

## A Review Article We can unify quantum mechanics and gravity only by ToE i.e MIND

Dr. Vijay Mohan Das  
University of God  
Parade Ground Fatehgarh India

### Abstract

A Theory of Everything would unify all the fundamental interactions of nature: gravitation, strong interaction, weak interaction, and electromagnetism. Because the weak interaction can transform elementary particles from one kind into another, the ToE should also yield a deep understanding of the various different kinds of possible particles. The usual assumed path of theories is given in the following graph, where each unification step leads one level up: In Unification physics where four fundamental forces are tried to unify. It means Four natural forces which are mediated by four particles ( photon, vector boson, gluons and gravitons) are created from one particle. It is called super unification. GUT means three forces (Photon, vector bosons, and GLUON) could be unified as these are made up of one type of fundamental particle called energy basic building blocks.

### INTRODUCTION

Gravity is a force mediated by energised gravitons and it is a quantum phenomenon and comes under quantum physics like tunnel effect rather than classical physics. Both the effects are triggered by MIND, the Theory of Every Thing. Hence we can unify Quantum Mechanics and Gravity.

Unification physics is different phenomenon and that is used for the search of God particles or fundamental particles and fundamental interaction i.e. MIND.

### Can we unify quantum mechanics and gravity? [9]

Oct 31, 2013 3 comments

Taken from the 25th anniversary issue of *Physics World*, this article examines one of the five biggest unanswered questions in physics as selected by the magazine's editors the incompatibility of general relativity and quantum mechanics is perhaps the most important open problem in theoretical physics. Sabine Hossenfelder describes how physicists are working to unite these two perspectives in a theory of quantum gravity:

If you know one thing about quantum mechanics, it is probably that quantum matter can be both here and there at the same time – it can be in a superposition. And if you know one thing about gravity, it is probably that matter attracts other matter – it has a gravitational field. So it seems that the gravitational field of quantum matter should also be both here and there at the same time. However, Albert Einstein's general relativity, which describes gravity, is a classical theory. It has taught us a great many lessons and can do many things, but one thing it cannot do is describe gravitational fields in quantum superpositions. For this we need a quantized version of general relativity – a theory of quantum gravity.

And if you know one thing about quantum gravity, it is probably that no-one knows how it works. We do, however, have requirements for the successful theory of quantum gravity.



**Can we unify quantum mechanics and gravity?**

### **What do we want from quantum gravity?**

To begin with, a theory of quantum gravity should tell us how quantum matter gravitates, especially if gravity is strong. As long as gravity is weak, we could get away with quantizing it in the same way that we quantize other interactions. But this weak-field quantization stops making sense when gravity is strong, such as when highly energetic particles collide at energies so high that the particles themselves have a strong gravitational interaction.

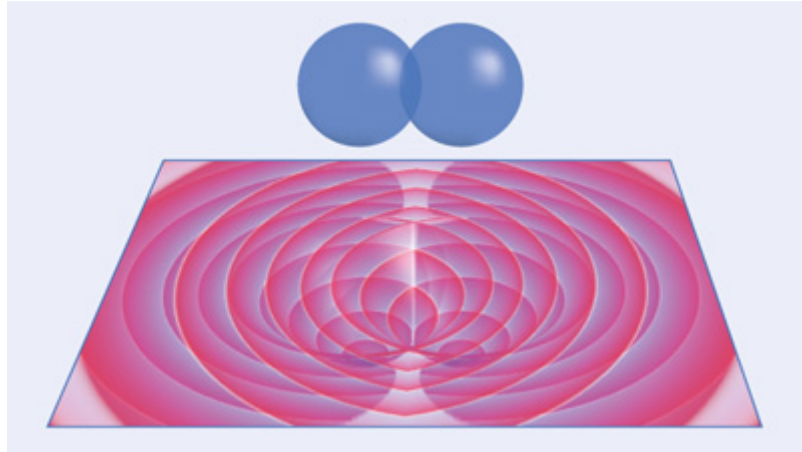
Quantum gravity should also tell us what happened in the very early universe. According to general relativity, our universe started in a singularity. This unphysical result indicates that we need a more fundamental description of space and time back then. Since gravity was strong in the early universe, quantum effects of gravity cannot be neglected when describing this phase.

General relativity also predicts singularities when matter collapses into black holes, which leads to what is known as the black hole information loss paradox. It concerns the fact that black holes emit thermal radiation because of quantum effects, not including quantum gravitational effects. But when the black hole has completely evaporated, all that is left is thermal radiation, regardless of what formed the black hole. Information is destroyed in this irreversible process, but since irreversible processes cannot happen in quantum mechanics as we know it, this represents an inconsistency. Quantum gravity should explain what happens to the information in black holes.

Along with solving these thorny problems, the successful theory of quantum gravity must also be able to reproduce all achievements of general relativity and the Standard Model of particle physics. And it must make testable predictions that give us confidence that we have the right description of nature.

### **What have we learned so far?**

Physicists are working on several approaches to quantum gravity: string theory and loop quantum gravity; causal dynamical triangulation and asymptotically safe gravity; causal sets; group field theory; emergent and induced gravity; and a few other comparably small research agendas. String theory currently has the highest score in addressing the above requirements, followed by loop quantum gravity and asymptotically safe gravity.



### **Why combine quantum mechanics and gravity?**

From the outside, research on any of these approaches to quantum gravity must be like watching the construction of a tunnel. For a long time, nothing much happens, except that occasionally a tool goes in and rubble comes out. But step inside and you will see a hive of activity. Recently, a lot of progress has been made in each of the approaches – progress that has considerably advanced our understanding of the problem. In the end though, a tunnel is only useful once a breakthrough is made.

While no breakthrough has yet been made, we are learning. We have learned that specific properties of quantum gravity appear in several of the approaches, if in different manifestations. The best known example may be holography – the encoding of information contained in a volume on the boundary of that volume. The existence of a minimal length scale is another such property that appears in different approaches. It seems that, ultimately, quantum gravitational fluctuations prevent us from resolving structures arbitrarily well. A more recent discovery is that the dimension of space–time seems to become smaller on short distances, a surprising behaviour that has also been found in different approaches.

I have little doubt that we will be able to unify quantum mechanics and gravity; some of my colleagues might even argue that we have already done so. But we are not looking for a theory of quantum gravity. We are looking for the theory of quantum gravity – the theory that describes the world around us. Making connections with observation is thus not only important, but also necessary for quantum gravity to be scientific.

### **What is next?**

So far, we do not have any experimental evidence for quantum gravity. But during the last decade it has become clear that it is technologically possible, even in the absence of a fully-fledged theory, to search for evidence of general properties expected of quantum gravity – like the ones named above, and more still, such as violations of certain symmetries. This can be done, and has been successfully done in some cases already, through the use of phenomenological models. Such models parameterize effects and make connections with observations. Observations can then be used to learn what properties the yet-to-be-found theory can have and which it cannot have. I think that this experimental guidance is essential to constructing the theory of quantum gravity, and is the route to making progress.

Since gravity is really a consequence of space–time being curved, we are looking for a theory of the quantum nature of space and time itself. It is the most fundamental of the currently open questions in the sense that it concerns the most basic ingredients of our theories. Next to revolutionizing our understanding of space, time and matter, quantum gravity will likely also significantly advance other areas. The nature of time and its uni-directional arrow are puzzles deeply interlinked with quantum gravity, and so is the physics of the early universe. Moreover,

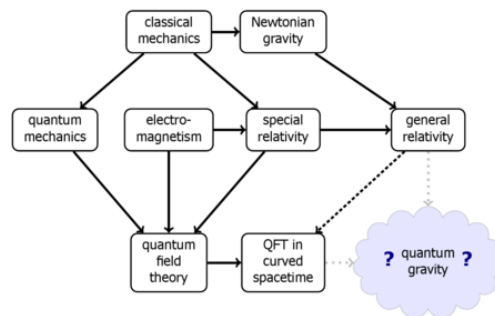
I believe we will learn a lesson about quantization that has the potential to improve our ability to manipulate quantum matter.

The tunnel's construction site might not look like much, but rest assured: once a breakthrough is made, you will see heavy traffic on the new route.

### About the author

Sabine Hossenfelder is an assistant professor of high-energy physics at the Nordic Institute for Theoretical Physics (Nordita), Sweden, and writes the popular blog Backreaction

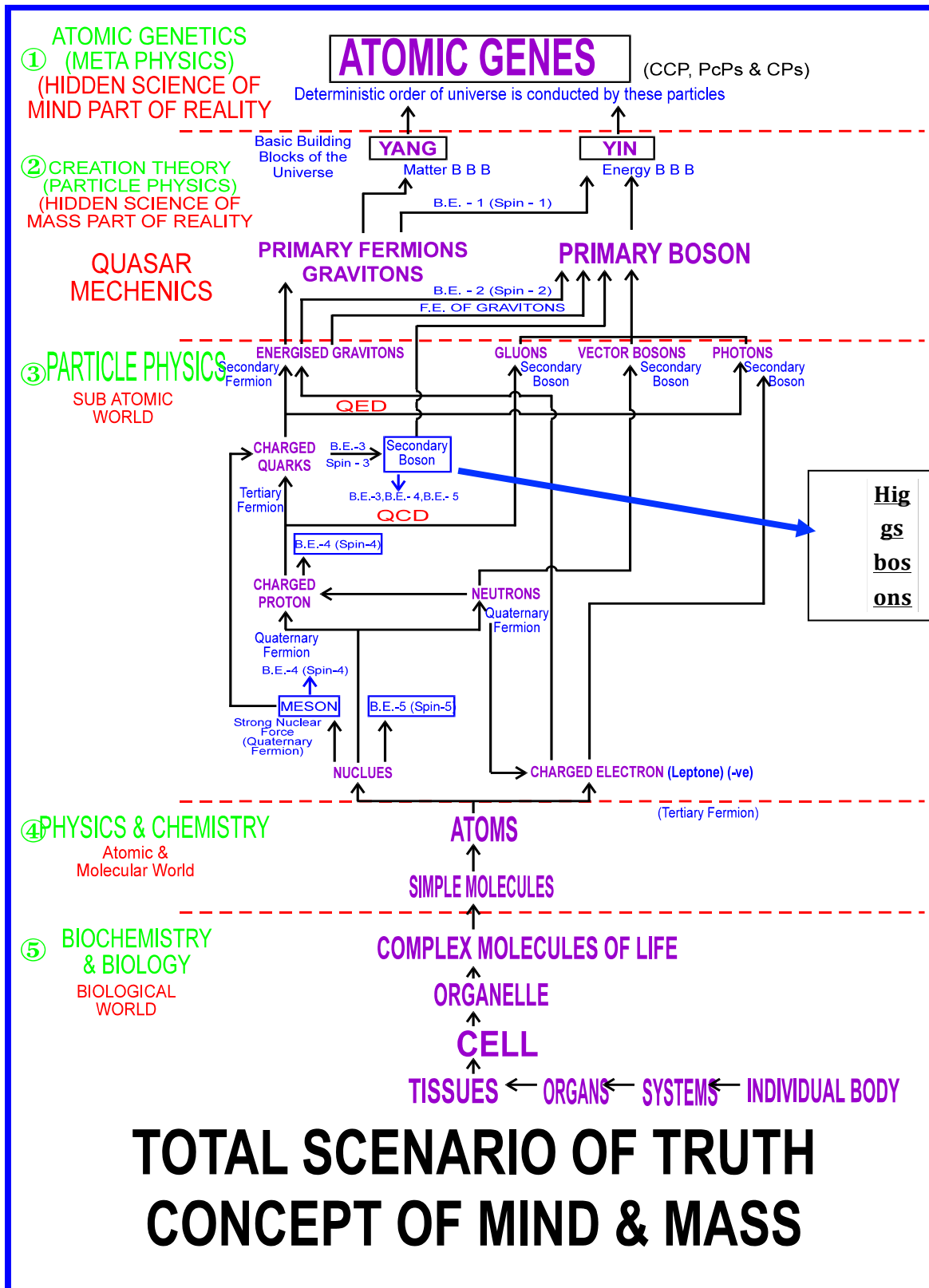
The incompatibility of general relativity and quantum mechanics is perhaps the most important open problem in theoretical physics. Sabine Hossenfelder describes how physicists are working to unite these two perspectives in a theory of quantum gravity.



