

# A fundamental description of the universe and its associated workings

The IRRED continuum

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**A new way of understanding and describing cosmological reality**  
**This is my theory**

**Abstract**

Mainstream physics typically ignores the energy type condition of ontological-reality and its associated effects after the Big Bang explosion. This includes the holistic universal real life condition and its associated units of influences as well, which includes nature.

I propose that by considering the effects of the universe's four primary informational energy types it is possible to ontologically develop a meaningful reference frame of local and non-local information to satisfy this contemporary scientific anomaly. I further suggest that my approach provides indicative insight into what might be the energy-type of the conditionless-void matrix of reality as well. This is all that "IS".

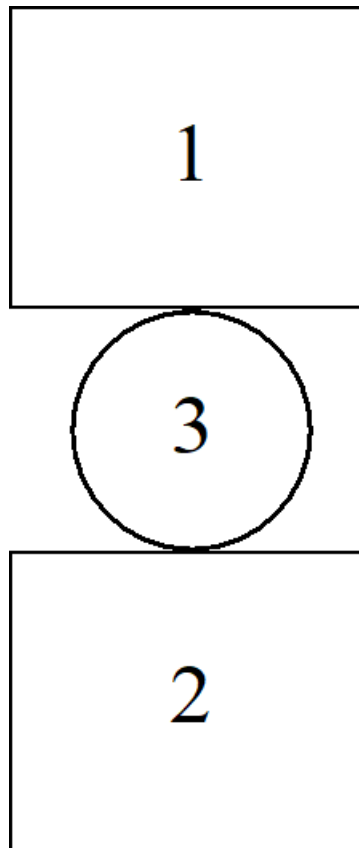
I believe that following the release of the energy-type of the Big Bang the Big Bang itself became the point of singularity for all the conditions, influences and effects that constitute the universe that scientists theorise it probably is. I propose that the primary energy effect of the Big Bang was an ontological irreducible one. I believe that this irreducible energy effect provides the essential conditions of all universal life forms and their associated informational meaning. The human mind is an energy type that is informationally representative of the wider irreducible energy type. This presentation seeks to structurally demonstrate this entangled holistic-reality condition.

**Foreword**

I have identified what appears to be the natural continuum force of the universe. This force is irreducible and experiential across all frames with the exception of those relating to electricity and magnetism. I have entitled this force "ether" Ether is an energy effect that is derivative of its concurrent relationship with my concept of Primordial-Gravity. It is from this effect that the conditions for the creation of particles may occur. Gluon particles "bind" these particles across the universe. This means that ether and gluons influence the conditions for energy transfer into matter, as well as their associated fields. These respective energy forces can be informationally explained and demonstrated.

Chart one that follows demonstrates the universal effects of these words:

**Reality is in two distinguishable parts:**



Key:

1: Symbolizes all units of information and influences in universal reality as being irreducible (IRRED).

2: Symbolizes all units of information and influences in universal reality as being reducible (RED).

3: IRRED and RED meet together to complete the three dimensional experiential reality within which we live our lives.

Note: You will find throughout this presentation that my science related ideas and statements are not necessarily in accordance with main stream science meaning and usage. This is because I am a concept scientist and not a trained physicist. I apologise for any inconvenience this may cause my readers.

Because of the abstract nature of this presentation I believe that the onus is on my unbelievers to disprove my argument that in the final analysis reality is an IRRED/RED universal reality.

## **Introduction**

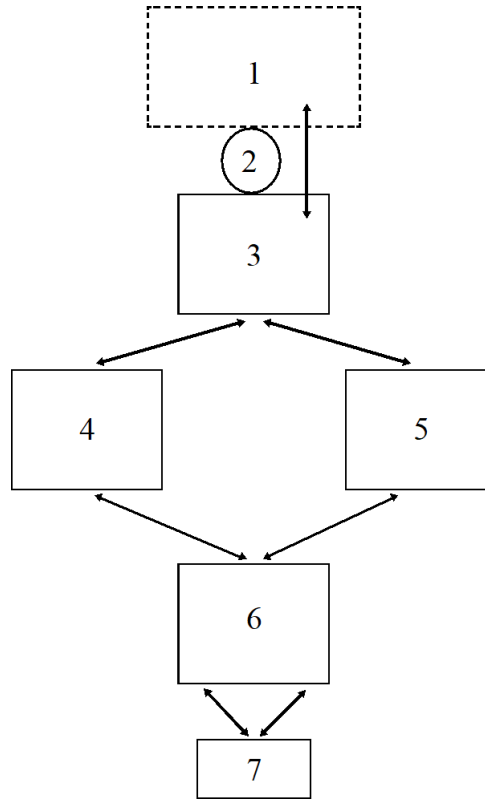
I believe that most of contemporary physics theories are missing a critical factor as they attempt to develop a universal theory of everything. I suggest that many mainstream physicists have overlooked what I believe are the two dominating characteristics of the universe. It is my opinion that the universe (the absolute quantity of cosmological reality as we understand it to be) has two separate reducible (RED) and irreducible (IRRED) quantities as well as associated sub-units of energy influences relating to these quantities. I believe that these two fundamental quantities physically and metaphysically mean something with respect our being able to better understand the holistic universe around us and also assisting us to better understand ourselves as well. My hypothesis is loosely built upon the ideas of the twelfth century philosopher and theologian Thomas Aquinas. My work today is not a religious story. This is my own story. It is constructed principally around the ideas and theories of contemporary physics.

What I think you will discover regarding science once you have read my ideas today are:-

- There is a single quantity of information (IRRED) that dominates cosmological reality which includes all life forms as we understand them to be
- There is an additional quantity of information that exists in a concurrent relationship with IRRED and this quantity is RED. RED cannot exist without IRRED
- Cosmological reality can be explained by this concurrent relationship between IRRED and RED
- The IRRED and RED quantities can be incorporated within any inertia continuum (foundation) provided their respective conditions and influences (forces) are interpreted, segregated and scientifically applied ethically and correctly
- The concurrent relationship between IRRED and RED is not only applicable to our universe but also seems to be pertinent to all other universes and dimensions as well

**Chart two below demonstrates what I mean by these words:**

Ourselves and our behaviour in relationship to primordial awareness (all that is)



Key:

1: Primordial awareness (wider IRRED reality).

2: The Big Bang.

3: Primordial universe (a quantity).

4: IRRED quantity relating to the wider universe.

5: RED quantity relating to the wider universe.

6: The combined IRRED and RED quantities of the universe from which inherent conditions and influences emerge to create change or otherwise do something of every conceivable nature. These possibilities to do something are units of possibilities as well as any resultant condition or influence resulting there from within the universe. These words mean all units of activity within the universe are connected to each other through different fields of quantum conditions and influences (entanglement).

7: Ourselves as units, including sub-units, to do something such as our body organs and IRRED units to think. Furthermore RED consciousness does something that causes subsequent behaviour. RED consciousness can be considered and as such is reducible.

**A summary of what I believe that the IRRED and RED theory achieves.**

1. It is a story that appears to fundamentally and reliably bring together all the quantities, units, forces and influences that can conceivably exist within the universe. The story could conceivably also include the conditions and influences that existed before the Big Bang as well.
2. It describes not only how the universe works but also why it works in the manner that it does.
3. It demonstrates that there are two primary types of scientific causation.
4. It defines and describes a continuum that our universe could conceivably be built upon, and where the inherent energy of the universal system might internally emanate from.
5. It demonstrates how and why the universe is a random system.
6. It explains and describes the relationship between the smallest and the most trivial phenomena and the largest in the universe as well. This includes the method and means by which these quantities and units are interconnected, as well as their associated influences and effects.
7. It intimately describes the human condition at every conceivable level, including the manner in which we make decisions and subsequently behave.
8. It explains and describes why there is such a deep and irreconcilable division which persists to this day between the metaphysical scientific predictions of Quantum Mechanics and Einstein's Special Relativity.
9. It is an instrument of instruction that I believe most people could at least partly identify with and believe, in order to form their own views about cosmological reality and its relationship with the human condition, and perhaps wider culture as well.
10. It provides a wide and diverse range of philosophical and scientific information that can define the wider universe and provide the informational base

upon which inestimable numbers of shorter investigative stories can be written about.

