such as the bosons of SU(3) are tightly binding by the quarks formed baryons, mesons, protons, neutrons, electrons of the matter atoms etc. then by increasing atomic numbers we found various heavy particles of inorganic & organic etc. We then found an architecture of the model of atomic structure where it is found at the centre with heavy nucleus consisting protons, neutrons, mesons etc. and around it electrons moving in the various orbits etc. with vacuum spaces assumed to be as filled with new energies are explained herewith. The said atomic structure were compared with the solar systems, i.e. movement of planets, satellite around the sun or star as nucleus-like etc.

We assumed that all various New Unified Groups SU(11), SU(23), SU(47),...so on are explained in my all articles are also responsible for non-living and as well as living matter worlds directly or indirectly.

Theoretical considerations may be suggest that if we extrapolate to considerably higher energies, the strong interaction of SU (3) reduces in strength, while the electro-weak interaction SU (2) × U(1) gains. At around 10^{15} GeV these interactions become comparable and their unification of SU (5) at around 10^{17} GeV may seem natural. This is the Planck energy.

Thus we can assume theoretically with the discovery of Higgs Bosons at LHC, that after the symmetry breaking of SU (11) and seem to be at comparable strength of “SU (6) × U(1) & SU(5)” if we extrapolate to considerable higher energies that the electro-strong interaction of “SU (6) × U(1)” decreases its strength, while the strength of relatively weak exotic-matter interaction of SU(5) in wave status are slowly gained for the next symmetry breaking whereas energies of SU (6) working like as latent energy detached for changing the vapor like phases of the new energies universe and hence detachable latent energies including all other previous existing energies of SU (12), SU (24),...etc. in the respective framework “SU(6) × U(1); SU(12) × U(1); SU(24) × U(1)”.....etc. created bunch of electromagnetic short waves with different high frequencies of packages are therefore considering as created like consciousness of the universe as well as lives. Considering, due to the variety of high frequencies may constituted as “Sense Datum” and others biological phenomena because these energies are directed to form the ordinary matter and then stayed thereby as quantum gravity etc. Clearly we can expect the participating interactions of Jk bosons of SU (6) to have a comparable strength. The Jk bosons are expected to generate a latent force. This force is believed to be potentially so large that the exotic matter fluid in the so called vapor phases are expected to transfer into the ordinary matter fluid and then everything, constituting black-hole by the
high energies of high frequencies of short wave lengths are remained at the centre region of the new formations. We ultimately found a Blue-Print or an Architectures of the Model of Living Matter Atoms where it may be found the vacant spaces are filled with new-energy-sources and there also created elements by the bosons of new energy sources of SU (6) are tightly binding by the lepton-likes [as lepton-likes & quark-likes are vice-versa, it is in the theory of SU (11), where it is possible to change any of 30 (thirty) latent energy bosons of SU (6) into any of the 30 (thirty) matter energy bosons of SU (5) or vice-versa by the exchange of the J-bosons of SU (11) and the ordinary matter atoms by SU (5) within it. Thus in the initial stage of DNA or Protein Structure where we found like vacant spaces and around the centre region where gradually created the nascent matters, then formed the lumps of matter atoms etc. together called living matter atoms, which may be compared with the formation of spiral galaxy etc. in the physical world. Which was very similar to the explanations of the famous scientist Pierre-Gilles de Gennes, where he explained that how the atomic structures of bio-molecules formed after the creation of “Soft Matters” etc.

Thus we saw that all unified symmetry groups SU (23), SU (47),..... etc. which are all stayed like in the gaseous stages assumed as empty spaces or vacuum (considering the stages exceeding to the critical points like as critical temperature between gas-vapor) states. After the symmetry breaking of all other super unified groups SU(23), SU(47),....etc. created different natures of vacuums till to the symmetry breaking of SU(11) and then created various electromagnetic force-fields with short wave lengths and high frequencies by the new energy sources of SU(12), SU(24),...etc. in their respective framework of “SU(12) × U(1) ; SU(24) × U(1)” ;.......etc. simultaneously. Thus the so called vacuum spaces with new energy sources are directly or indirectly involved with the unified groups of SU (5), the material worlds. An analogy will illustrate the scenario with an example that if we decomposed water we found two different characters such as oxygen and hydrogen, which are different from the character of water.