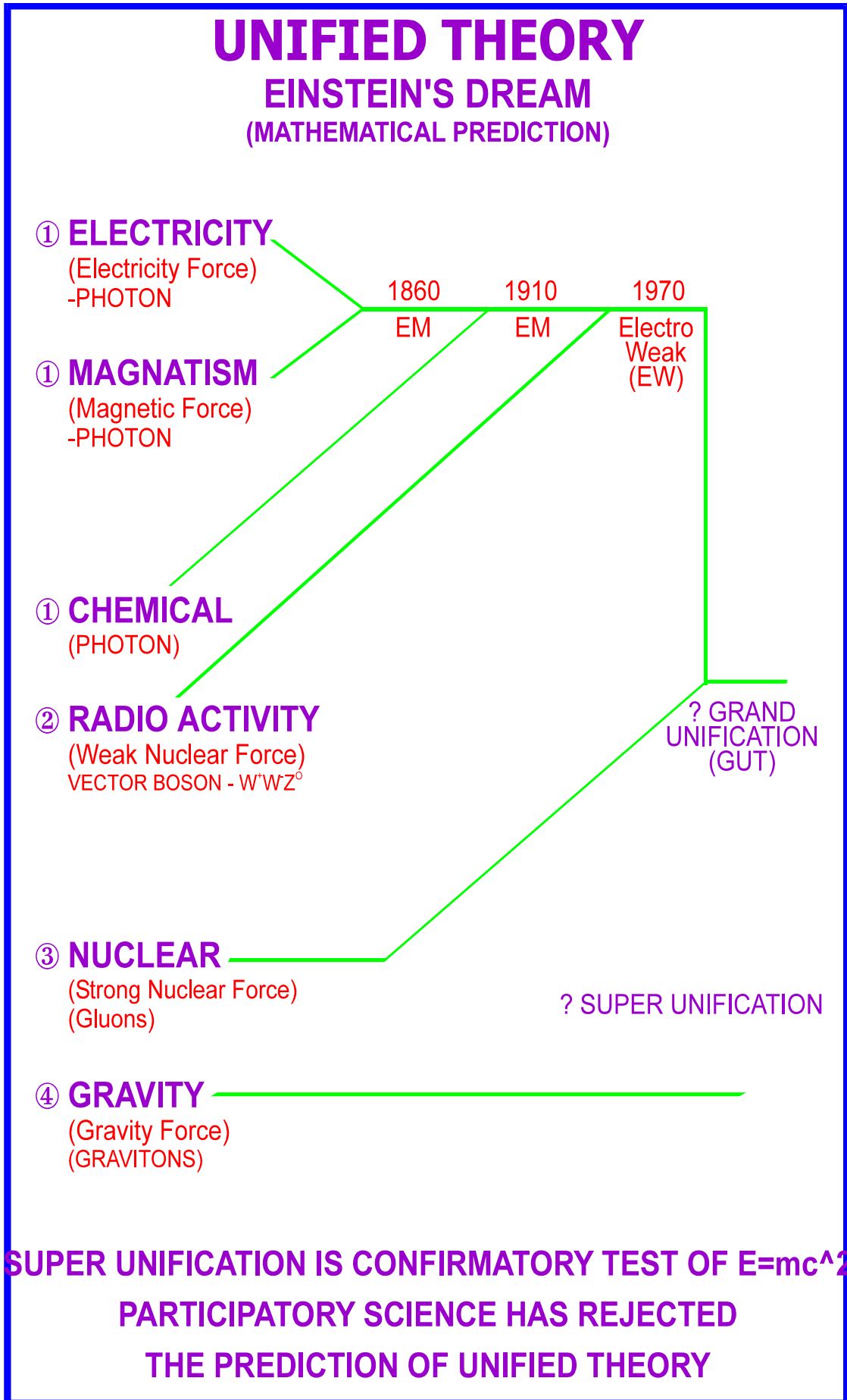
### Wrong Dipiction Of Unification Of Quantum Mechanics And Gravity

## 2. Structure [8], [10], [11] [12]

Before we discuss about this issue, we should know some facts about structure of matter, origin of the universe, unification physics and finally atomic genetics i.e. Mind. (Fig 1 to Fig 13)



(Fig -1)

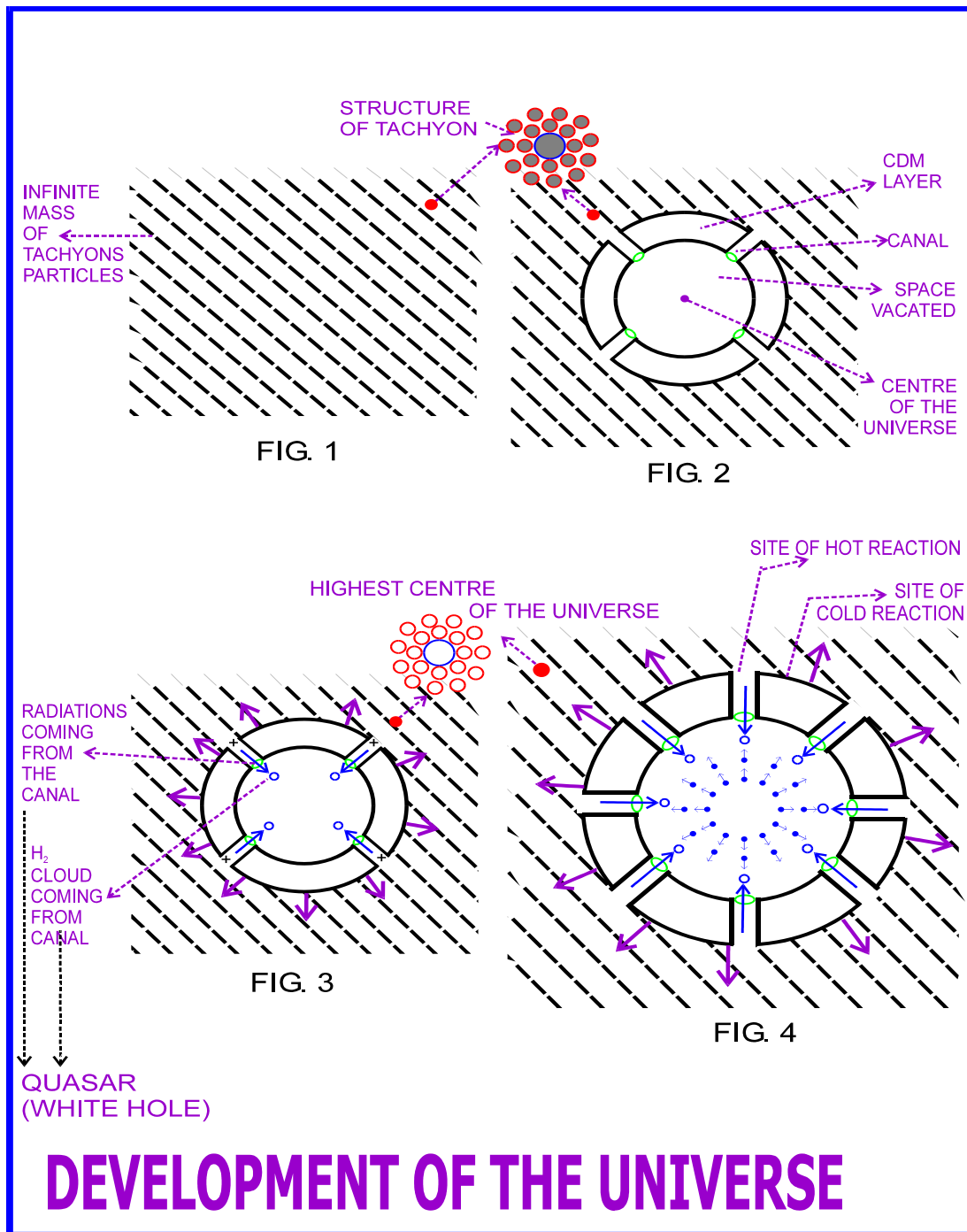


(Fig -2)

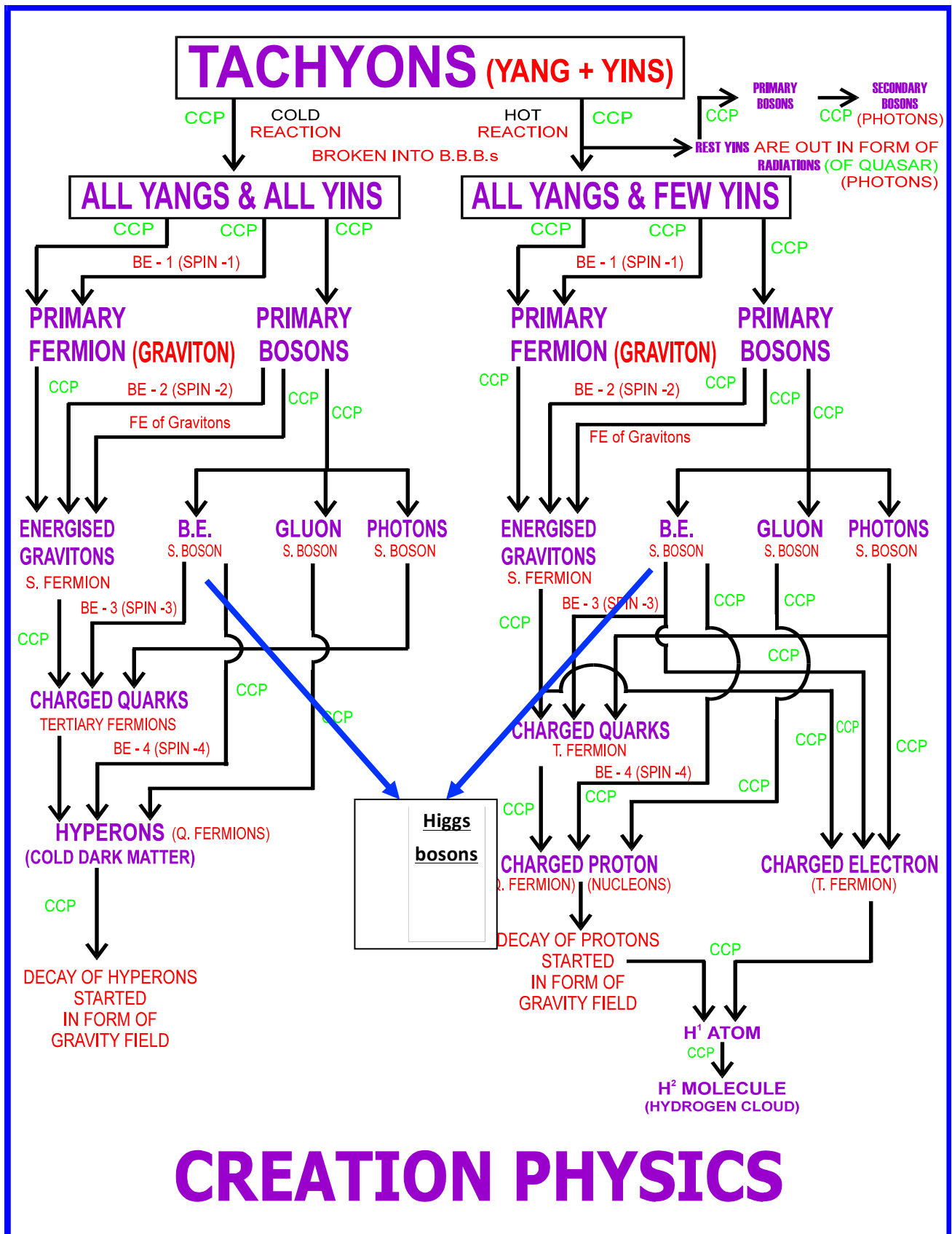
**Unification Theory**

The highest hypothesis in physics is unification theory Fig 2. It is also called Einstein's dream. The theory has predicted super unification phenomenon before origin of the universe. It does mean that four natural forces which are mediated by four different particles (gravitons, gluons, vector bosons and photons) were identical or belonging to the same family. It is also called ONE PARTICLE THEORY. This theory is not proven yet. One particle theory means that are natural forces are created from one type of particles.

Now I am proposing TWO PARTICLES HYPOTHESIS. It does mean that four natural forces which are mediated by four different particles are created from two type of particles instead of one types. So finally, there are two views. One is Einstein's dream i.e. one particle theory and the other one is participatory science's view i.e. two particle theory.



(Fig -3)



(Fig -4)



### **13. HOYLE- NARLIKAR UNIVERSE - NEW MODEL OF THE UNIVERSE AND NEW SCIENTIFIC UNDERSTANDING**

Hoyle and Narlikar proposed (in their continuous creation theory) that new matter is being created due to 'IMPLOSION' to balance the expansion of the universe, which astronomers have observed. Inside 'QUASI-STARS' gravitational collapses may form some matter in the universe. The huge luminosity and the radio emission from these quasi-stars appear to be 'gravity powered' unlike ordinary stars, which derive their energy from nuclear reactions.