11. It seems to provide sound grounds for both scientists and philosophers to develop new ideas and theories regarding the nature and origins of the universe.

### **What my theory does not achieve.**

From a contemporary mainstream scientific perspective it proves nothing! It is a concept document. This does not mean that my ideas are wrong or phenomenon's of the type that I have introduced herein do not exist or are worthy of reader consideration. I see my work in progress endeavour today as being a stand-alone fundamental reality theory that stands on its own merits until such time as others can demonstrate a more descriptive and compelling theory. Also see my notes at the end of this blog with respect to this subject.

### **Contents in sequential order**

1. General description.
2. The relationship between quantities, units, influences and energy.
3. Nature, and where we fit into the bigger picture.
4. The relationship between IRRED and RED units and the mind, brain and consciousness nexus as it relates to human behaviour.
5. NOWs, and how they impact upon our daily lives and the wider cosmological universe.
6. The role of observers within the RED and IRRED model.
7. Why the IRRED quantity is the dominant quantity within the universe.
8. Why Special Relativity and General Relativity theories do not seem appropriate models through which to explain cosmological reality.
9. Why the universe is nothing?
10. Other existing model types that may be more suitable in explaining cosmological reality.

## **1. General description:**

As I stated above, I believe that that cosmological reality exists in two parts. I have described these two parts as being quantities. I see these dual quantities as being reducible (RED) and irreducible (IRRED), which not only mean something but also influence units of cosmological information within themselves and each other. Cosmological information is all information and influences that may be related to RED and IRRED. I believe that it is this informational relationship that provides a comprehensive and meaningful understanding of the universe, and insight to into some of the great related scientific mysteries. The types of ideas that you will find include...

- A. IRRED may be able to be considered as a cosmological constant because it never decays and so it is a constant everlasting cosmological effect. It provides energy for all phenomena in the universe. We can only ever talk about IRRED as the universal continuum because it is also the force of nature. We can perceive RED as the temporal continuum. We can only talk about IRRED and RED together as information. Some is knowable and some is not, but this does not mean that it is not there.
- B. Causation is not restricted to RED units. It applies to IRRED units as well. The concurrent relationship between both is the life force of the universe, as we can best perceive it to be.
- C. IRRED and RED help us to define and describe thought construction processes and associated influences that cause us to behave in the manner that we do.
- D. Cosmological reality (the absolute quantity in physics) is about our understanding the relationship between IRRED and RED influences on each other as well as themselves. This relationship relates to energy types, densities, averages and ratios with each other in every conceivable manner in a conditionless-void [timeless] cosmic continuum.
- E. Absolute time is IRRED time. RED time is clock time. RED time is a unit of the human mind and therefore RED time is like an analogical field of describable units. It is not physical. Clocks originate from the RED unit quantity. Clocks count RED units of any given state of the temporal RED system. Clocks themselves originated from the structuralist [metaphysical] IRRED preon particle which sub-atomic quarks and electrons are made of. It is from these combined forces that molecules of atoms from which clocks are constructed. (I have included this associated energy description with clocks in this section so as to demonstrate conceptually the cosmological influence the



relationship between IRRED and RED across the width of universe. This is as demonstrated by particle physics entanglement theory).

- F. IRRED and RED influences define universal cosmological activities and behaviour in a manner that Quantum Mechanics (QM) cannot do. QM describes and predicts cosmological activities and influences but cannot directly link them to the continuum of nature. Because IRRED is nature, it can. This means that the IRRED and RED concurrent relationship is the lowest common denominator of cosmological reality.
- G. IRRED and RED describe, demonstrate and explain that we have two consciousnesses. IRRED is instinctual awareness and RED is temporal consciousness.
- H. IRRED and RED demonstrate that C is just one condition or influence relating to light and, as such, the beam-mass of light is more important for physical reference than the speed of light. They are two different units altogether and have different meanings.
- I. IRRED and RED influences demonstrate that physics can be demonstrated, physically described and tested by means of the cosmological influence of NOW.
- J. IRRED and RED demonstrate that it is possible to instantly move between past history, NOW, and the future in relation to the influence of light as distinct from the speed of light, as is generally believed in science.
- K. IRRED and RED theory demonstrates that Special Relativity and General Relativity theories in physics seem to be valid and correct with respect to my concept of RED quantity alone. However, they are not in relationship to my concept of a dual IRRED and RED quantity. In this respect special relativity and general relativity are incomplete and seem to make only describable sense. Neither one represents universal cosmological reality. They are both incomplete and only seem to make describable sense.

At this stage, I feel that there are questions that you should consider.

Do you think:-

- I. That the universe can be separated into two clearly distinguishable quantities. What may I have missed by creating this hypothesis?

- II. That the unit system which I have conceived, associated with these two quantities, are representative of universal phenomena at every conceivable level relative to both the IRRED and RED quantities?
- III. That I have appropriately nominated the IRRED quantity as being the dominant quantity because I incorporated important phenomena within it such as nature, gravity, the speed of light, intuition and the like into this quantity?
- IV. That it makes a significant difference to the validity of my wider hypothesis if I have erred along the way by incorrectly appropriating units to either the IRRED or RED quantity. Do the simple law of averages apply?

## **2. The relationship between quantities, units, influences and energy**

I believe that the metaphorical connecting nodes of this universal relationship between RED and IRRED and their associated units are timeless NOWs. But this is not always necessarily so. I discuss these NOWs in section five. The IRRED quantity may also be seen as metaphysical quantity. I see the RED and IRRED quantities, together with their units of energy types as being in a dynamically fluid concurrent relationship that is unpredictable and random. I argue that RED and IRRED influences contain both knowable and unknowable information and so their combined influences of energy cannot be scientifically tested by observation or experiment. However, those that are dominantly RED would need to allow for at least some degree of IRRED hidden entanglement (some physicists say hidden variables), or similar indeterminable universal interference. An example of universal interference is the cosmological influences affecting molecular contraction relating to movement of rods within time dilation theory or the clock preon particle relationship I discusses earlier.

This means that RED and IRRED are representative of units relating to both themselves individually as well as to each other. They mean something worthy of future understanding and investigation. This ‘something’ can also mean communication across the width of the universe in an instant. This force’s behaviour is similar to that in entanglement theory in particle physics, where it has been demonstrated by experiment that the spin of one particle can influence the spin of another particle on the other side of the universe instantly. In other words my IRRED and RED theory means that it is possible for anything to happen across all units of the universe which includes our lives. This idea is similar to the phenomenon of wave particle collapse as a result of observation in particle physics theory. I feel that both phenomenon are related.

This inter-relationship between RED and IRRED can be likened to a neural network, and at points where RED and IRRED meet or cross each other, these points can be seen as nodes that have specific informational meaning. Knowable and reducible information emanating from RED includes time, patterns of light and associated densities of light, motion, consciousness and the splitting of an apple into two separate halves. Unknowable but describable IRRED information includes units relating to the origins of electricity, the origins of magnetism, the speed of light (one way in a vacuum), intuition (awareness), thought, gravity and ether in General Relativity theory. These units are to be included with the all-important units of nature and life as we understand and experience them to be. This combined information of IRRED and RED, with associated meaning and influences can then be described as being units of cosmological activity and process along the lines I talked about above. I believe that if RED and IRRED and other related units of influence within the universe did not exist in a concurrent but mutually dependant relationship and ratio with each other, the universe as we understand it to be would not make sense. Furthermore it would probably not exist at all.

I say that IRRED gravity-type wave motion relating to this network (the analogical neural network) at some point, probably before the Big Bang, began to progressively generate RED symmetry patterns of time relating to both RED motion as well as the overall universal unit network, which is our universe. This is the universe containing both IRRED and RED units. I suggest it is from this absolute quantity (our universe) that this RED unit of time became knowable and understandable and a unit to assist us, through our curiosity, to progressively context and plan all manner of human endeavour. Clocks then became the instruments to help us to recognise and explain our existence around cosmological RED time. Furthermore I suggest it is from this position that the reducible RED time that we are familiar with today (space/time) progressively became the time/motion reference frame that most physicists have adopted in their theories today. This is the reference frame that scientists tell us is the appropriate manner for us to context everyday reality. Because of this, we have become accustomed to planning and living our lives accordingly. (At the close of the nineteenth century, Lorentz absolute time ether theory was generally seen to be the appropriate continuum inertia frame. Object movement in timeless space was then recorded differently).

