The Nature Of Time

Time….Sometimes briefly defined as the period between two events.

Taken to the extreme, the period between the Big Bang and the Big Crunch. This could be described as the most important 'time' to us.(Well, actually, the point in time when the first sign of life appeared may well rival it) any way, assuming the first supposition to be correct, after that, it's perhaps just a case of dividing it up amongst all the events in-between, in the order that they happen or coincide.

Ok, assuming this is a reasonable description of time, let's look at the 'Nature Of Time'.

Simplistically, I would say that, everything that occurs naturally, and I include all sentient beings actions, inventions and achievements in this, during this period, equate to The 'Nature' of Time'.

As we call everything around us 'Nature' there seemingly, would be no dispute there then?

Well assuming there's not, or not much anyway, let's continue.

What we are saying by accepting the above, is that time only exists, if 'matter' exists.

I include 'sentient beings' as 'the part of matter' which can observe time, and who actually 'care' whether it exists or not.

The 'Major Events' described above, the Big Bang and the Big Crunch, are commonly regarded as the beginning and end of all matter, and thereby, I presume, the beginning and end of time.

Following the logic of the above argument, the 'nature of time' is matter.

So that's it then. Everybody's happy. No further questions?

Yeah right!!!

It begs the question, ok then, what's 'the Matter' then?

Answer that, and you'll find the 'nature of time'.

I will attempt to do that.

So……. Consider this statement….

The Universe is 'solid'.

I have an analogy for you.

Imagine a jelly. (An English jelly.) Say it's orange flavoured.

It's been whacked with a paddle so it wobbles/vibrates.

Between the molecules of this orange jelly we fit a strawberry jelly and whack that too, but at a different time than the orange one was whacked, so they are not vibrating in sync.

In fact let's imagine they are wobbling/vibrating at different frequencies.

They are close enough to interact, but only when their frequencies coincide or 'peak' together, they add together. When this happens, a harmonic occurs. Imagine it takes the form of a three dimensional shock wave, an expanding sphere, from the point of contact in all directions through the two 'jellies'.

I'm suggesting that, this point of contact may be viewed perhaps, as a short lived particle, as viewed by us. (Or maybe not quite a particle yet)

At present it's just a disturbance, like a pebble dropped in a pond, except the ripples are three dimensional.

Add another jelly, a lime one, in between the molecules of the other two.

This jelly has a more interesting quality, its frequency isn't constant. (Perhaps it's being continually squashed or pulled) a self-exciting oscillation exists.

(It may be that the other two jellies are doing the same, but lets assume they're 'stable' for now)
'Hunting,' was an old fashioned engineering word describing this phenomenon, and may be more apt.
The suggestion here is, that this 'hunting' vibration, when the timing is right, 'finds' a' harmonic' at the start of the expanding wave, when it forms, and at that moment, is 'in resonance' with it, both containing it, and as importantly…. maintaining it! Energy is absorbed from the 'lime' jelly in the form of 'resonance' provided by its natural vibrating frequency.
Ok I think we can drop the 'Jelly' analogy now.
The 'jelly' was a way to describe what I visualise as individual 'solid' 'vibrating fields'. I consider these fields to be more 'solid' than anything we know. I think they'd have to be, to vibrate at the frequencies required to sustain matter. (Imagine a modern 'solid state' CPU chip, 'solid', but a lot of 'activity' going on in there! In some computer games, whole worlds even universes. Chuckle.) There doesn't have to be a limit of three fields either. There are as many as it takes to make our 'universe' work, using this model. In this universe a true 'vacuum' would be the rarest of all phenomena.
The harmonics I described before may actually be 'sub-harmonics' of the basic frequencies of the vibrating fields, or the fields may be detectable to us, which at present they are not. (Their effects however, are very detectable, matter, gravity etc.)

To continue……..Once resonance has occurred, the contained 'harmonic in resonance' is, I suggest, MATTER! The simplest of all 'harmonics in resonance' being a Hydrogen 'atom'. (I'd prefer just the hydrogen nucleus, a proton, for reasons explained later.)
The 'hunting' field ceases to 'hunt' and starts to become stabilised at this point.
From this point the stabilisation 'expands' as the 'resonant fields' critical frequency continues to 'hunt' to 'find' each 'harmonic in resonance,' in the other fields, virtually instantaneously. (Remember at this moment, 'our time' (as we know it) doesn't exist, or it does, but only since the very first harmonic became maintained by resonance), this expanding 'bubble' of resonance/time, may have given those early hydrogen atoms the direction the universe seems to have today. (Being perhaps, pushed ahead of it like surfers on a giant wave) It may have been the Big Bang.
The first EVENT.

So maybe, the Universe is 'instantly' filled with outwardly moving hydrogen atoms.
The start of TIME.