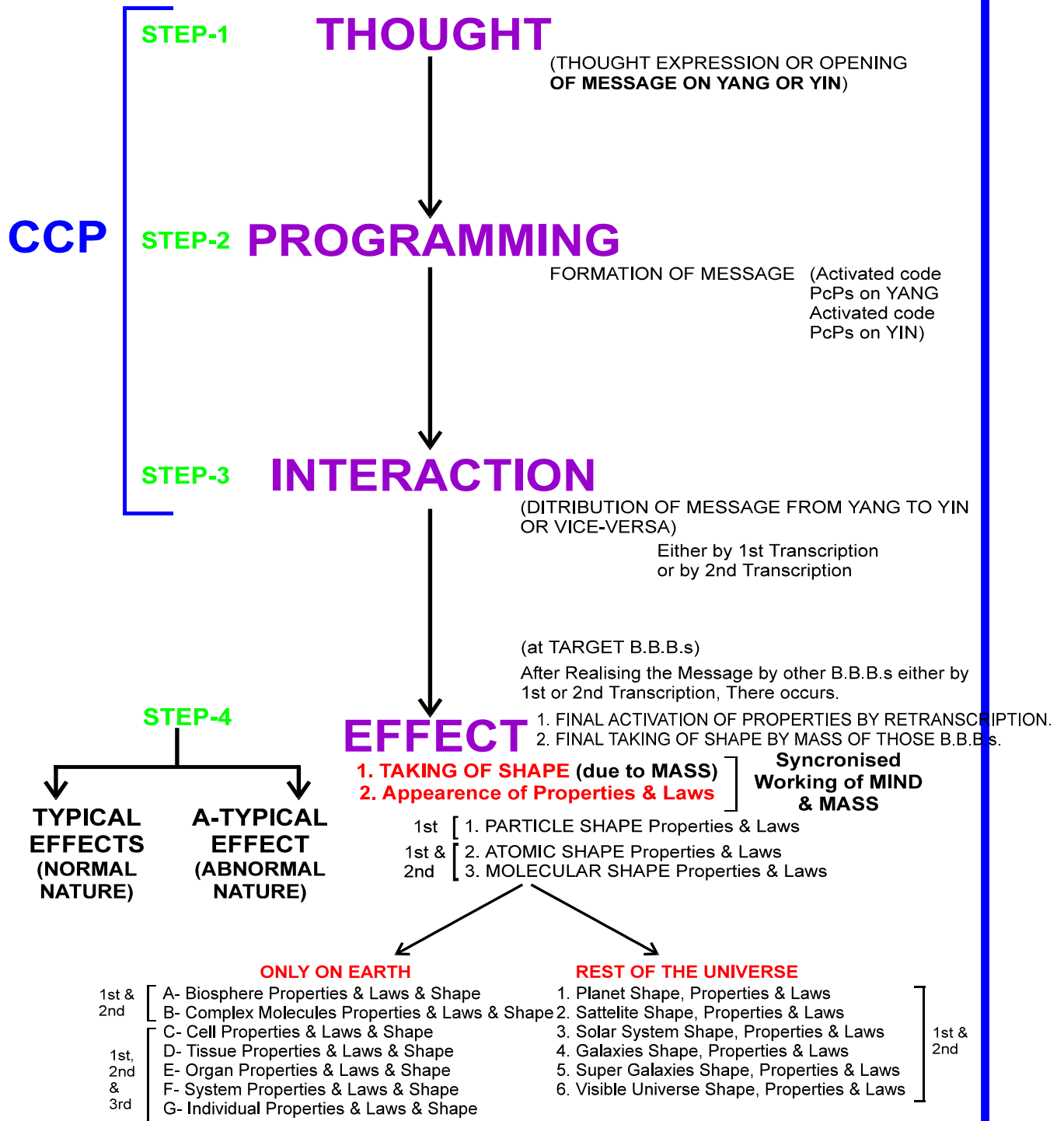
Before the origin of the universe, these Basic Building Blocks (B.B.Bs) (Fig-3) were in the form of tachyons (Fig-3). It means that at that time the tachyons were everywhere in the universe. Let us look at the structure of tachyons; it is made up of one matter B.B.B. (YANG) and many energy (YINs) B.B.Bs. Initially out of the infinite tachyons, one became the highest center of the universe. Messages used to go from highest center to rest of the universe and messages could come from rest of the universe to highest center of the universe by atomic transcription. Thus highest center had fed its thought to rest of the B.B.Bs. that would take part in creation - that they would express only those thoughts to give desired effect as wished by the highest center of the universe. So all B.B.Bs were informed about their role before creation of the universe. In pre-creation era programming of the future universe was done by highest center of the universe.

Our universe is oscillating and it is a divine universe. It means that it has a creation phase and a destruction phase. During creation phase tachyons break into their B.B.Bs. and from these B.B.Bs, formation of fermions and bosons take place (Fig-3). After the creation phase, destruction would start and in this phase all created particles would again break into their B.B.Bs and finally tachyons would form.

At the time of origin of the universe, all the effects got created. These effects are taking of different shapes and appearance of properties and law. All these effects are studied in various branches of science.

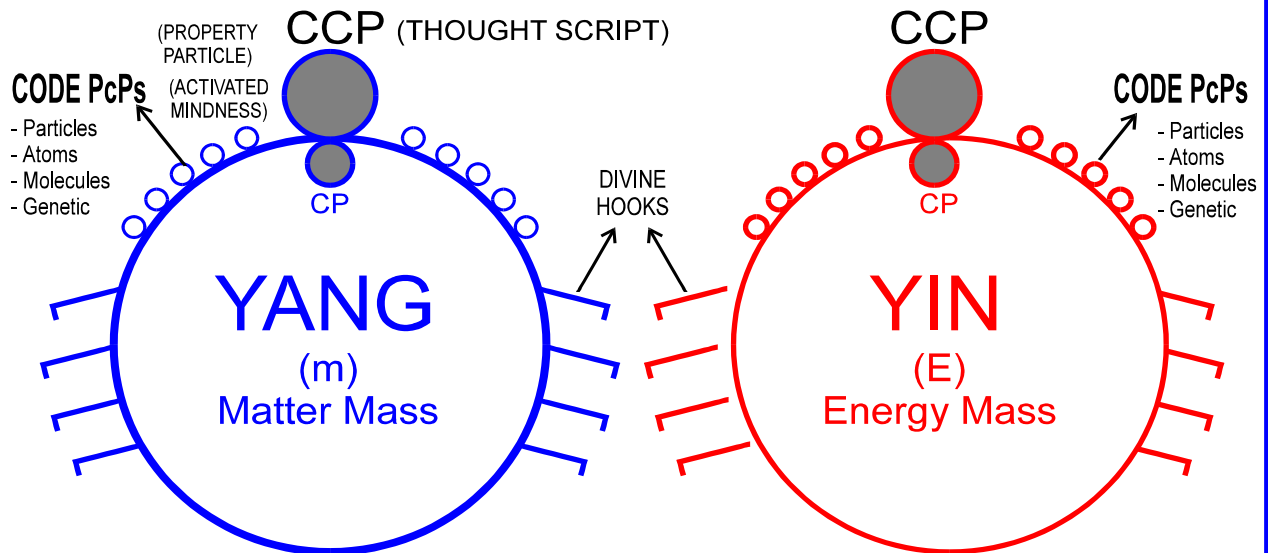
With the origin of the universe, nature first created a sphere of COLD DARK MATTER (C.D.M) and canals in it. With the result space got created. At the other end of the canals, hot reaction started (the relics are back ground radiations 2.7 degree K of our hydrogen clouds). As a result hydrogen clouds and lot of radiations were created. The empty canals were filled by these hydrogen clouds and radiations and thus QUASARS appeared in the universe. Simultaneously C.D.M. layer started expanding and clouds and radiations kept on coming in this closed universe (Fig-3). With the passage of time more and more C.D.M. layer formed, more and more quasars formed. The hydrogen cloud came in this closed universe. They started running towards C.D.M. layer as they were attracted by the gravity of C.D.M. layer. Those clouds, which were nearer, moved faster than those, which were away from CDM Layer. The HUBBLE LAW, can thus be explained. With some more passage of time, clouds were joined to form GMC (giant molecular clouds). Later by self-gravitation different proto stars, proto planets, proto satellites were formed. Finally stars became bright and thus bright galaxies appeared in this universe. Our universe is still in expansion phase and creation is still going inside quasars (Fig-4). It is to be remembered that highest center of the universe does not come in the visible universe. It keeps on receiving the messages by atomic transcription and it has power to change any programming programmed by it during pre-creation era.

# HOW DOES NATURE WORK CAUSE & EFFECT CONCEPT



(Fig -5)

# MODEL OF BASIC BUILDING BLOCKS OF THE UNIVERSE



CP is shown in the Picture  
(Realisation Particle)