As I have indicated I also believe that these same IRRED and RED influences supported the creation of a inertia (the continuum foundation of the universe itself) from which the development of the universe took place, then developed and evolved in the manner that it has and continues to do so. It also seems clear to me that both IRRED and RED influences created the conditions for the Big Bang to occur. This is both before (in IRRED-virtual form) and after the Big Bang in real

form. All forces involved collectively created the conditions of energy types, averages, densities and ratios between both RED and IRRED conditions to occur at a particular timeless NOW to create such a Big Bang explosion, the word NOW is important. Remember we are talking about a period in reality space where clock units of time did not exist. Clock time units relating to the explosion did not exist. Conditions relating to the explosion were simulations and as such the RED explosion related only to its own explosion reference frame. This frame included forces existing prior to the Big bang itself, as I mentioned above. The dynamic nature of the IRRED quantity (with all its inherent forces) that I have been discussing today would be quite capable of creating such a violent cosmic event.

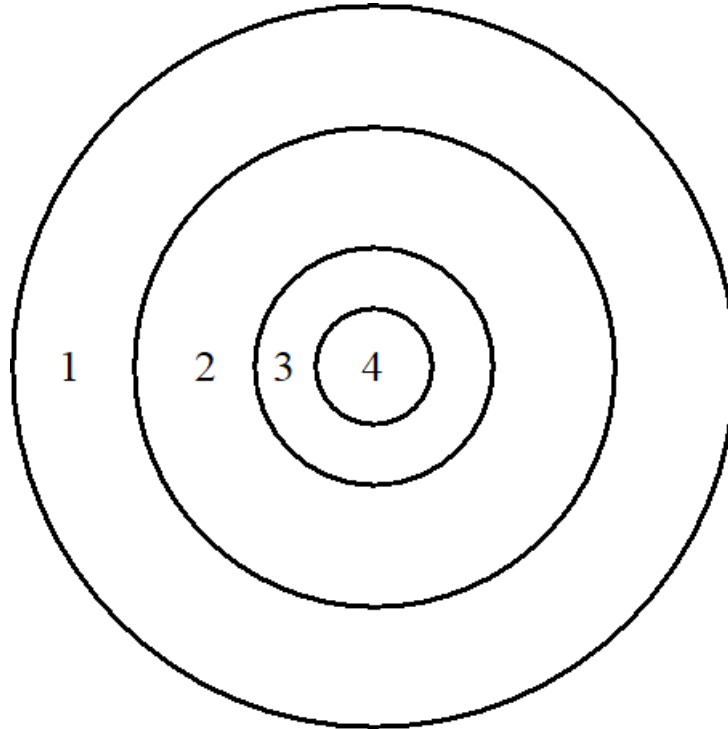
### **3. Nature and where we fit into this bigger picture**

Nature embraces both RED and IRRED units that are common for us all to experience, sense, and see. As I pointed out earlier, I see primordial gravity (gravity) as being an IRRED informational unit of energy influence and so you may assume such energy exists relating to influences between both RED and IRRED. I will later explain the concurrent relationship of primordial gravity with undetectable ether pixel energy. Different push and pull gravity waves are also IRRED as they travel at C. I believe that we are born with both RED and IRRED features and influences and this means that we are no different from other influences as represented by animals, fish and birds. By this I mean influences that originated from nature (IRRED) in the first place. I argue that the only difference between our own twin influences of RED and IRRED compared to other species is in respect of unit energy types, ratios, averages and densities (degrees of influence) between all of us. I also suggest from these words that as we age and become more widely experienced, the twin influences of RED and IRRED in our lives change in relation to ratios, averages and densities as well, at every conceivable level.

I see the human brain and consciousness as being reducible units which can sometimes be measured and tested. An example of this is the Global Consciousness Movement's activities relating to global atmospheric disturbances (waves) emanating from events such as the collapse of the twin towers in New York and mass bombings that periodically take place somewhere in the world. I suggest that it is these types of both positive and negative influences that impact upon our mind, consciousness and brain relationship globally. These negative and positive influences are the same IRRED and RED influences that cause us to think and act in the manner that we do, however subtle and influential they may be. It should be remembered that Sheldrake's hyper morphogenic field theory demonstrates the ability of plants and other organisms to influence each other as this ability is a natural part of IRRED nature and so is IRRED intuition as well.

## **Our relationship with RED and IRRED:**

This illustration also demonstrates how we could not exist without the IRRED influence in our lives.



Key:

- 1: IRRED represents the dominant quantity of informational units of reality.
- 2: RED is in a concurrent but junior partnership with IRRED informational units of reality.
- 3: RED and IRRED come together to represent how we live in an experience that combined RED and IRRED units of influences of reality.
- 4: Ourselves experiencing RED and IRRED in reality.

### **4. The relationship between irreducible and reducible units and the mind, brain and consciousness nexus, as well as associated human behaviour.**

As an extension of my words in item three I do not see the human mind as being reducible. I see it as being an unknowable metaphysical IRRED. In my opinion this IRRED mind is an assimilator of both RED observable as well as IRRED

intuitive information before instantly forwarding such dual information to the human RED brain for our brains to context, interpret and analyse with all other information already stored within it. The existing information already within our brains is memories of both a RED and IRRED nature which includes time and motion influences relating to these same past events. Time influences might include your recalling happy times when your father was pushing you on a swing as a young child, or the day the hearse got bogged on its way to your grandfather's grave site. I suggest that these types of remembrances can also be seen as a combination of IRRED and RED influences that provide historical purpose and meaning to events past and present. I believe that every event can be seen to be a succession of timeless NOWs in a continuum of the whole of our life experience.

I believe that it is pre-assimilated extracts of RED and IRRED historical information from this continuum which our brains selectively organise and store memories based upon such information. Furthermore I believe that our brains store such information in what it considers to be an hierarchy of importance for the benefit of itself (its owner). I believe that the associated power and energy of any given set of memory influences (the degree of its historical importance and relevance to an individual or group of individuals) is an IRRED influence. By this I mean the scope, meaning and depth of a particular memory or a series of memories. This includes providing historical purpose and meaning with respect to both past and present events which I refer to as timeless NOWs. Because this is a difficult concept to understand, and for me to explain, I will now present you with this analogy.

Let's look back into history and create a bar code system (such as is printed on products in a supermarket) that is representative of all quantities of reducible (RED) and irreducible (IRRED) information (units) that have evolved since the Big Bang. This then becomes a description of the progressive evolution of the universe itself. This includes reducible motion and time. This bar code also includes the random nature of the concurrent relationship between motion and time (including its effects) which in turn may be seen to create the universal conditions and systems that we are familiar with today. This also includes the scientific quantity of entanglement, non-locality, gravity and all forces that are both known and yet to be discovered by physical science. I suggest that we are aware of the timeless quantities of NOWs that pervade our lives but we cannot consciously interpret them individually because of both their irreducible IRRED and reducible RED nature. Furthermore it would be impossible to do so anyway.

However, I do think we can consciously interpret patterns of NOWs and give some sort of meaning to them. I refer to our intuitive awareness unit as being IRRED and our rational consciousness as being RED consciousness. It is only our RED consciousness that can be tested by an act of observation, analysis and

measurement. Our personal awareness can only be assumed, not tested. It is these two RED and IRRED units that our brains make some sort of sense of before we talk and then behave according to clock time and IRRED nature.

### **5. NOWs and how they impact upon our everyday lives as well as the wider cosmological universe**

I see both RED and IRRED units of information as being an instantaneous successions of NOWs. NOWs are also units of IRRED influence. Because this succession of NOWs are not related to clock time (they are related to IRRED absolute time) they are a collective representation of all that has ever been and will be with regard to RED and IRRED units of influence within the universe. The universe can also be considered as being a NOW because ‘something’ brought about its existence in the first place and we can never know whether this ‘something’ was a RED influence, an IRRED influence or a combination of both. These universal units of RED and IRRED can then be seen as a collective representation of all that has historically been, is, or will ever be into the future via a timeless succession of here and now “NOWs”. These include historical [virtual] NOWs before the Big Bang.