Now, the combination of certain amount of unfolded new high energies of SU(6), SU(12), SU(24),.....etc. which are created distinct high frequencies of short wave lengths in their respective framework are therefore structured the various conscious-living-bodies with separate intelligences, consciousness and biological phenomenal, hence there found various instincts of lives etc. depending on the above stated energy packages and the requisites amounts of different high energy frequencies or fluxes of electromagnetic forces etc. are therefore requires for the completeness in the living modes. As it is known to all that for broadcasting we need to amplify the short waves and then use carrier waves with bandwidth frequencies etc. the same will be applicable for the variety of lives also etc. in different modes.

**About The New Unknown Particles**

According to the above discussion of the hypothesis we can found a large number of new unknown particles formed by the lepton-likes were tightly binding by the strong new energy forces of the group SU (6) may be named as “Bhadra” for understanding, having wave status which are much more strong strengths than accordingly weak strengths of matter particles which are also formed tightly binding by the “Quarks” with the bosons of SU (3). The creation of bio-matter-elements are fully depending on these new wave-particles bhadras, in the new model various set of lepton-like bhadras together with matter atoms formed bio-molecules and hence from single cell to multiple cells for completing an identity body as like as two u-quarks and one d-quarks together formed a proton, one u-quarks and two d-quarks together formed a neutron and with electron by lepton formed an identity of the matter atoms and hence from hydrogen to heavier elements for the completion of a matter body.

There may be opened a field of burning discussions not only about bhadras but also invisible electromagnetic force-fields which also created consciousness by the series of new energy sources of SU(6), SU(12), SU(24), SU(48),....etc. Highlighted, that all “bhadras” are created by the “Leptons-Likes”, which means that new particles are considered as invisibles, massless, charge less which are all filled the vacuum or empty spaces as explained by Albert Einstein or “Standard Model of Physics”. These new unknown particles bhadras are active about the formation of bio-atoms within the medium of charged particles of protons, electrons etc. and also it is assumed to be formed the so called either-medium etc. Therefore it makes “Force Fields” like magnetic force fields, electrical force fields, gravitational or quantum gravitational force fields etc. with respect to the physical matter particle world maintaining the fundamental responsibility for the creation of various lives with all basic entities. We thus found a large number of living things with unprecedented criterion of life and unpredicted change of lives etc.

For example, an involvements of the new energy sources are as the formation of protein structures and DNA chain, etc. where it was found a common picture as polymerization, there is a fluid property called Viscosity which is very much essential for the formations of early stages of bio-molecules. In that cases, the consistency of semifluid of matter atoms are required about the formation of polymerization that means the formation of string-like chains which was formed by the monomers or nucleic acids of DNA where assumed to be the foundation of life formation. The early situations for life formations are as similar to the string theory or M-theory of the large scale universe.

**How Consciousness Appears**

It is clear from the above discussion that before the formation of physical universe the space-time were engulfed by the various types of new energies, just imagine like as an ocean of various electromagnetic short waves and high frequencies new energies created by the new energy sources of SU (12), SU (24), SU (48),...., etc. i.e. the ocean of microwaves whose presence everywhere till to date. There exists various kind of energy wave-lengths with an infinitesimal short wave lengths together with all other short energy wave lengths created packages of new energies, may be the named as “Narayan” for the better understanding of same person. We know about the systems of broadcasting by using radio-waves where sound or pictures transferred into electrical energy then from electrical to sound or pictures. We consider the packets “Narayan” having various frequencies may create as Consciousness and other Sense Datum of us. Thus energy groups SU(6), SU(12), SU(24), SU(48),....etc. in their respective frameworks of “SU(12) × U(1); SU(24) × U(1); SU(48) × U(1)”....etc. and with SU(6) in the framework of SU(6) × U(1) are itself creates consciousness by the energy packages Narayan as incoming data’s
created by the particles bhodras, where recovers like as human brains, using with an existing data’s created by the electromagnetic force-fields of SU(5), it follows like broadcasting systems and then created basic properties like instincts, emotions, etc. of lives. It is also to be noted that these energy packages ‘Narayan’ transmitted to the object directly and it does not affect the unnecessary medium or other distinct objects. The differences of interactions of Narayan’s and bhodras with quarks are caused for the creations of various kind of lives.