## UNITY OF OPPOSITE

BOTH ARE COMPLEMENTARY

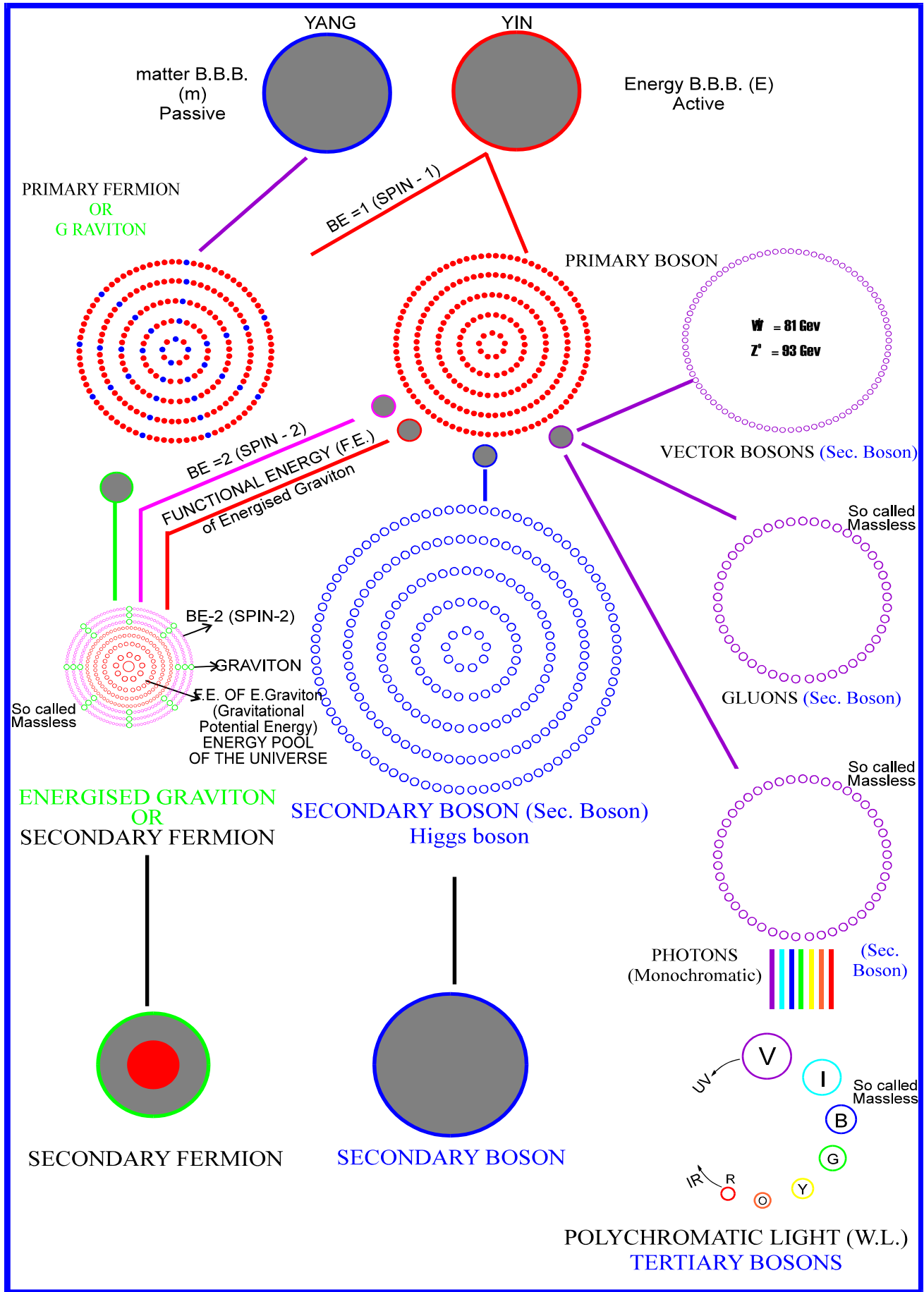
DIVINE B.B.B.s

MIND & MASS REALITY

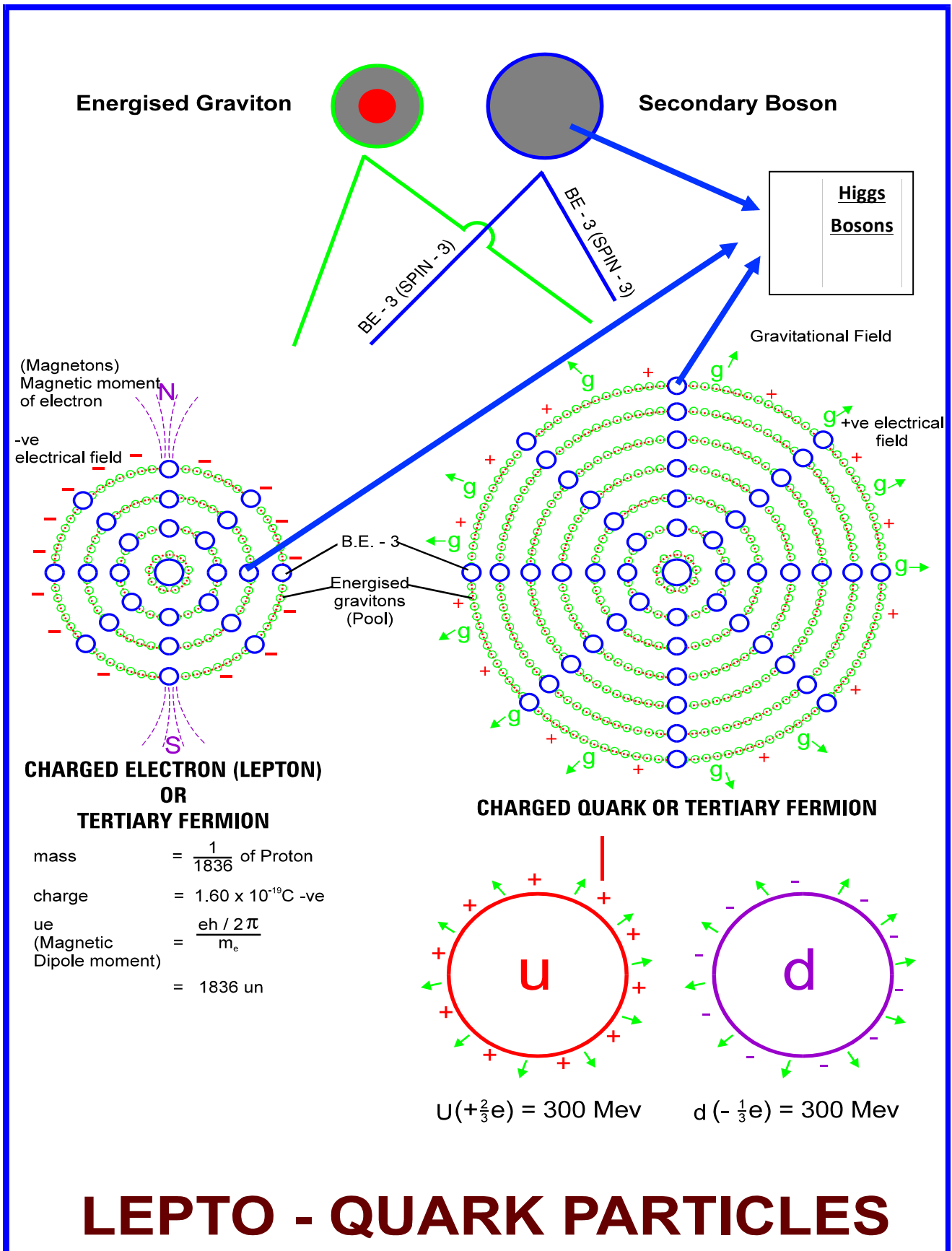
(ATOMIC GENES)

(MATTER MASS  
ENERGY MASS)

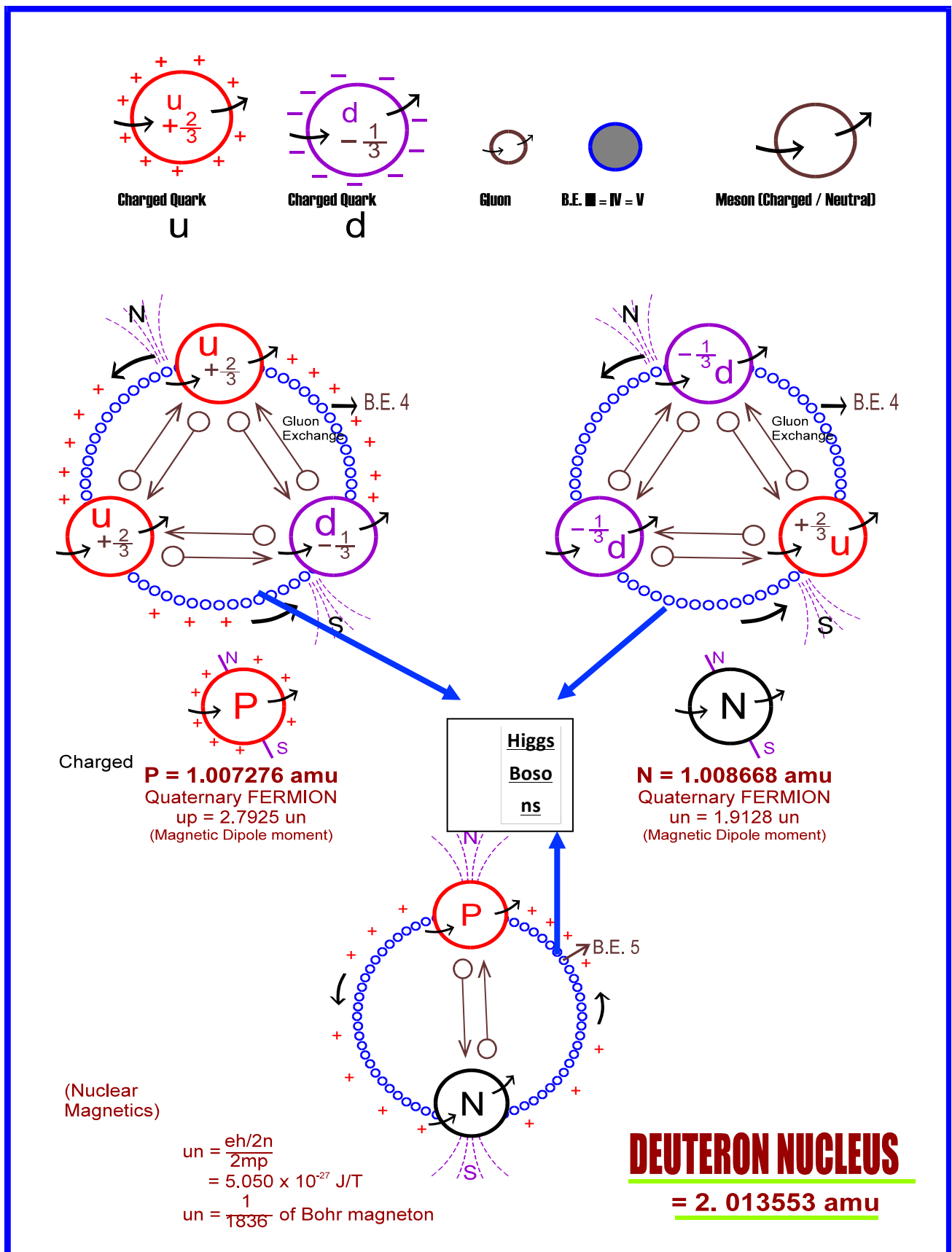
(Fig -6)



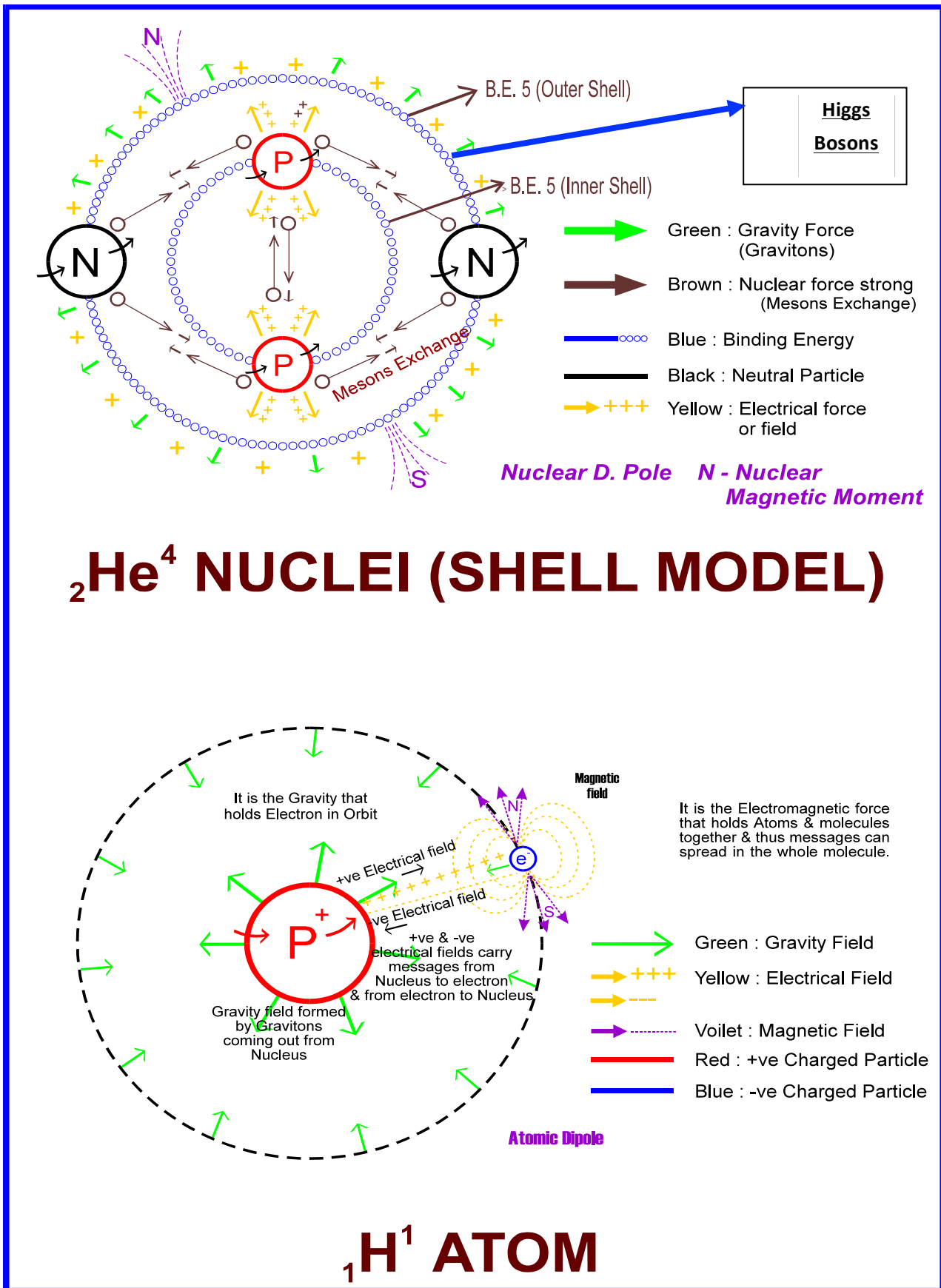
(Fig -7)



(Fig-8)



(Fig -9)



(Fig 1, Fig 6, 7, 8 and Fig 9, 10)

Matter is made up of molecules, molecules are made up of atoms, and the atoms are made up of nucleus and the electrons which revolve around the nucleus. Electrons are also called leptons. Nucleus is made up of protons and neutrons. Protons and neutrons are made up of quarks. So lepto-quarks are supported to be the smallest matter particles. But according to participatory science, lepto-quarks are not fundamental particles of the matter. We have explored the nature beyond lepto-quarks. We have found that lepto-quarks are made up of energized gravitons and secondary bosons. Energized gravitons are made up of gravitons and primary bosons. Finally, gravitons are made up of two types of basic building blocks (B.B.Bs) called matter B.B.B. and energy B.B.B. While primary bosons are made up of one type B.B.Bs. called energy B.B.B... The other name of these B.B.Bs. are YANG (matter B.B.B) and YIN (energy B.B.B.).The size of the mass of these particles is reducing and then B.B.Bs. are the smallest mass particles of which all fermions and bosons are composed. From these fermions and bosons all the matter (visible as well as invisible) of the universe is formed including the human cells.

### **Basic Building Blocks (B.B.Bs) of the Universe (Fig-6 and Fig 12)**

These B.B.Bs. are the smallest structural and functional units of the universe. Upon these B.B.Bs., **ATOMIC GENES** are found. These basics units are divine in the sense they talk with each other by phenomenon called atomic transcription and translation. These are fundamental particles and atomic transcription and translation is fundamental working of the nature. These B.B.Bs have power to transmutate to form any bigger unit of the universe like field particles, Lepto-quark particles, atom, molecule, complex molecules of the life, organelle, cell, tissue, organ, system, individuals, earth, solar system, galaxy, etc. So all effects of the universe are triggered by atomic transcriptions or thought expressions.