When I talk about future NOWs I mean NOWs that are representative of life units of influences that we are either hopeful about, or neutral about, or fear completely. That is, future events may be positive and joyful family activities like Christmas time, or events like sitting by a lake fishing and relaxing, thinking about nothing in particular. NOWs also include negative events such as the imminent death of someone you care for are. NOWs therefore are also a representation of their own history and also all conceivable possibilities to do something NOWs. These latter possibilities are NOWs which we would never experience or seek to exploit in respect to any given day or time now. These words are akin to Quantum Mechanics theory that says every conceivable for possible to happen is on the table can happen when it is observed. I suggests this also means experiences as well. This means that we can change our minds at random by no other means than a whim or a short term distraction whilst we are engaged in some sort of activity or another.

I believe that the naturally present RED and IRRED influences, together with their subsequent effects relating to this infinite continuum of NOW's in the universe also implies that the universe is not only aware (IRRED) of itself but it is also conscious (RED) of itself. This is at every level as well. This idea then implies that the universe not only has its own mind (as seemingly represented in physics by entanglement theory) but it can also influence all manner of RED and IRRED influences within its itself too. This set of influences may explain the random nature of the universe and how it manifests itself to observers in the manner that it

does. I also believe that the universe has its own separate IRRED and RED memories, which could mean that when we die our IRRED selves (souls if you like) can reconnect with the IRRED souls of deceased persons. Because IRRED is also irreducible information, this idea seems to have merit for me. Both souls return to nature after experiencing their RED (organic) earthly experience.

I also suggest that we live in both RED time and IRRED time simultaneously, and that the metaphysical connection node for us between both times is a NOW unit too. As I have said earlier, RED units exist in this same type of relationship. This means that all past, present and future are always connected to this inter-time node. So then, we move step by step with each other metaphorically either side of the connection node (but in reality simultaneously) at all times as though we are part of a timeless movie. Our RED selves cannot of course know about or understand this but our intuitive IRRED selves can. I see this inability to do so as being no more than an inter-dimensional one. By this I mean between separate IRRED and RED unit conditions and influences respectively. This could be between a third and a fourth dimension. This ability can manifest itself in unusual and strange ways such as clairvoyance, alleged astral travel, out of body experiences, near death experiences, deep meditation and prayer. Other simple ways are knowing someone is looking at you when you are not looking at them, and knowing when someone has died before you have been told about it.

## **6. The role of observers within the RED and IRRED model**

I feel that observers cannot remove themselves from the act of observation and experiment because they are inseparably a part of the frame of reference they are observing, which is itself a NOW. Observers are not only a unit of NOWs, but they are also influenced by RED's and IRRED's NOWs at any given event they are observing. These events that they are observing not only include participating individuals in any given event as NOWs but also these same individuals with their inherent and diverse personal NOWs as well. By this I mean that their own IRRED and RED NOWs relating to their life history thus far. This NOW influence relationship at any given event, including lab experiments, also includes the wider universal NOW. I am suggesting that observers are merely an elementary line in the wider evolving analogical barcode of all possibilities to do something in the universe that I described a little earlier.

Observers are therefore are an irremovable part of the RED and IRRED universal cosmic whole, and so their act of observation could be prejudicial to the authenticity of the event itself. This seems to be in accord with the fact that when quantum wave collapse occurs when physicists observe an experiment such as if a cat is dead or alive with the physicists Schrödinger's analogy relating to his thought experiment involving a cat in a sealed box. This is in order to explain the



flawed interpretation of quantum superposition in physics as to at what point can it be scientifically determined if the cat in the sealed box is dead or not.

As I discussed above from my physics RED and IRRED perspective the analogical cat is always dead and alive at the same time but of course it does not know it. Nor do the observing physicists because they are all located in the same timeless NOW as the cat. Furthermore in my IRRED and RED hypothesis they are all part of the universal continuum of NOW'S simultaneously in relation to clock unit measurement of time. These words imply that as individuals we are cosmologically IRRED's and RED'S at the same time but like the cat we do not know it.

### **7. Why the irreducible quantity is the dominant quantity within the universe**

I believe that the universe relates to an IRRED inertia continuum that is, from a relativity theory perspective, an unknowable and therefore a metaphysical IRRED quantity. Relativity theory rejects metaphysical phenomena as part of its universal modelling. However, with IRRED, ether theory type models such as the Lorentz electron model is the continuum upon which the universe evolved in the first place, and how it seems to work in the manner that it does. I support ether type theories and my Awareness Model of Reality physics is loosely a representation of this. You will see where I discuss my theory in section nine of this blog.

I believe that RED quantities cannot exist without a pre-existing IRRED quantity. This IRRED quantity needs to influence itself and its associated RED units. RED units cannot influence IRRED units. It is for this reason at the outset of this presentation I stated that the universe has two quantities, which includes their associated units. For this reason the primary reducible quantity, manifesting itself via IRRED units of influence is the dominant influence in the universe. This is accentuated by the five points that I have outlined in the introduction entitled 'What I think you will discover once you have read my ideas...'.

### **8. Why Special Relativity and General Relativity theories do not seem appropriate models through which to explain cosmological reality**

I believe that both Special Relativity (SR) and General Relativity (GR) theories in physics make sense. They are both valuable models within their own time and motion frame of reference, but they are both incomplete and unsuited for the integration and assimilation of my ideas relating to both reducible and irreducible quantities. I will explain further. Time and motion cannot be of units themselves because they are both reducible quantities in there own right that have a mutually dependent relationship. One is meaningless without the other. Both time and

motion units did not separately pop out of nowhere and then form the type of random relationship that relativity physicists seem to assume that they have.

I see this physical construct as one that comes from the human mind, and is not representative of cosmological nature at all. Furthermore, in my opinion it does not make sense either. This is because, as a result of this belief, physicists have become compelled to force other bits and pieces of cosmological phenomena (influences) into this constricted scientific mould. Thus they have found themselves being then compelled to create artificial theories in order to justify their beliefs as well as work in progress. Examples of this are the long-standing arguments regarding the merits of ether theory and, in particle physics theory, the manner in which they have found themselves being not able to understand and describe entanglement and non-locality. My ideas relating to IRRED and RED units of influences seem to get around this problem.

I believe that the combined RED and IRRED units are, in contrast to Einstein's clock time, a timeless and seamless universal influence/energy environment wherein an 'anything goes' random continuum exists which can be seen as the inertia frame I talked about earlier. I argue that it is merely the IRRED inertia unit of nature that provides the parameters within which any existing order, efficiency and reliability prevails.

In my opinion it seems that Einstein in his determination to rid his Special and General models of non-testable influences then set about explaining the random fluctuations in space by linking time and motion to the IRRED speed of light frame of reference. By doing this it seems that he found the need to 'stabilise' his special relativity model with a force unit that could be related to the unit measurements of clocks. It seems that Einstein did this in order to justify this theory of motion with units of time across different frames of reference. I believe that this is probably how he overcame having to fall back to a universal ether continuum as Lorentz had previously postulated.

Lorentz's electron (ether) theory is now considered to be an acceptable, with the exception of the mobility of the ether. Relativity theory, as per Einstein's words, demands that ether be mobile. It is not immobile as Lorentz and a small core of contemporary believe it should be. My point is that my concept of an undetectable IRRED pixel ether in physics is not an unacceptable one today. Contemporary physics says that it should be a RED so that they can link its movement to clocks.

Einstein was then left to resolve another IRRED difficulty with his model. It seems that this issue with general relativity has been recently resolved by an experiment. This is by means of physicists measuring the speed of light in relation to the planet Saturn. Because of this the physics community now believes that the

speed of gravity has to be the speed of light, which then makes it an IRRED unit as I have always thought it was. This means that both the special and general relativity models are primarily IRRED units of energy/influence and all other units associated with them are RED units. The only difference between both relativity models is that in the special relativity model relates to small objects and in general relativity it relates to large objects. This means that both special relativity and general relativity are IRRED theories anyway. These residual RED units are part of the wider dual universal quantities of concurrent IRRED and RED anyway.