Individual humans or animals etc. itself may use himself as Aerial or Antenna in the broadcasting systems for distant objects by gathering and strengthening their internal potential energies.

Criterion of Waves
The wave form of the quanta like bhodra of SU (11) in the packages are different from waves of matter of SU (5) in the large scale of physical universe, such as that there may be found as different familiar waves in the ocean of water (for wider universe we found in the similar manner long wave lengths then short wave lengths which tends to infinitesimal short invisible microwaves compared like X-Ray etc.) with short wave lengths, long wave lengths with low frequencies etc. All kind of energies which are inter-related to long wave lengths where all other various kinds of wave lengths are assumed to be as carrier waves for shorter waves. By contrast, the quantum wave can be viewed as a wave of the probability for finding a particle in a specific position. This probability wave-distributions may be applied for the momentum of the quantum states of living & no living matter atoms while the quanta remained in its wave forms when it is viewed of the superposition of all the possible positions that the particle could occupy. At the peak of the wave, where the amplitude is greatest, there is the highest probability of finding a particle and eventually when the wave collapses. However, the choice of position for each individual particle is completely random, representing an effect without any cause.

Conclusions
Living status like Human where Consciousness is due to the creation of packages of various short wave lengths and high frequencies energies called “Narayan” created by the different SU-levels together with matter elements formed by the unknown particles “Bhadras” conducted biological phenomena like Consciousness, Minds, Emotions, Sense Datum, & Biological Phenomenal,.....etc.

Thus, Consciousness may be exampled by the scenario of bandwidth broadcasting transmission systems where sound energy and light energy changes to the electrical energy then modulated electromagnetic short energy waves were transmitted bandwidth via radio waves. Just imagine that various packages of short-wave lengths frequencies must create without any players at the source or like as stored in the old gramophone record player, although in the broadcasting systems it was not possible practically without any presence of incumbents (persons) that means the participations of incumbents are essential for the creation of pictures or sounds and then transmitted bandwidth to Radio or Televisions.

References
1. Narayan Kumar Bhadra (2012) the complex model of the universe, IOSR Journal of Mathematics 2: 41-45.
2. Narayan Kumar Bhadra (2012) the complex model of the quantum universe, IOSR Journal of Mathematics 4: 20-33.
3. Narayan Kumar Bhadra (2013) the Complex Quantum and Classical Pseudo-Tachyonic Universe, IOSR Journal of Mathematics 8: 15-32.
4. Narayan Kumar Bhadra (2013) The Complex Quantum-State of Black-Hole and Thermo-statistics, IOSR Journal of Mathematics 8: 1-19.
5. Narayan Kumar Bhadra (2014) the Origin of Consciousness in the Universe, IOSR Journal of Mathematics 10: 53-68.
6. Narayan Kumar Bhadra (2017) The Complex Quantum-State of Consciousness, IOSR Journal of Applied Physics 9: 57-93.
7. Narayan Kumar Bhadra (2019) Revised Standard Model of Physics and Origin of Biology, IOSR Journal of Applied Physics 2: 12-40.
8. Narayan Kumar Bhadra (2019) A Human is a Miniature of Universe, IOSR Journal of Biotechnology and Biochemistry 5: 56-73.
9. Di Sia P, Narayan Kumar Bhadra (2019) Mind and Consciousness as Created by Electromagnetic Force, International Journal of Applied and Advanced Scientific Research 4: 1-6.
10. Di Sia P, Narayan Kumar Bhadra (2020) Origin of consciousness and contemporary physics, World Scientific News 140: 127-138.
11. Di Sia P, Narayan Kumar Bhadra (2020) Origin of living matter by a new model of consciousness, World Scientific News 143: 67-78.
12. Di Sia P, Bhadra NK (2020) Everything in a Part: About the Creation of Universe and Consciousness, Ergonomics Int J 4: 000228.