The properties of these two basic units are opposite. This would be explained during the discussion of inertial properties of the matter while giving definition of the energy (E) and matter (m) of the expression  $E=mc^2$ . Therefore, this is called unity of opposite or unity of complementary particles.

### **Weaving of Different units of the Universe**

It is these divine basic units that have woven all the structures of the universe. These two B.B.Bs. have joined to form gravitons, while energy B.B.Bs. have joined to form primary bosons only. Later, gravitons and primary bosons have joined to form energized gravitons, while primary bosons only have joined to form secondary bosons (photons, vector bosons, gluons). Binding energy (B.E) (Higgs Bosons) is nothing but a type of energy which is responsible for binding the matter B.B.Bs to one another along with marking the created particle (fermions) to spin. The details would be given during the discussion of creation physics. Later energized gravitons and secondary bosons have joined to form lepto-quarks. Quarks along with secondary bosons form protons and neutrons. Finally electrons revolved around proton forming atom.

It is these divine B.B.Bs. which are transmuted into atoms. Atoms have joined to form molecules, complex molecules of life, organelle, cells, tissues, organs, systems, different individuals. Similarly, atoms have transmuted into planets, solar systems, galaxies, super galaxies and invisible universe.

So, basically these divine B.B.Bs. are everywhere in the universe or we may say they are:

**OMNIPRESENT:** The omnipresent is defined as GOD in all religious books. Therefore, B.B.Bs are God Particles.



### **Nomenclature of atomic genes**

In participatory science, we take similarities from biological world to understand the B.B.Block world. One who knows biological transcription and translation, can also understand atomic transcription and translation. Cell is anatomically and physiologically unit of the body.

Similarly B.B.Bs. are structural and functional units of the universe.

Cell functions (metabolic) are controlled by biological transcription and translation. Similarly, B.B.Bs. functions are controlled by atomic transcription and translation. Biomolecules take part in biological transcription and translation are:

**DNA** - message storage system.

**MRNA** -messenger molecule (carries message from nucleus to cytoplasm).

**Ribosome** - translating molecule (it translates the message and works accordingly).

Similarly, atomic genes that take part in atomic transcription and translation are:

**CCP** - thought storage system (omniscience). It is similar to DNA of the biological world.

**Code PCPs** - messenger atomic genes. It similar to mRNA.

**CP** - translating atomic genes. It translates the messages and realizes the message and reacts accordingly.

Message system of the Universe (Fig 11)

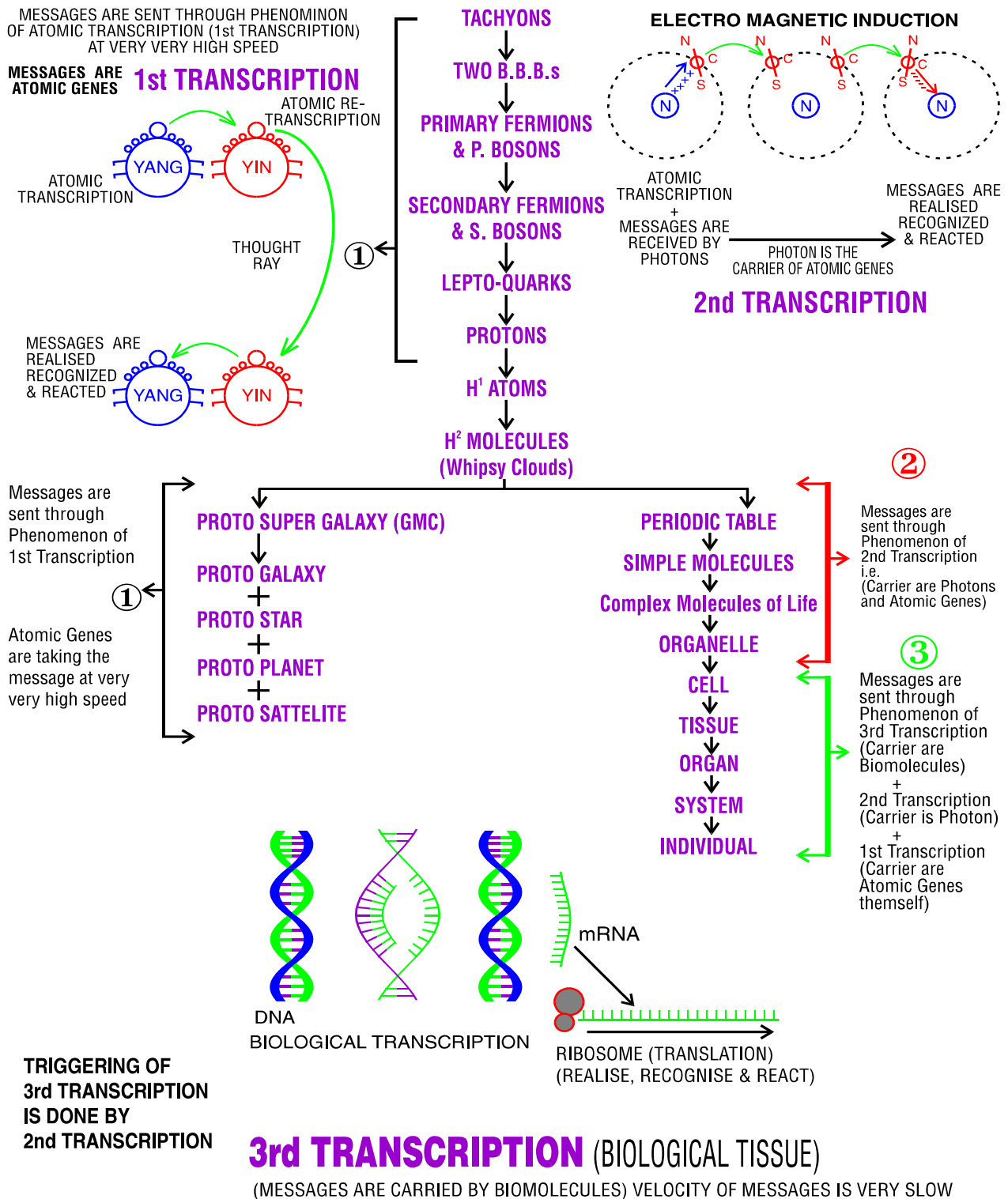
Before the origin of the universe nature had only one type of message systems which is called **FIRST TRANSCRIPTION**. Messages used to go from one B.B.B. to another B.B.B. by atomic transcription. Messages were carried by atomic genes with very very high velocity. It is the fundamental message system.

After the origin of the universe, nature created atoms. It also created one more message system called **SECOND TRANSCRIPTION**. Here the message (code Pcps) are carried by photons from one atom to another atom with velocity of light. Thus atoms, molecules, cells, and even individuals talk with one another.

After the formation of the cell , nature created one more system called **THIRD TRANSCRIPTION**. Here there is a message storage system formed by DNA. There are messenger molecules called mRNA that carry message from DNA script to cytoplasm where the message (code PCPs) is read or translated by ribosome and they work accordingly. Thus the messages reach to enzymes and hormones and finally messages reach to target units. Having received the messages, target units work accordingly. Finally life effects (metabolic) are observed.

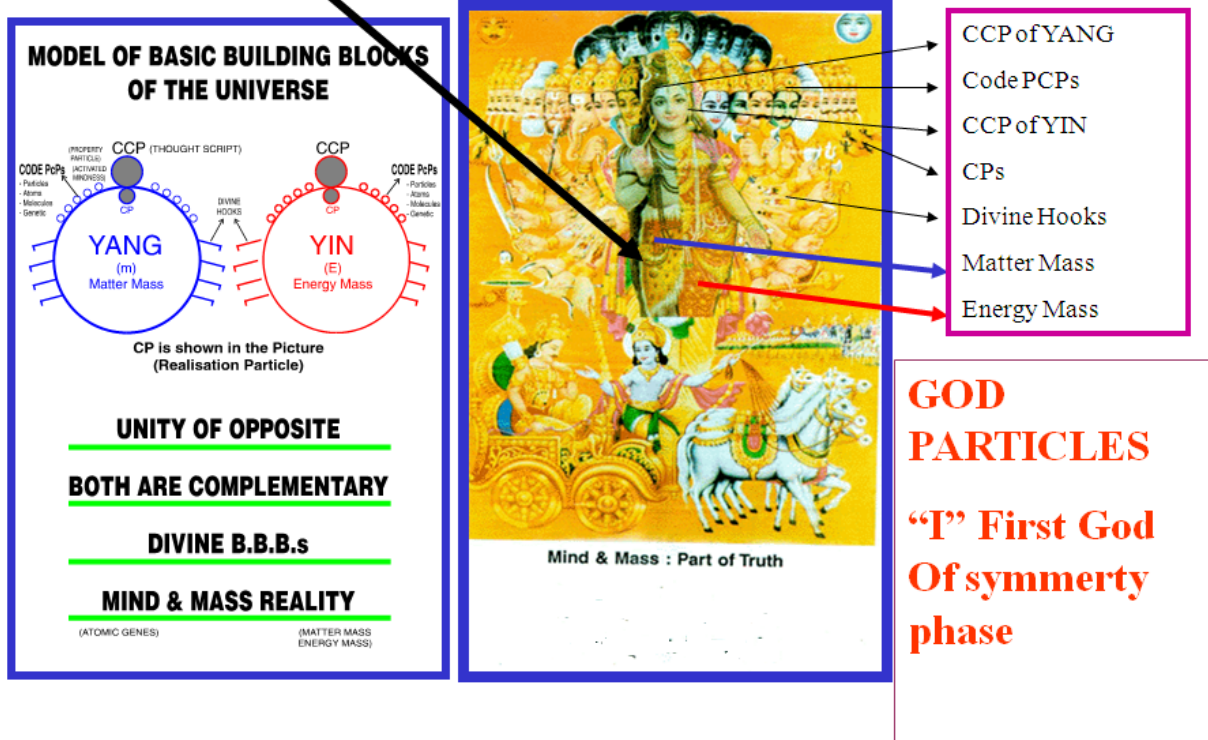
These three types of message systems are working in the nature. These message system are being used by the nature according to nature's need. **(Fig-11)**

# MESSAGE SYSTEMS OF THE UNIVERSE



(Fig 11)

**This is called Final Truth . Mind and Mass** mysteries have emerged like  
**OMNIPRESENT** i.e. Every small and bigger units are made up of these B.B.Bs  
**I am The origin of all every thing evolved from Me.—Gita 10/8**  
 These are divine in the sense that they talk with each other. They have power to transmutate to form any bigger unit of the universe . The triggering activity is atomic transcription and translation.



(Fig -12)

**3. MOTIVATION: -**

Prof. J.V. Narlikar and Prof. Fred Hoyle had proposed continuous creation theory [1] in 1960s. The new model of the universe made by participatory science which is contrary to Big bang model supports theory proposed by Prof. Narlikar and Prof. Hoyle with addition of new scientific understanding calling it a “NEW PHYSICS”. Prof. Hermann Bondi, co-author of Steady State theory said, “It is 80% big bang, 5% steady state and 15% unknown”. New model of the universe not only explains all the events of Big bang and steady state but also 15% unknown events i.e. quasars and cold dark matter which is constituting 90% to 98% of the matter of the universe. Researches regarding structure of the matter are held up at lepto-quark level. Prof. J.V.Narlikar had asked to investigate the structure of the matter beyond leptons and quarks (the ultimate structure of the matter) in an article titled, “Do Astronomical observation Require New Physics?” in Physics News, Vol-30, N0-3&4, Sept &Dec, 1999 [2]. New Scientific understanding has explored the matter beyond lepto-quarks and ultimate structure of the matter i.e. Basic Building Blocks ( B.B.Bs) are not only hypothesized but also there are observations that confirm their existence. Mathematics as well as Experimental Labs are required to know structure of the matter up to the level of leptoquarks. Beyond that it is the participatory science discipline which is required to know structure of the matter up to the level of Basic Building Blocks. As we have radioactivity, where nature is breaking itself to know about structure of the nucleus of the atom. Without this breaking it is not possible to study about nucleus. Similarly nature is breaking itself beyond leptoquark up to the level of Basic Building Blocks in the universe, only we have to re-explain those observations in terms of their constituents. These are:

1. Proton Decay - As we observe decay of nucleus in radioactivity into alpha, beta and gamma, similarly proton does decay forming gravity and electromagnetic field particles. These field particles - gravitons (secondary fermions) are coming out from quarks while photons (secondary bosons) are coming out from decay of gravitons.