Einstein considered the speed of light frame of reference to be a reliable one because its speed was physically determined to be non-fluctuating in a vacuum at C. (C is shorthand for the speed of light). From my perspective this does not seem to make sense. I believe that the hidden and untestable relationship between the IRRED and RED quantities, which some physicists refer to as being hidden variables, does not allow for this. IRRED and RED influences create their respective own continuum within which motion of both IRRED and RED influences take place. In other words, by Einstein linking the speed of light to his special relativity model he was linking it to only the RED quantity. This means that if my ideas about IRRED and RED are correct then Einstein's special relativity model is essentially flawed. It would not be if he had linked it to the continuum/inertia of IRRED ether or a similar IRRED inertia such as with the Process, Holomovement and Awareness models of theoretical physics.

Because the RED and IRRED influences are concurrently related solely to themselves, this means that this combined unit relationship (also meaning an undetectable energy force) is timeless and so clock time is not pertinent to either influences at the same time. As I said earlier, clock time is only relevant to the RED component of the combined RED and IRRED universal quantity. In clock time it is only RED influences that grow and decay in relationship to a RED clock time mechanism. Man-made clock mechanisms, because of their hands moving over a scale of units of their own, are also clock mechanisms and hands that have been created by the RED unit of their brains. This means that man-made RED clocks are only relevant to the RED brain of physicists, who in turn are seeking to prove and give clock time meaning to the growth, change, movement and decay of other RED units only. It is only IRRED intuition that relates to this unit, and nothing mechanically related.

This being the case, physicists are ignoring the universal relationship between both RED and IRRED influences and associated forces which includes energy of diverse types as physicists have historically determined them to be. This further illustrates what I see are the shortcomings of Einstein's motion-time special relativity modelling, more especially so because it is not representative of cosmological and personal reality as we commonly perceive it to be.

I suggest that physicists should perhaps consider that my concept of a combined quantity of RED and IRRED influences of units (and their forces and effects) as being like an ether type continuum (inertia). I believe that is only the RED influences of the inertia continuum that can be observed and measured in relation to the RED influence of the observer's brain and the RED influence of the object or movement being observed.

Therefore, time and motion, like the non-fluctuating speed of light, are the natural order of things in the universe. Movement and time are RED unit influences and the fixed speed of light is an IRRED unit influence. From a physics perspective, these time and motion units in relation to the speed of light are influences which originate in the natural form of IRRED nature. The IRRED speed of light influence has no physical relationship with reducible RED time and motion, because time and motion always remain in a random and concurrent relationship with each other. This is not the speed of light as relativity theory postulates. However, RED time and motion influences can influence each other with respect to the RED fluctuating mass of light (a beam) that is different from the speed of light (which would then be allowable in relativity theory because all three of these influences are physically relative to each other). This is because they are all RED units.

I believe that the appropriate manner to physically describe the RED and IRRED relationship is by considering it as being a single universal quantity of combined influences (units of information) of differing types, ratios, densities and averages. This single unit can be then seen as a point of singularity for the universe itself, as well as the inertia continuum of the combined RED and IRRED. I feel that because of the fluctuating and random nature of RED and IRRED influences within this inertia frame, the singularity itself could be seen as a medium of fluctuating ether as I talked about earlier. The fluctuating ether would be an immobile one with respect to primordial gravity but its density and formational averages would randomly fluctuate with respect to the inherent RED and IRRED influences and create effects across the universe.

I feel that the RED influences within this ether would manifest themselves so that physicists could observe and measure them, but not the hidden IRRED influences within the same ether primordial gravity continuum. Such influences would remain the 'hidden variables' as has often been speculated about by mainstream RED physicists. I believe that the RED and IRRED influences and units in particle physics should be treated in the same manner as the General Relativity model. The same IRRED and RED units and influences are universal and as such should relate to both.

## **9. Why the universe is nothing**

### **A story about the Big Bang and what happened from there**

In the first instance I will talk to you in general terms. This may help you to better context some of the more complex physics ideas that I will share with you a little later herein. I believe that it was, incomprehensibly to most people, an irreducible (IRRED) four dimensional Primordial Awareness condition that influenced the creation of the universe in irreducible absolute IRRED time. Primordial Awareness is an informational ether like state that I conceived that I believe influences all things in all places in IRRED holistic reality time circumstances. This includes other universes and dimensions as well. I believe that phenomena is created, maintained and destroyed by differing energy types, densities, averages and ratios. This same diverse energy relationship is also pertinent to quantum, sub-quantum metaphysical and unknowable cosmological information that is yet to be discovered. Unknowable and IRRED cosmological information conditions and influences include intuition, thoughts, out of body experiences, how did gravity come into existence and what is the origins of electricity and magnetism. Gluon particles [see reference 1] are an important IRRED particle information as well. You will soon find why this is the case.

Gluons have no internal structure yet at the same time they hold the universe together. With regards to unknowable and irreducible information, such information can be considered to be imaginary and or virtual such as the existence of preon particles. Preon particles [see reference 2] are also particles that mathematics say exist but they have not been detected yet. Preons are alleged to be one of the essential sub atomic particles related to the creation of quarks. This same mathematical mystery applies to tachyon and dybbuk particles that can allegedly travel beyond the speed of light which also have not been detected yet. There are many others as well. Reducible RED cosmological information is related to phenomenon that can be reduced in its energy type influences in some way and would include such simple things as cutting an apple in half. What I am saying above is that if you have knowledge about sub quantum metaphysical physics these types of mysteries are not unusual at all. Metaphysical entanglement in particle physics is another such phenomenon as well. Often they are referred to as non-local conditions and influences.

I suggest that it is from this diverse range of cosmological information that the energy-force type conditions for the creation of the universe occurred. Only energy of some type existed at the immediate beginning of the Big Bang explosion. I refer to this energy as being virtual energy. I have cited intuition and thoughts as unknowable information above because I believe that the wider cosmological reality from which all universes and dimensions emerged is information that is not only aware of itself but it is also aware of all conditions and

influences within itself as well. By this I mean in my concept of Primordial Awareness absolute-time. My ideas relating to primordial awareness energy is an IRRED energy type condition that can create IRRED effect conditions such as was needed to influence the Big Bang explosion. In respect to IRRED energy all conceivable possibilities to do something is conceivable. RED effects relates to phenomenon that is not IRRED such as the cutting of the apple. This means that there are two different universal conditions that are capable of engendering conditions of influences of some kind throughout the universe.

I believe that the explosion of the Big Bang created not only quarks and gluons but also the conditionless-void of primordial gravity. Primordial informational gravity is weak so it is very difficult to detect, sometimes it is not detectable at all. I say that the informational primordial gravity, quark and gluon influences created the universal condition of a metaphorical carpet of ether across an ever expanding universe. I believe that all “things” in the universe have a particle nature and this includes gluons which have no internal structure. As I stated above the evolution of the universe needs gluons. There are eight different energy-type gluons [see reference 1] related to gluons and six energy types in relating to quarks. Gluons and quarks are absolutely inseparable and this is why gluons are often referred to as universal cosmic glue. Furthermore gluons can exchange forces and influences within themselves as well [see reference 1].

When one combines the inherent informational energy of primordial gravitation with these fourteen combined conditions of gluons and quark units of energy I suggest that this collective energy condition is the inherent energy condition of the universe. This collective energy manifests itself upon every aspect of the universe in both RED and IRRED ways as I discussed earlier. It influences itself in a RED and IRRED manner as well. Particles can move between these conditions at will. This relationship is an entangled one in as much that it is a random relationship of units of these combined fifteen different fields of energy informational (primordial gravity, gluons and quarks). These effect fields of energy are in an ever changing density, average and ratio with each other and this is why the universe is unpredictably random as physicists know it to be. You and I are beings that are being similarly affected by this dynamic primordial gravity ether condition. You would realise this if you stop to consider your own RED and IRRED units of influence. I have nominated this concurrent universal energy as being Primordial Ether (ether).