MATTER (Without it time doesn't exist?)
The simplest resonance/ harmonic described above suggests the creation of the 'Hydrogen atom.' I also suggest that this atom consists only of a nucleus. No 'electrons,' just a three dimensional point where a harmonic exists which is maintained at that point by resonant fields vibrations. The energy required to do this will be enormous. The vibrations from the resonant field will be hitting the 'shell' of the harmonic from all directions around its 'surface' at the same instant. Every 'cycle' that the harmonic would have tried to expand, like the ring in a disturbance in a pond, it will be hit by the resonant fields own vibration cycle, keeping the 'would be' expanding sphere, from expanding. The vibrations will

‘flow’ into this point, constantly, providing only enough energy in order to maintain it. (Assuming that these fields are infinite and that there is a constant ‘pressure’ which tries to maintain the status quo throughout itself. See gravity below.)

A good example of the amount of energy required to maintain an atom is shown when one is ‘split’. What happens here is we hit an ‘atom’ so hard that the harmonic is destroyed. (Its vibrating frequency altered so much as to be completely ‘out of tune’ or out of sync with the resonant maintaining field.) The energy ‘flow’ into it, has nowhere to go, so it stops. (A bit like the hydraulic shockwave (know as ‘water hammer’) caused when a water ‘ball-valve’ bounces on a wave in a water tank. The resulting backward ‘shockwave’ can ‘hammer’ very loudly, even destructively, throughout the whole buildings pipe work.) Similarly the shock wave back –feeds into the resonant field in all directions.(most likely through the static fields too) This energy we can measure. We know it’s ‘lots’. A similar shockwave can also be observed in an atomic bomb explosion. (Larger due to the vast numbers of atoms involved.)
As the harmonic dies, parts of it may have components which are briefly maintained by the resonant field(perhaps spurious harmonics created by the disturbance to the static fields) but are still too much ‘out of sync’ to survive very long. These may be observed as sub particles which are sometimes assumed to make up the atom.
I think not.
I think that the smallest particle of matter is the simplest nucleus, which in this model is a hydrogen (nucleus) atom.
Heavier Elements
It follows that the existence of heavier elements will be the result of the existence of more complex harmonics. These may be the result of the interaction between any number of individual fields and the resonant field. (At present I am only assuming the existence of one ‘resonant’ field, the reason for which may become clearer later.) The more stable elements will be more ‘in tune’ with the ‘resonant’ field, the less stable ones less so.
In this respect, and not for the first time, the periodic table is likened to ‘notes of a musical scale’. Or perhaps the combinations of the various harmonics more like those produced by an orchestra. The less stable elements being more or less ‘discordant’, but still able to exist, for varying amounts of time.
Let’s speculate a little following the above suggestions. If our ‘universe’ can be filled with elements created by one ‘scale’ of notes and harmonics thereof, perhaps other ‘universes’ can exist, created from their own, perhaps higher ‘scale’ of notes, thence elements? These would not be readily detectable by us and may be viewed as existing in another ‘dimension’. There may be many different such ‘scales’.
At this point, I digress a little more, to a question I’ve asked myself many times, If the ‘elements’ are the musical notes of our Universe, is life’s ‘DNA’ ‘The Unfinished Symphony’ that writes itself?
Ok enough speculation and romanticism, back to business. Let’s do the whole electromagnetic spectrum thing.

Let there be light!
So, you’ve got a universe filled with atoms of hydrogen then. They may not all be exactly the same size (The amplitudes of the harmonics may have been ‘captured in resonance’ at

slightly different moments during ‘creation’) but they are all maintained by the same resonant field. They may all be equally spaced apart. Whatever. As soon as they exist, gravity exists. (I’ll explain that later) Each atom would be at absolute zero temperature, they would cause no light or any other ‘radiation’.
Each, resonant ‘node’ by virtue of its size and weight, will have its own slightly different vibration. Soon they’ll start to clump,(It’s important that they are not all identical) As soon as they touch their individual vibrations will interact.(Friction) When they are in close proximity their vibrations will average out and the clusters will gain a common majority vibration. In doing so, their resonant frequency will change slightly from ‘perfect pitch’ to a slightly ‘discordant’ one.
The resonant field vibrations which were ‘flowing’ optimally into these atoms will now encounter a little ‘disruptive feedback’. Ie the ‘out of perfect sync component’ of this mass of atoms will feed back into the maintaining field, in three dimensions. This will be observed as ‘radiation’. (A misnomer if ever there was one.) This would appear at this stage as infra red light,(or perhaps previously as radio frequencies) or heat. It is transmitted back as a wave of continuous disruptive modulation on the incoming vibration flow. When this strikes another atom, which up until now had only had a ‘nice flow’ of perfectly ‘in sync’ vibrations into it, it is demodulated by this atom by this atom absorbing the modulation as ‘Energy’ and in turn raises its ‘temperature’ or raises its level of vibration to sync with that of the incoming ‘disrupted’ vibrational flow. Then its own sustaining resonant flow will be back fed modulated and go on to ‘warm up’ every subsequent atom it touches. So on and so forth. Of course without the continued process of gravity, all these atoms could cool down again as the resonant field gradually returns them all to ‘perfect sync’ frequency. Well as we know this condensing process continues as more and more atoms clump together, their total vibrational differences combine and add up, friction increases. The observed effect of this is of a cloud of gas condensing and getting hotter all the time.