2. Gravity observations - all gravity interactions should be re-explained. During these interactions gravitons interact by breaking themselves. By these observations we could know structure of the matter of secondary fermions and secondary bosons up to the level of primary fermions and primary boson.

3. Quasar observations - Inside quasar Nature is breaking itself up to the level of Basic Building Blocks (CREATION PHYSICS Fig-4). So we could see the basic constituents of all the force particles (except weak nuclear force which is mediated by vector bosons) We could see up to the level of Basic Building blocks (B.B.Bs)

**4. Our Brain realisation** - Inside our brain nature is working by breaking its last box i.e. atomic genes. Breaking of atomic genes, which is the property of the matter or basic building blocks, is triggering the thought process and other working of the brain. We could see up to the level of atomic genes property of Basic Building blocks.

Participatory science is a new discipline in science as proposed by Prof. John A. Wheeler [3]. Prof. John Wheeler sees this involvement of the observer as the most important feature of the quantum theory and he has therefore suggested replacing the word 'observer' by the word 'participator'. The idea of participation instead of observation has been formulated in modern physics only recently. Modern science teaches us up to the level of lepto-quarks. Beyond that, it is the participatory science that teaches us about structure of the matter upto the level of Basic Building Blocks (B.B.Bs) i.e. ultimate structure of the matter of which all fermions and bosons are composed. The entire participatory science has been developed by me and we could see structures which are beyond our visibility i.e. both macro (invisible universe) and micro (ultimate structure of the matter) worlds. Big bang and steady state models have been made because we could see only 30% of visible universe. Rest of visible and invisible universe could be seen through participatory science while making new model of the universe. Till today no attempt has been made to investigate about the consciousness of the matter. D. Bohm has found it is necessary to regard consciousness as an essential feature of the holomovement and it should be taken into account explicitly while considering this theory. He sees mind and matter as being interdependent and correlated but not causally connected [4]. Atomic genetics, a new concept in science has been introduced. It is the study as regard mind part of the reality. There are observations that show that matter is related with consciousness. The most exciting observation is expansion of the universe shown in new model of the universe. Behavior of Dark matter is such that we are forced to assume that 'thought' is the inbuilt property of the cold dark matter to trigger expansion of the universe while making the new model of the universe. Before expansion or symmetry breaking phase, universe was in symmetry phase and to trigger symmetry breaking, it is the 'thought' an inbuilt property of the matter or B.B.Bs (of entire universe), which is responsible for this triggering too. The problem of how matter attained masses has been meticulously solved by the research of B.B.Bs. Matter attained mass by virtue of mass property of B.B.Bs. So the God's particles are Basic Building Blocks (mind and mass unit) rather than Higgs bosons as proposed by Prof. Peter Higgs in STANDARD MODEL.

#### 4. DISCUSSION AND INFERENCES:

Science has not yet defined God. Co-relation of science and religion can be made possible after the concept of Basic Building Blocks is well understood. Religion guides us in recognizing these B.B.Bs. The model of B.B.Bs is made on the basis of inertial properties of energy and matter. On the same fundamental basis religion had incorporated certain definite clues thousands of year back. When a parallel is drawn between the two (models made by participatory science and the clues given by the religion) by using common logic, incorporation of science and religion can thus be made possible (**Fig 12 and Fig 6**). So far no attempt has been made to define eternal properties of energy and matter at the level of B.B.Bs. No attempt has been done to investigate **PURE matter**. Fermions are **IMPURE matter** as they have spin properties. The research of B.B.Bs or mind and mass would produce fragrance of God (B.B.Bs or Omnipresent) in the new model of the universe. Thus Einstein's question that how God created the universe can be meticulously solved by introduction of the new model of the universe. New model of the universe shows that the universe is deterministic universe and all quantum, classical and life sciences effects are triggered by thought expressions or atomic transcriptions (**cause and effect concept**) and thus their precise prediction by the participator (B.B.B working as highest center of the universe) could be possible in future. Thus Einstein's famous metaphor that **God (B.B.B) does not play dice** ultimately became the truth along with final acceptance to **Laplace determinism**--- All that had happened had a definite cause and gave rise to definite effect and future of any part of the system could in principle be predicted with absolute certainty if its state at any time was known in all details [5].

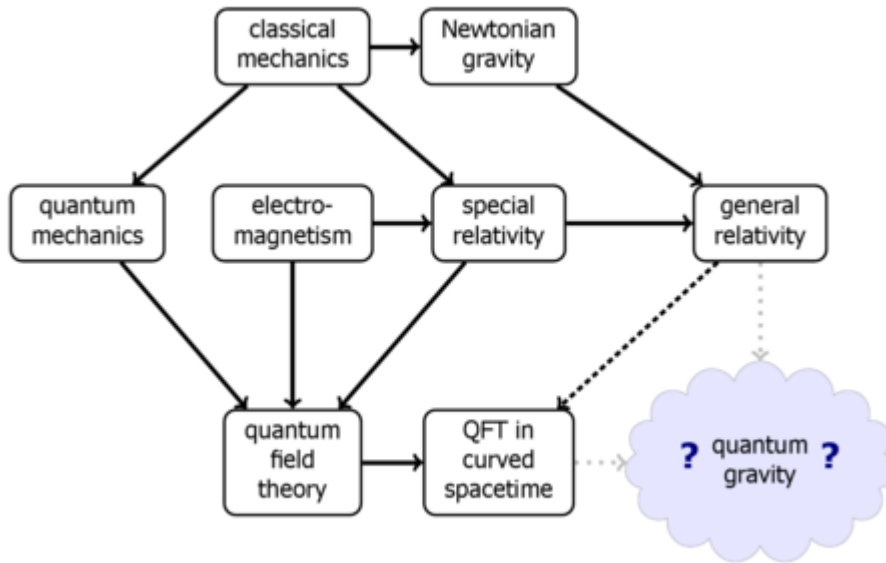
The final stamp of success to the new model of the universe has been given by observation published in journal JAMA {6} by the study- prayer helps cardiac patients. Prayer is now a well-confirmed phenomenon and it is related with God (B.B.Bs working as highest center of the universe). It is the replicated study. Phenomenon of prayer propounds that hypothesis of new model of the universe in which one B.B.B is working as highest center of the universe is correct and phenomenon of feed back to this B.B.B exists in this universe. This phenomenon of prayer also propounds that there was a precreation era in which programming of future universe was done by highest center (B.B.B) of the universe. If the phenomenon is replicated, the supporting theory is believed to be the truth. Big bang and its early events (GUT, and super unification) that prove this theory neither could be replicated in lab nor could be observed (replicated observations) anywhere in the universe. On the other hand, continuous creation as proposed by Prof. Narlikar and Prof. Hoyle could be observed (replicating phenomenon) in quasars and also it is replicating every time. New model of the universe based on different observations not only supports this idea but also it could prove how creation is going inside quasars.

Hoyle and Narlikar proposed (in their continuous creation theory) that new matter is being created due to 'IMPLOSION' to balance the expansion of the universe, which astronomers have observed. Inside 'QUASI-STARS' gravitational collapses may form some matter in the universe.

The huge luminosity and the radio emission from these quasi-stars appear to be 'gravity powered' unlike ordinary stars, which derive their energy from nuclear reactions.

Einstein preferred to believe that the universe was ageless and eternal [7]. Einstein's views were correct when they are applicable to symmetry phase of the universe. After symmetry breaking phase only small part of entire universe got into expansion phase along with creation of the matter, both hot and cold. After the contraction phase of the universe, it would again go into symmetry phase and then entire universe would be not only ageless and eternal but also it would be infinite, absolute and holomovement --to which participatory science calls ONE ABSOLUTE "I" made up of two God particles.

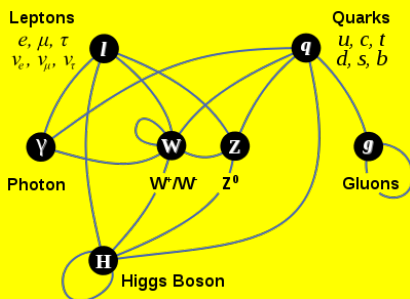
### HOW TO STUDY PHYSICS?



WRONG DIPICTION OF UNIFICATION PHYSICS

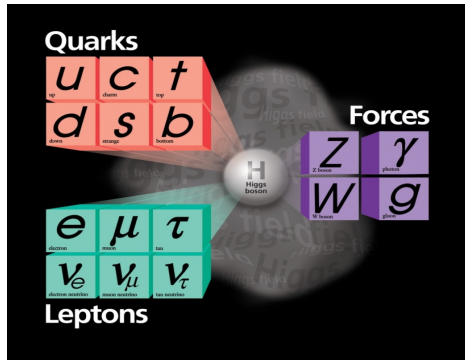
### STANDARD MODEL

#### ATOMICGENETICS AND FUNDAMENTAL PARTICLES AND FUNDAMENTAL INTERACTIONS



HIGGS BOSONS ARE NO  
PARTIC

On 4 July 2012, the two main experiments at the LHC (ATLAS and CMS) both reported independently



**Higgs boson**  
is a very

**QUARKS, LEPTONS AND HIGGS BOSONS ARE NOT FUNDAMENTAL PARTICLES. FORCES (INTERACTIONS) ARE NOT FUNDAMENTAL INTERACTIONS**

### Standard Model of FUNDAMENTAL PARTICLES AND INTERACTIONS

#### FERMIONS

**Leptons spin = 1/2**

Flavor	Mass, GeV/c <sup>2</sup>	Electric charge
$e^-$ electron	$< 7 \times 10^{-6}$	0
$\mu^-$ muon	0.000511	-1
$\tau^-$ tau	$< 0.003$	0
$\nu_e$ neutrino	$< 0.000001$	-1
$\nu_\mu$ neutrino	0.106	-1
$\nu_\tau$ neutrino	$< 0.03$	0
$\tau$ tau	1.7771	-1

**Quarks spin = 1/2**

Flavor	Approx. Mass, GeV/c <sup>2</sup>	Electric charge
$u$ up	0.005	2/3
$d$ down	0.01	-1/3
$c$ charm	1.5	2/3
$s$ strange	0.2	-1/3
$t$ top	170	2/3
$b$ bottom	4.7	-1/3

#### Structure within the Atom

#### BOSONS

**force carriers spin = 0, 1, 2, ...**

Unified Electroweak spin = 1	Mass, GeV/c <sup>2</sup>	Electric charge	Strong or color spin = 1	Mass, GeV/c <sup>2</sup>	Electric charge
$\gamma$ photon	0	0	$g$ gluon	0	0
$W^\pm$	80.22	-1			
$Z^0$	91.187	0			

#### PROPERTIES OF THE INTERACTIONS

Property	Interaction	Gravitational	Weak (Electroweak)	Electromagnetic	Strong	
		Mass-Energy	Flavor Quarks, Leptons	Electric Charge Electrically charged	Fundamental Color charge	Residual SC, Nuclear Force
Acts on:	All	All	Quarks, Leptons	Electrically charged	Quarks, Gluons	Mesons, Hadrons
Particles mediating:	Graviton (not yet observed)	$W^\pm, W^0, Z^0$	$\gamma$	Gluons	Mesons	
Strength (for two quarks at distance $r$ ):	$10^{-41}$ (for $r = 10^{-16}$ m)	$10^{-11}$	0.8	1	25	Not applicable to quarks
	$10^{-41}$ (for $r = 10^{-17}$ m)	$10^{-4}$	1	1	60	
	$10^{-6}$	$10^{-7}$	1	1	20	

#### Sample Fermionic Hadrons

Symbol	Name	Quark Content	Electric Charge	Mass, GeV/c <sup>2</sup>	Spin
$p$	proton	$uud$	+1	0.938	1/2
$\bar{p}$	anti-proton	$\bar{u}\bar{u}\bar{d}$	-1	0.938	1/2
$n$	neutron	$udd$	0	0.940	1/2
$\bar{n}$	anti-neutron	$\bar{u}\bar{d}\bar{d}$	0	1.156	1/2
$\Omega^-$	omega	$sss$	-1	1.672	3/2

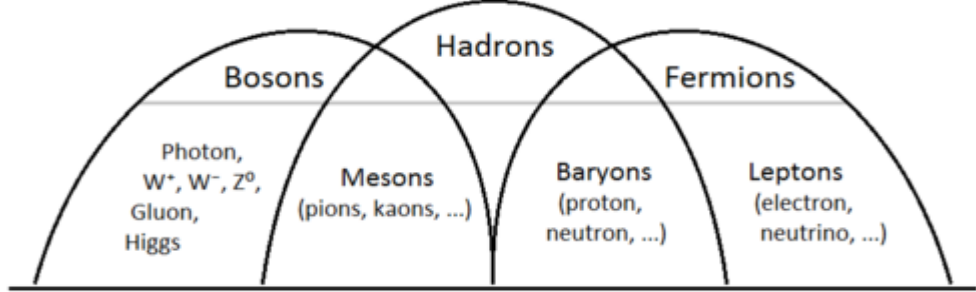
#### Sample Bosonic Hadrons

Symbol	Name	Quark Content	Electric Charge	Mass, GeV/c <sup>2</sup>	Spin
$\pi^+$	pion	$u\bar{d}$	+1	0.140	0
$\pi^-$	pion	$d\bar{u}$	-1	0.140	0
$\rho^+$	rho	$u\bar{d}$	+1	0.770	1
$D^+$	D	$c\bar{d}$	+1	1.869	0
$J/\psi$	Jpsi	$c\bar{c}$	0	2.979	0