In respect to these words I see this ether effect as being both the defining force in nature as well as the inertia continuum of the universe as well. I see the ether as being the influence that created the condition of a second push and pull gravity as related to larger objects such as planets and similar large objects in space. Electrical and magnetic forces also separately emanated from the Big Bang

explosion to create a single electromagnetic field and associated radiation that concurrently travels at  $C$  within this ether. Over an indeterminable period the Big Bang electromagnetic field influenced the creation of immeasurable numbers of sub fields which included those in relationship to the creation of light.

You will see from my description of this diverse range of energy influences that primordial gravity [a part of part of pixel-particle ether], quarks, gluons and electromagnetic fields might be representative of the strong force in the universe. Metaphysical (IRRED) preons and IRRED gluons together with RED quarks and electromagnetic fields are the combinations of energy that make up protons, neutrons and electrons in different averages, densities and ratios with each other. These diverse conditions of energy can be seen as being like the foot print of all RED conditions and influences across the universe. Because these RED conditions and influences (units) are effects of the IRRED condition of ether as discussed above then these combined conditions and effects can be seen to describe the universal whole at every conceivable level. From these words I postulate that my ether concept, detects the presence of individual planets and then by influencing the energy type ratios, densities and averages with each other that in turn influence the conditions and effects of a new energy type. This new energy type effect can be seen as the condition that influences push and pull gravity into being the types of fields that maintain the universal symmetry of motion between objects that prevents undue universal chaos. This is not its inherent wave randomness in respective to inter acting fields of informational energy types.

I believe that the other allied important matter relating to these words about my concept of ether is that it can be seen as the same guiding field that David Bohm postulated existed within his Holomovement pilot wave theory of particle physics [see reference 3]. I also claim that this same ether detects the gravity forces between two or more masses of objects which include planets hundreds of light years away from each other. The reason why this can occur is that because primordial gravity, which is in a concurrently relationship to the ether, moves in context with absolute-time. Absolute-time is represented by the stationary [in relative terms] ether effect in comparison to primordial gravity waves, even though they are part of the same effect. This implies that the relationship between the mass of all objects at any absolute distance. This means at any distance whatsoever in relationship to unit clock-time. This relationship can be mathematical calculated in respect to their differing densities, ratios and averages with each other, but not in respect to mechanical units of clock-time as stated above.

I have discussed the powerful role that gluons play in respect to holding the building blocks of matter together and in turn demonstrate how they work as well. This is more especially so as they holds neutrons and protons together in a stable

relationship in respect to its glue like relationship with quarks. This means that gluons are also conjunctive IRRED stabilisers of my ether system which I see as being critical for the stability and consistency of the universe generally but are not associated with diverse ranges of electromagnetic fields which are energy forces unto themselves. As I suggested earlier I believe that gluons are the analogical life blood of the universe and if they did not exist with the energy and conditions type that they do the universe would not exist and nor would we within it as well. This is with the exception of electric and electromagnetic fields. Particles such as quarks would not exist either which are one of the foundational influences in respect to the creation of matter. The additional mystery about gluons is that although they are now accepted in physics as being elementary particles their microscopic structure remains unknown and furthermore it is considered to be irreducible but it can change influences within itself as I discussed earlier. The other interesting thing is that there is no maths to support gluons from its basic physics law but I have read that some of its properties can be calculated.

The influences and conditions of a diverse range of energy types that I have discussed above demonstrate what I consider to be the dynamic and experiential conditions of the universe as a whole. This includes us as well. This universe is what I term as being a primordial awareness quantity. The mysterious IRRED and RED forces at play before the Big Bang took place in a separate and dynamic state of Primordial Awareness and time quantity. I suggest that this means that there is a continuum of Primordial Awareness across all reference frames of wider reality as well. I believe that the Euler's equation in mathematics demonstrates why such a notion may make sense. This is because it embraces the transcendental square root of minus one (-1) as presented by  $i$  in this equation  $e^{i\pi} + 1 = 0$ . This symbolic mathematical symbol represents all possibilities whatsoever within the frame of reference of reality (what ever this may mean) at any given time, place or circumstance.

You will see from my words that gluons are the life blood of the universe. Without gluons nothing relating to matter and its associated influences could exist in the universe. It is hard to imagine that electromagnetic fields could exist on their own somehow. The microscopic structure of gluons remains unknown. There is no maths physics to support gluons in relationship to physics laws. This means that gluons do not physically exist and as such they are permanently IRRED (metaphysical) units of energy influences. However, this IRRED energy holds the universe together. This means without gluons it would be nothing. This further means that the IRRED nothingness of gluons are at least in part responsible for the creation of the universe but almost fully responsible for its associated maintenance and seeming infinite fractal like cohesion and stability [see reference 1]. Another way of saying this is that a physics influence of nothing created another universe



of the same nothing and as such the universe can be physically described as being IRRED nothing.

### **10. Other existing model types that may be more suitable in explaining cosmological reality**

The Process, Holomovement, my Awareness model and other similar physical theories seem to be appropriate models upon which to construct an irreducible (IRRED) and reducible (RED) physics theory of everything. Although the constructs of the three cited models are different from each other, the point of singularity (continuum) remains much the same as all three models are built upon a IRRED quantity that is without clock time in respect to IRRED units and influences. I feel that it is important to note that when David Bohm created his Holomovement theory in the 1970s he attempted to leave Einstein's relativity theories intact by simply underpinning it with my concept of IRRED. Bohm's theory was firmly rejected by his peers but scientific interest in the Holomovement theory is once again taking place today. There are many other differences between the three theories as well but I feel that I have drawn your attention to perhaps the more important ones [see reference 4]. The key words above are '... the point of singularity (continuum) remains much the same' This is the metaphysical IRRED quantity of the universe.

#### **My closing words:-**

From the information that I have provided for you today, I believe that because of the all-inclusive nature of my IRRED and RED hypothesis, scientists of the future need only to decide upon what respective unit types of energy are involved within universal cosmic reality. From this point, physicists can then decide in what ratios, densities and averages these energy types need to be appropriately melded into a single quantity of information. I think that this will then provide scientists with the necessary basis of a comprehensive theory of everything.

I believe that I have provided and perhaps demonstrated the fundamental structure of the universe and how it may work. It is also possible that I have provided the elementary information that describes the essential nature and associated effects of wider reality as well. This is by both my description of NOW, as I have demonstrated, as well as the associated Euler's equation to go with it. By these words I mean the everyday conditions and influences that commonly apply to universal human life within the wider quantum universal experience together with its associated IRRED and RED effects, conditions and influences.

## References

Reference 1:

Matters relating to the properties of Gluons

The following eight scientific sources support ideas that I have submitted in my presentation. I have specifically submitted this reference relating to Gluons because as it appears to ontologically support my belief that Gluons are the fundamental energy-type of universal reality that not only “glues” the universe together but also influences its wider conditions and effects as well.

Source 1:

Live science

Primordial 'Soup' of Big Bang Recreated

Quotes:

“...The hearts of the atoms that we are made of consist of protons and neutrons. These subatomic particles, in turn, are made of building blocks known as quarks, which are glued together by particles aptly named gluons...”

"...We have a new state of matter for which we can write down the mathematical law governing its properties in a single line, but after 30 years of theoretical research, we still do not understand its microscopic structure even in rough terms," said theoretical physicist Berndt Müller at Duke University in Durham, N.C. "The reason for this is that we still lack the mathematics that would allow us to predict the structure and properties of the quark-gluon plasma starting from its basic physics law. We can calculate some of its properties by means of raw computer power, but that does not tell us how it works..."

“...Mysterious matter

Quark-gluon plasmas may also shed light on other exotic states of matter whose constituents strongly interact with other and in which the strange world of quantum physics plays a key role. One example includes Bose-Einstein condensates, where many atoms work together to essentially behave as giant "super-atoms."..."

<https://www.livescience.com/21715-big-bang-quark-gluon-plasma.html>

Source 2:

Science Daily

Quotes:

“...One of the great theoretical challenges facing physicists is understanding how the tiniest elementary particles give rise to most of the mass in the visible universe.