**THESE ARE NOT FUNDAMENTAL PARTICLES AND FUNDAMENTAL INTERACTIONS.**

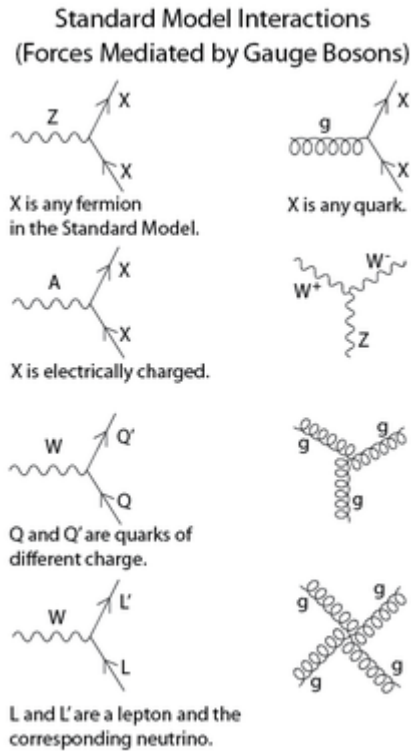
**Particle content**

The Standard Model has 61 elementary particles. [13]



**61 PARTICLES CANNOT BE FUNDAMENTAL PARTICLES.**

**SUMMARY OF INTERACTIONS BETWEEN PARTICLES DESCRIBED BY THE STANDARD MODEL.**

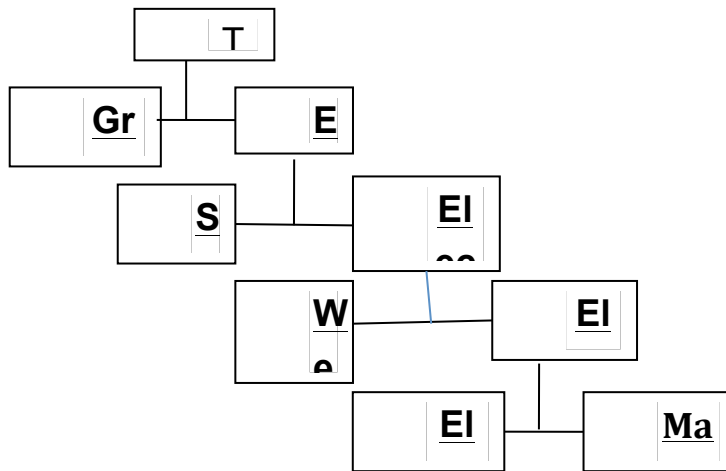


**THESE ARE NOT FUNDAMENTAL INTERACTIONS**

**THEORY OF EVERY THING**

A Theory of Everything would unify all the fundamental interactions of nature: gravitation, strong interaction, weak interaction, and electromagnetism. Because the weak interaction can transform elementary particles from one kind into another, the ToE should also yield a deep understanding of the various different kinds of possible particles. The usual assumed path of theories is given in the following graph, where each unification step leads one level up:





**In this graph, electroweak unification occurs at around 100 GeV, grand unification is predicted to occur at  $10^{16}$  GeV, and unification of the GUT**

In this graph, electroweak unification occurs at around 100 GeV, grand unification is predicted to occur at  $10^{16}$  GeV, and unification of the GUT force with gravity is expected at the Planck energy, roughly  $10^{19}$  GeV.

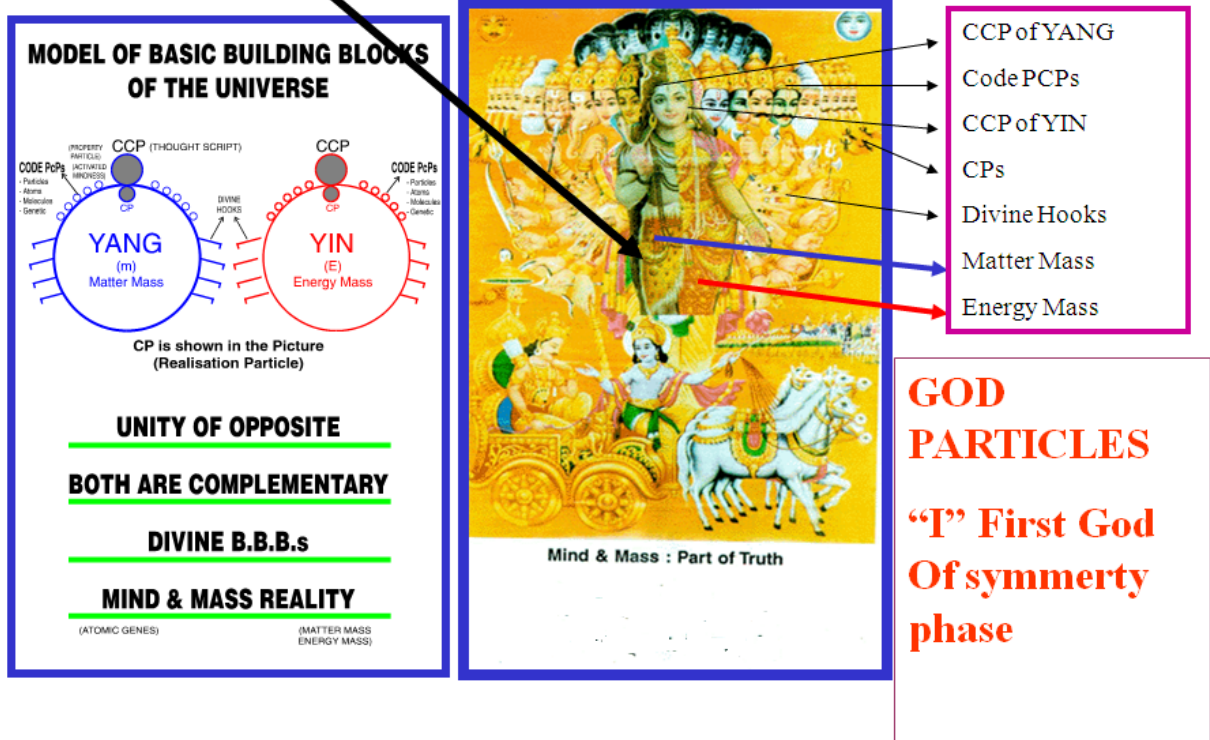
#### **THEORY OF EVERY THING IS NOT YET INVESTIGATED.**

#### **FUNDAMENTAL PARTICLES AND FUNDAMENTAL INTERACTIONS.**

Basic Building Blocks (B.B.Bs) of the Universe (Fig - 13). These B.B.Bs. are the smallest structural and functional units of the universe. Upon these B.B.Bs., ATOMIC GENES are found. These basic units are divine in the sense they talk with each other by phenomenon called atomic transcription and translation. These are fundamental particles and atomic transcription and translation is fundamental working of the nature. These B.B.Bs have power to transmutate to form any bigger unit of the universe like field particles, Lepto-quark particles, atom, molecule, complex molecules of the life, organelle, cell, tissue, organ, system, individuals, earth, solar system, galaxy, etc, etc.. So all effects of the universe are triggered by atomic transcriptions or thought expressions.

The properties of these two basic units are opposite. This would be explained during the discussion of inertial properties of the matter while giving definition of the energy (E) and matter (m) of the expression  $E=mc^2$ . Therefore, this is called unity of opposite or unity of complementary particles.

**This is called Final Truth . Mind and Mass** mysteries have emerged like  
**OMNIPRESENT** i.e. Every small and bigger units are made up of these B.B.Bs  
**I am The origin of all every thing evolved from Me.—Gita 10/8**  
 These are divine in the sense that they talk with each other. They have power to transmutate to form any bigger unit of the universe . The triggering activity is atomic transcription and translation.



(Fig 13)

**FLAWS IN STANDARD MODEL CHART [10]**

Flaws in standard model chart (SMC) are that all particles mentioned are not fundamental particles as well as all interactions are not fundamental interactions. Hence SMC requires unification (simplification).

Unification of SMC has been shown in Fig 7 and Fig -8.

Gravitons have not been incorporated in SMC.

MIND has not been incorporated in SMC.

Higgs bosons are not GOD PARTICLES.

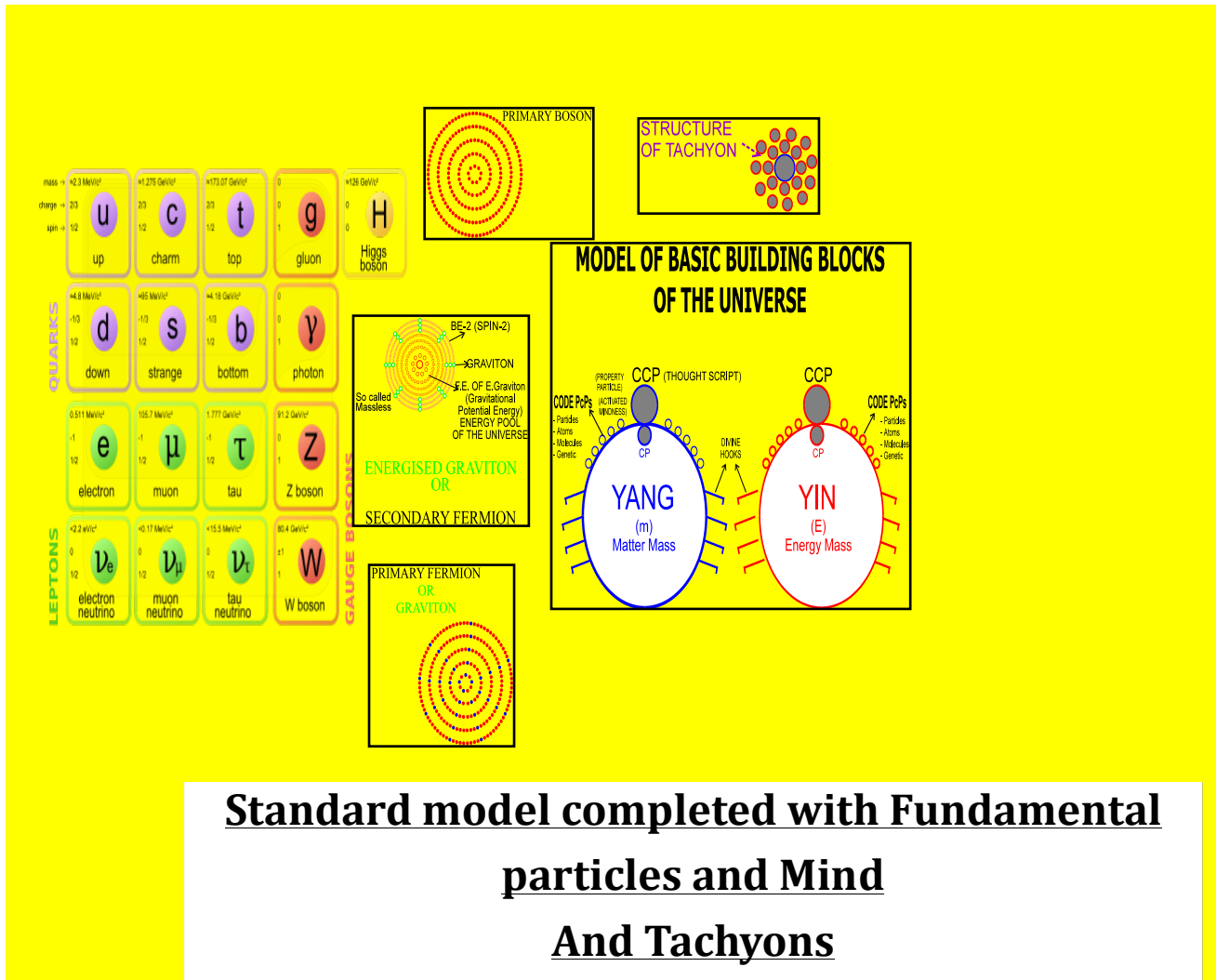
**GOD PARTICLES**

According to participatory science Higgs bosons are secondary bosons ( Binding energy -3,4,5 ) ( Fig-7,8,9) . They are made up of more fundamental particles called primary bosons. These primary bosons are made up of further fundamental particles called - energy basic building blocks or God particles. God particles are made up of mind and mass. (Fig-4 see parallel). In modified Higgs mechanism, Higgs bosons combine with energized gravitons to form leptons and quark family. Thus they give inertial mass to leptons and quarks. Higgs are called Binding energy – 3. Higgs are also called B.E-4 and 5 because they form quaternary fermions mass and nucleus mass. (See proton, neutron and nucleus structure) Higgs mechanism given by Prof. Peter Higgs is not correct as he has forgotten gravity particles in formation of inertial mass to lepto- quarks.

Higgs does not give mass to photon and gluons. Hence it is not God particle. (Fig-7)

All particles have mass (inertial mass) by virtue of Mass property of Basic Building Blocks or God particles.

God particles are those particle which give mass to all fermions and bosons. Higgs bosons donot give mass to photon and gluon hence they are not God particles. God particles are those particles which could not be further divided. Hence basic building blocks are God particles. Prof Peter Higgs did not talk about MIND in Higgs mechanism. Hence physicists are still away from God particles or fundamental particles and fundamental interactions.



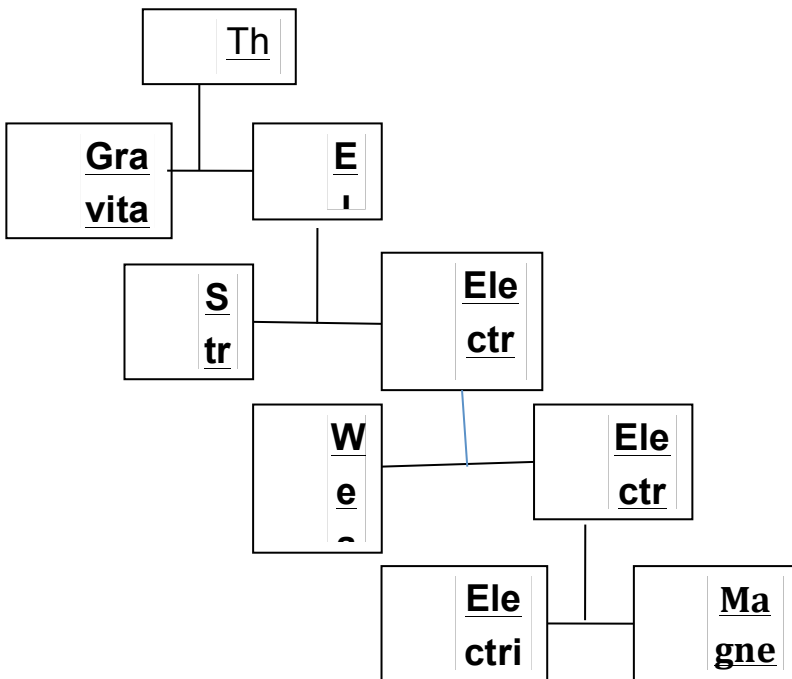
God particles (the two basic building blocks) are fundamental particles and atomic transcription and translation is fundamental interaction. God particles are divine in the sense that they talk with each other. They have power to transmutate to form any bigger unit of the universe. The triggering activity is atomic transcription and translation.

## 5. CONCLUSIONS

### Mind and Mass

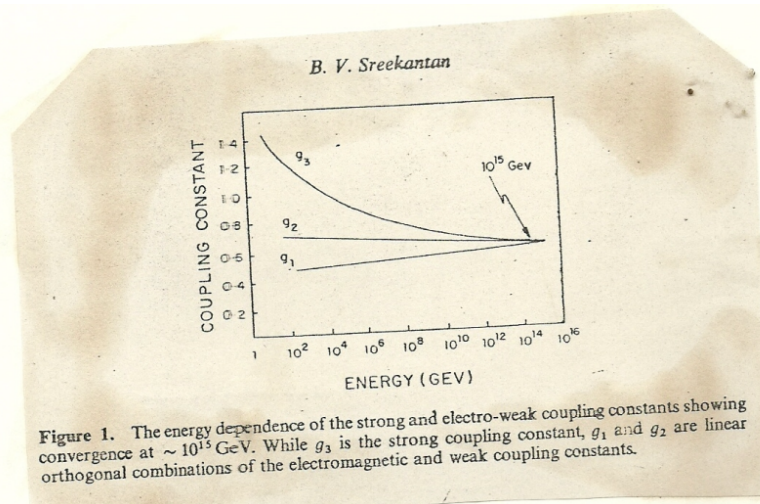
#### 1. THEORY OF EVERY THING

A Theory of Everything would unify all the fundamental interactions of nature: gravitation, strong interaction, weak interaction, and electromagnetism. Because the weak interaction can transform elementary particles from one kind into another, the ToE should also yield a deep understanding of the various different kinds of possible particles. The usual assumed path of theories is given in the following graph, where each unification step leads one level up:



**In this graph, electroweak unification occurs at around 100 GeV, grand unification is predicted to occur at  $10^{16}$  GeV, and unification of the GUT force with gravity is expected at the Planck energy, roughly  $10^{19}$  GeV.**

In Unification physics where four fundamental forces are tried to unify. It means four natural forces which are mediated by four particles (photon, vector boson, gluons and gravitons) are created from one particle. It is called super unification. GUT means three forces (Photon, vector bosons, and GLUON) could be unified as these are made up of one type of fundamental particle called energy basic building blocks.



In this graph, electroweak unification occurs at around 100 GeV, grand unification is predicted to occur at  $10^{16}$  GeV, and unification of the GUT force with gravity is expected at the Planck energy, roughly  $10^{19}$  GeV.

while gravitons are made up of two types of fundamental particles i.e energy basic building blocks and matter basic building blocks . Hence super unification cannot be proved.

Had graviton is made up of one type of basic building blocks, the coupling could have merged at energy  $10^{16}$  GeV. But instead of that it is merging at energy  $10^{19}$  GeV.

2. Mind has not been incorporated in standard model, similarly energized gravitons are not incorporated in SM.
3. We have yet to explain gravity phenomenon from beginning as it is the force mediated by energized gravitons not the property of space- time.
4. We have to incorporate Mind in quantum and classical physics and gravity and all these theories have to be explained by Mind.
5. Quantum mechanics and Gravity both should be explained by Mind.
6. Theory of everything is Mind.
7. Theory of mind can only unify quantum gravity and quantum mechanics.
8. The word quantum means changing thoughts. Hence we get changing effects. Hence we cannot predict nature precisely.
9. Quantum gravity means, gravitons change their effects through mind. For example. When body is near earth it falls. But when it is very far, it moves in the orbit like satellite. For different masses it is different. Hence we cannot precisely predict which mass at what distance it would behave in what manner with gravity. For Photon it is different and for electron it is different. [10]
10. In quantum tunneling effect, potential barrier is open for fast moving particles but few slow moving particles get way through potential barriers. It is because there is phenomenon of request to open the barrier by slow moving particle and if the request is accepted, the barrier allows particle to pass through. This is how quantum phenomenon works. [11]

To answer how laws of physics are made is now easy due to the research of fundamental particles i.e. B.B.Bs and Atomic Genetics.

Mathematics alone is unable to explore the reality behind any classical and quantum phenomena. Participatory science is ultimate science to know about any phenomenon of the universe. Without this science, **transparency** in explaining any phenomenon **is absent**.

### MESSAGES TO BE DELIVERED

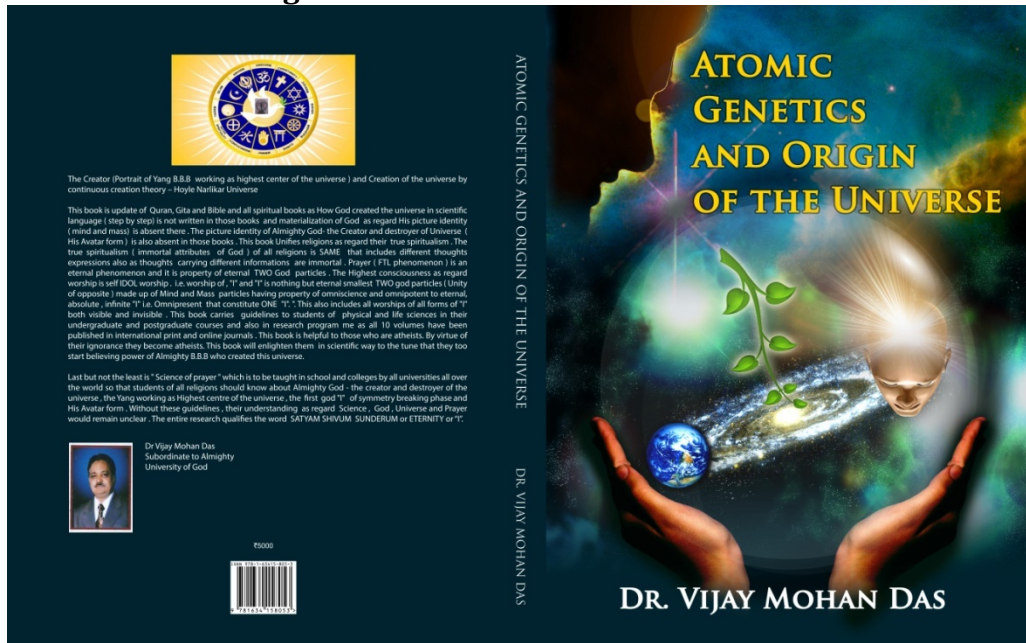
1. Biological Aspects should be taken into consideration while making the curriculum of physics at the undergraduate level.
2. Conceptual functions and understanding of MIND would give a better understanding of physical phenomena during their course at undergraduate level.
3. The theory of everything is THOUGHT EXPRESSION rather than anything else.
4. If the phenomenon has not been explained by MIND, it is wrong theory.

### REFERENCES

- [1]D.N.VASUDEVA. Text Book of Light, 7th edition, 1969; p. 598
- [2]Jayant V. Narlikar, Physics News- Vol-30, No- 3&4, Sept. & Dec, 1999; pp. 5-14
- [3]Fritjof Capra, The Tao of Physics, 1989; p.153.
- [4]Fritjof Capra, the Tao of Physics, 1989; p. 353.
- [5]Fritjof Capra, the Tao of Physics, 1989; p. 65.
- [6]JAMA-Archives Of Internal Medicine, Vol 159, No-19, 25th Oct, 1999; pp. 2273-2278.
- [7]Strig Theory and Cosmology- How Old is the Universe? [www.superstringtheory.com/cosmo.html](http://www.superstringtheory.com/cosmo.html)
- [8] Vijay Mohan Das, Atomic genetics and origin of universe volume 6 INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH & DEVELOPMENT August, 2014 Vol 3 Issue 8p 194-210
- [9] <http://physicsworld.com/cws/article/indepth/2013/oct/31/can-we-unify-quantum-mechanics-and-gravity>.
- [10] Vijay Mohan Das, Atomic genetics and origin of universe volume 4(part 1) International Journal of Sciences: Basic and Applied Research (IJSBAR) (2014) Volume 17, No 1, pp 259-29
- [11] Vijay Mohan Das, Atomic genetics and origin of universe volume 4(part 2) International Journal of Sciences: Basic and Applied Research (IJSBAR) (2014) Volume 17, No 1, pp 292-32
- [12] Vijay Mohan Das, Atomic genetics and origin of universe volume7 Social and basic sciences and research review (SBSRR) Volume 2, Issue 4Pages: 197-255
- [13] Vijay Mohan Das, Atomic genetics and origin of universe ( $H_0= 72$  km/sec/Mpc) volume 1, International Journal of Sciences: Basic and Applied Research (IJSBAR), volume 16, number 1 (2014), p 311-338.
- [14] Vijay Mohan Das, Atomic genetics and origin of universe volume 2 International Journal of Sciences: Basic and Applied Research (IJSBAR) (2014) Volume 16, No 2, pp 274-309
- [15] Vijay Mohan Das, Atomic genetics and origin of universe volume 3 International Journal of Sciences: Basic and Applied Research (IJSBAR) (2014) Volume 17, No 1, pp 148-185

## Acknowledgement

### 1. White Falcon Publishing



**Dear Author,**

Congratulations!! Your book is published and has started becoming available on the online distribution channels as below:

Global Edition Available on: Amazon.com Amazon.co.uk Amazon.de Amazon.fr Amazon.es Amazon.it Amazon.ca

Indian Edition will be Available on: Amazon.in Flipkart WFP Store

The book will be available on Amazon.in, Flipkart and WFP store in a couple of weeks.

### 2. Prof Fred Hoyle and Prof J.V.narlikar



**Prof. Fred Hoyle**

**Prof. J.V. Narlikar**

**Director, IUCAA, Pune, India**

**THANKS**