Tiny particles called quarks and gluons are the building blocks for larger particles such as protons and neutrons, which in turn form atoms. However, quarks and gluons behave very differently than those larger particles, making them more difficult to study...”

“...This property describes how the force generated by the exchange of gluons becomes weaker as the quarks come closer together and grows larger as the quarks are separated. As a consequence, none of the analytical techniques used to successfully solve atomic and nuclear physics problems can be used to analyze quarks and gluons...”

<https://www.sciencedaily.com/releases/2008/02/080217143832.htm>

Source 3:

NCI.Org

What holds the universe together?

Quotes:

“...Australia’s most powerful supercomputer, Vayu, at the NCI National Facility is engaged in an epic task of discovery, helping to define how elementary particles bind together to form our universe.

“This is about determining the fundamental laws of Nature by advancing our knowledge of the subatomic structure of the universe,” says Adelaide University’s Professor Derek Leinweber, whose team at the ARC Special Research Centre for the Subatomic Structure of Matter (CSSM) are using Vayu to probe the intricacies of quantum chromodynamics (QCD), the theory behind the so-called ‘strong force’ that binds the elemental building blocks of our universe together.

On a larger scale, this is the ‘nuclear’ force that binds protons and neutrons together to form the nucleus of an atom – and provides the basis for nuclear energy. On the much smaller, quantum scale being investigated by the CSSM team, it is the force that causes fundamental particles such as quarks and gluons – the smallest sort thought to exist – to form protons, neutrons and other more exotic particles.

“Quantum chromodynamics is the key fundamental quantum field theory of the Standard Model of the Universe,” Professor Leinweber says. “It describes how quarks and gluons interact to give rise to the mass of particles such as the proton and neutron – and so form ourselves and most of the visible world around us.”

The Strong Force is the most powerful of the four primary forces that govern the physics of the universe...”

<http://nci.org.au/research/what-holds-the-universe-together/>

Source 4:

The Forces Holding the Universe Together

Quotes:

“...In the nuclear realm of the Universe—that of atoms—we’ve identified three amazing forces that organize the elementary particles—this microworld which is composed of composite particles and atoms that populated the original space microseconds after Big Bang...”

“...1 Strong Force: carried by gluons (pronounced “glue-ons”), elementary particles of which there are eight types or “colors.”

2 Weak Force: carried by bosons, of which there are three types.

3 Electromagnetic Force: carried by the photon, probably the best known because of its association with light...”

“...What’s even more amazing is that the strong force is the gluon, a massless, weightless particle/wave...”

“...Even more implausibly, their pull increases as quarks get further away from each other—unlike magnets, which are easily separated the farther apart they get. Not so with quarks—the farther apart they are, the more attracted they are to one another—absence truly does make the quark grow fonder.

Galacti recalls that quarks were separate in the Big Bang, and he could therefore see them. In the present, we cannot separate two quarks long enough for one to be visible. Even though we can splinter a proton with a billion-volt charged beam of electrons, quarks remain “glued” to each other by means of the strong force...”

<http://theexplanation.com/forces-holding-universe-together/>

Source 5:

Physics.org

Quote:

“...By analyzing the highest-energy proton collisions at the Relativistic Heavy Ion Collider (RHIC), a particle collider at the U.S. Department of Energy's (DOE) Brookhaven National Laboratory, nuclear physicists have gotten a glimpse of how a multitude of gluons that individually carry very little of the protons' overall momentum contribute to the protons' spin. The data described in a recently published paper indicate that these glue-like particles—named for their role in binding the quarks that make up each proton—play a substantial role in determining the intrinsic angular momentum, or spin, of these building blocks of matter.

"These results confirm our suspicion that a lot of the gluons' contribution to proton spin comes from the gluons with relatively low momentum," said Ralf Seidl, a physicist from the RIKEN-BNL Research Center (RBRC) and a member of RHIC's PHENIX collaboration, which published these results. The results also suggest that gluons' overall contribution to spin might be even greater than the contribution from quarks...”

<https://phys.org/news/2016-02-physicists-gluons-contribution-proton.html#jCp>

Source 6:

Quora

What is gluons made of and why is it called force carriers?

Quotes:

“...Gluons are force carriers and is a gauge boson and so is bosonic in nature. So you can think of them as being made out of Charge or Energy(either one of them).

They act as a medium for strong interactions between Quarks. Quarks are the elementary particles that make up the protons, neutrons and electrons...”

“...Gluons are what hold the quarks together like glue(and so the name). This in turn is the strongest force in the Universe-The Strong Nuclear Force-and so Gluons are known as Force Carriers...”

“...A gluon acts as the force carrier for strong interactions which hold together neutrons and protons in a nucleus. They are the strongest forces by nature. The reason they are called elementary is because we dont know of their structure so far they may or may not be capable of subdivision. The reason they are called force carriers is because they are responsible for holding together neutrons and protons thus being responsible for the strong force...”

<https://www.quora.com/What-is-gluons-made-of-and-why-is-it-called-force-carriers>

Source 7:

Discover Magazine.

Quotes:

The Glue That Holds the World Together

“...The most we learn about subatomic particles called gluons, the more the universe seems to be made of nothing at all

You do not know what stuff is, you who hold it in your hands. Atoms? Yes, stuff is made of atoms. And every atom is a nucleus orbited by electrons. Every nucleus

is built of protons. Every proton is - but there you reach the end of the line. Inside the proton lies the deep, unsettling truth: Stuff is made of nothing, or almost nothing, held together by glue, lots of glue. Physicists first began to suspect this in 1973. Lately it has been proved by experiment..."

"...A proton is made of three quarks, yes, but the quarks are infinitesimal—just 2 percent or so of the proton's total mass. They're rattling around at near light speed inside the proton, but they're imprisoned in flickering clouds of other particles—other quarks, which materialize briefly and then vanish and, above all, gluons, which transmit the force that binds the quarks together. Gluons are massless and evanescent, but they carry most of the proton's energy. That is why it is more accurate to say protons are made of gluons rather than quarks..."

"...Gluons are thus like little dipole magnets. The gluons that surround a quark align themselves parallel to its color field, as magnets would, and so instead of weakening it, as virtual particles do an electron's field, they strengthen it. They antiscreen the quark, amplifying its field. Here the lamp analogy no longer works—the quark is a dim bulb that somehow becomes brighter outside the shade.

That's what holds a proton together, and that's what gives it a bizarre internal structure. If one quark manages to get inside another's gluon cloud, it feels only a feeble attraction. But the farther away it goes, the more it feels the added pull of gluons—gluons emitted by the quarks, gluons emitted by other gluons, gluons that materialize into virtual quark-antiquark pairs, which exchange more gluons..."

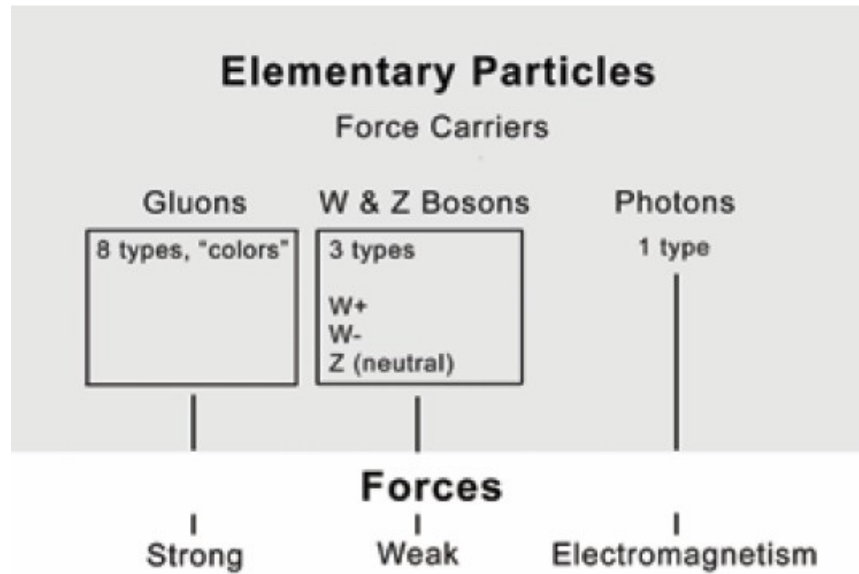
"...Wilczek says, pixel by pixel—and the results fit the proposal he and his colleagues made decades ago.

"It's only at the crudest level that a proton is made of three quarks," Wilczek says. "When you look close and get inside these clouds and start seeing the basic structure, you see that it's mostly glue." ..."

<http://discovermagazine.com/2000/jul/featgluons>



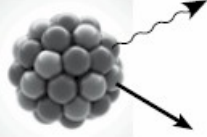

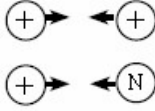
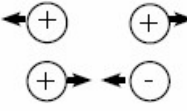
Source 8:

Illustration 1: The comprehensive role of Gluons with respect to the other force carriers.



Ref: <http://theexplanation.com/forces-holding-universe-together/>

Illustration 2: The wider causal relationship between the strong force [governed by Gluons] and the three other fundamental forces.

The Four Fundamental Forces That Govern the Behavior of Matter in the Universe			
Strong Force	Electromagnetic Force	Weak Force	Gravity
Protons (+) Neutrons (N) 	Nucleus (+) Electrons (-) 		
		Changes protons to neutrons and vice versa, emitting radiation	
Holds atom's nucleus together	Holds atoms together but allows for bonding and formation of chemical molecules	Triggers nuclear fusion causing stars to burn	Holds universe together and allows for its accelerating expansion
<b>Relative strength:</b> $10^{38}$	$10^{36}$	$10^{25}$	1
<b>Range:</b> diameter of nucleus $10^{-14}$	Infinite	0.1% diameter of a proton $10^{-16}$	Infinite
<b>Particle mediator:</b> gluons	Photons	W and Z bosons	Gravitons (unconfirmed)
<b>Particle mass:</b> 0	0	Heaviest known particles	0

Ref: <http://theexplanation.com/forces-holding-universe-together/>



Reference 2:

Preon particles

Quote:

“...Most physicists agree that quarks are the fundamental building blocks of all matter. But some researchers believe quarks may contain constituents called preons that are well beyond the detection limits of current and most future particle colliders. So in the December *Physical Review D*, a team describes two strategies for detecting them in space, in the form of preon “nuggets” that might also be a form of dark matter. Although many researchers are skeptical that preons exist, the team receives high marks for looking beyond conventional particle physics in a new way...”

<https://physics.aps.org/story/v20/st18>

Reference 3:

Bohm’s Holomovement theory

Quotes:

“...David Bohm was one of the most distinguished theoretical physicists of his generation, and a fearless challenger of scientific orthodoxy. His interests and influence extended far beyond physics and embraced biology, psychology, philosophy, religion, art, and the future of society. Underlying his innovative approach to many different issues was the fundamental idea that beyond the visible, tangible world there lies a deeper, implicate order of undivided wholeness...”

“...The **holomovement** is a key concept in David Bohm’s interpretation of quantum mechanics and for his overall worldview. It brings together the holistic principle of “undivided wholeness” with the idea that everything is in a state of process or becoming (or what he calls the “universal flux») For Bohm, wholeness is not a static oneness, but a dynamic wholeness-in-motion in which everything moves together in an interconnected process. The concept is presented most fully in *Wholeness and the implicate order* published in 1980...”

<https://www.scienceandnonduality.com/david-bohm-implicate-order-and-holomovement/>

Reference 4:

### A comparison of Three Models of Reality

	<b>Raymond Awareness Model</b>	<b>Cahill Process Physics Model</b>	<b>Bohm/Hiley Model</b>
<b>1</b>	At its deepest level, reality consists of awareness and everything that we can perceive and observe consists of patterns of information in that awareness.	Process Physics models physical space and quantum phenomena as patterns of information within a stochastic neural network. If this model corresponds to reality, then everything that we can perceive and observe would consist of patterns of information in such a network, which though infinite in size, is conceptually simple.	In the the Bohm/Hiley model, the observable level of reality of matter and space emerges from a lower level that consists of relationships involving processes, activity and movement. The sum total of all such relations is called the holomovement.
<b>2</b>	In the beginning, the awareness may have contained no patterns of information, but if so, we can suppose it had a capacity to create random patterns.	In the beginning, the network may have contained no patterns of information, but as a stochastic network, it would have a capacity to continuously create random patterns.	Bohm has written, "each relatively autonomous and stable structure is to be understood not as something independently and permanently existent but rather as a product that has been formed in the whole flowing movement and what will ultimately dissolve back into this movement."

	<b>Raymond Awareness Model</b>	<b>Cahill Process Physics Model</b>	<b>Bohm/Hiley Model</b>
<b>3</b>	As random patterns were created, a proportion would have had structures that would allow them to be linked into more complex patterns. We can suppose that the awareness allowed this to occur and that complex patterns could better persist than the simpler ones.	As random patterns were created, a proportion would have had structures that would allow them to be linked into more complex patterns. Feedback in such a network allows this to occur and allows complex patterns that link to others to better persist than simpler ones.	The above would imply that the universe as we know it emerged from and is being sustained by the holomovement.
<b>4</b>	Then over time patterns could emerge and evolve of increasing complexity.	Then over time patterns can emerge and evolve of increasing complexity. Computer simulation of a particular network was found to predominately generate 3 dimensional patterns that could be identified as an expanding 3 dimensional space and with other more highly linked patterns corresponding to quantum matter.	David Bohm also introduced the notion of Active Information. His idea was to use the activity of information as a way of explaining the actual nature of quantum processes.  Active information would inherently have the ability to form patterns of information of increasing complexity.

	<b>Raymond Awareness Model</b>	<b>Cahill Process Physics Model</b>	<b>Bohm/Hiley Model</b>
<b>5</b>	<p>We suppose this eventually led to a set of patterns with the right features to produce the universe in which we find ourselves.</p> <p>Eg. replication of patterns responsible for creating 3 dimensional space could produce the phenomenon of a universe expanding from a big bang.</p>	<p>Evolution of patterns could then eventually lead to patterns with the right features to produce the universe in which we find ourselves.</p> <p>Eg. replication of patterns responsible for creating 3 dimensional space could produce the phenomenon of a universe expanding from a big bang.</p>	<p>Then active information within the holomovement could lead to patterns with the right features to produce the universe in which we find ourselves.</p> <p>Eg. replication of patterns responsible for creating 3 dimensional space could produce the phenomenon of a universe expanding from a big bang.</p>
<b>6</b>	<p>We cannot perceive or observe anything outside our universe, however if physical objects consist of patterns of information within a deeper level of awareness, then that awareness might constitute a kind of fourth dimension.</p>	<p>We cannot perceive or observe anything outside our universe, however if physical objects consist of patterns of information within a deeper network then that network might constitute a kind of fourth dimension.</p>	<p>We cannot perceive or observe anything outside our universe, however if physical objects consist of patterns of information within the holomovement then the latter might constitute a kind of fourth dimension.</p>
	<b>Raymond Awareness Model</b>	<b>Cahill Process Physics Model</b>	<b>Bohm/Hiley Model</b>

7	<p>After dying the patterns of information corresponding to our physical body must fade away. But how about the patterns of information corresponding to our mental activity? Could they continue to persist within the deeper level awareness even after our physical body no longer exists?</p>	<p>After dying the patterns of information corresponding to our physical body must fade away. But how about the patterns of information corresponding to our mental activity? Could they continue to persist within the deeper network even after our physical body no longer exists?</p>	<p>After dying the patterns of information corresponding to our physical body must fade away. But how about the patterns of information corresponding to our mental activity? Could they continue to persist within the holomovement even after our physical body no longer exists?</p>
8	<p>Is our personal awareness linked to or produced by the deeper awareness?</p>	<p>Is our personal awareness produced by the deeper network and if so is the deeper network also in some sense aware?</p>	<p>Is our personal awareness produced by the holomovement and if so is the holomovement also in some sense aware?</p>