As the body of gas condenses, its total gravitational effect increases, more atoms are attracted and more vibrational equalising takes place. The temperature rises, until the disruptive energy levels reach that of visible light. (And then beyond). ‘Incandescent gas clouds’ are thus formed. After that because of ever increasing gravity, it’s a short journey to becoming a star. (Then the heavier elements are formed through fusion. In this model fusion would be the compressing of the harmonic field vibrations due to distortion by gravity ‘pressure’. Thus pushed together some combine into more complex harmonics. Again, only those sustainable by the resonant field’s vibrations would then ‘exist’ as heavier elements. When two lighter harmonics combine to form a ‘heavier’ or more complex harmonic the new harmonic can never be heavier than the added weights of the original two. In fact the new harmonic will always ‘fall back’ to a sustainable resonant frequency. The difference between the theoretical maximum combined total ‘peak’ of the two harmonics and the actual sustainable peak of the new harmonic will result in energy being released as ‘out of sync’ feedback. Seen as ‘energy’ or radiation. The strength of ‘disruption’ will vary with the discrepancy between the theoretical and actual peak values.

We could see ‘radiation’ at the high end of the electromagnetic spectrum produced. Ie x-rays, gamma rays etc.
It follows, the more complex the harmonic, the more energy would be used to maintain it. Hence the heavier the element, the more of a ‘hole’ it would appear to be, from the resonant fields perspective. Or a greater energy drain. Also the greater its atomic weight, inertia, and gravitational effect. (see gravity further below)

Back to Light
For example : If a light bulb is switched on in a windowless room. The tungsten element is disrupted by the current flowing through it. The resonant field flowing into it is disrupted and modulated; this back feeds into the field and is carried at the speed of light (through air) in all/most directions. When our perfectly resonant black matter, (i.e. the walls of a windowless room, in which the bulb hangs) intercept this modulated resonant field, then that modulation is ‘filtered out’ and disrupts that perfect state. The surface of the walls then ‘radiate’/disrupt the resonant field that is flowing into them and back feed into that. If we put an eye into the room it too is sensitive to this modulated frequency and is disrupted. This disruption is however converted back into the form of disruption which originally disrupted the tungsten filament, electricity, which in turn is sent to the brain and observed as light and interpreted as visible walls. The ‘light,’(in this hypothesis) is not in fact, reflected from the wall, it is actually the walls surface reacting to the disruption its vibrational level, altered correspondingly out of sync and then ‘back feeding’ into its resonant field. This process continues until all matter in the room is ‘disrupted’ to some extent. Or as we term it ‘filled with light’. Turn off the disrupter, the light bulb, and the resonant field is no longer modulated. This source of disruption ceases to the surrounding matter which quickly returns to undisrupted synchronisation with the resonant field. Ie the room gets very dark! In this example the existence of ambient temperature, infra red, has been ignored.

The reason photons have no mass is because they are not particles. They and the whole electro magnetic spectrum are just different energy levels of feedback. The higher the energy level the deeper into other matter it can disrupt, and the longer its effect. Ie light short, heat longer. Radioactivity being exceptionally disruptive, it can generally penetrate deeply into nearby matter and its effect is like striking a bell. It ‘reverberates’, within another ‘body’ causing a very great ‘out of’ tune’ component. This in turn back feeds into its resonant field, and this component is transmitted to and then demodulated, very deeply, by any other matter nearby when this body will then ‘reverberate’. Hence the term radioactive contamination. The resonant field will slowly bring all such contaminated materials ‘back in to sync’ ie disruption/radioactivity will decrease with time. Elements like lead will be heavier more complex harmonics, requiring more energy to sustain them and also more energy to disrupt them, if they are very stable. And various compounds and elements may be more or less likely to ‘reverberate’ than others.

Generally when elements, compounds etc combine or become heavier or lighter, a normalising of vibrational energies will take place. It will normally require the application of ‘heat’ or will produce it, to facilitate the equalisation ie when metals ‘melt’ together in

alloys or when a resin and hardener are mixed to ‘set’ as a glue or new material. Only elements that can resonate at the resonant level and as a whole body will combine. The same for compounds. The out of tune component will be seen as heat or it will be required to have heat added to make the ‘meld’ possible. When a body like a porcelain pot was once whole but is broken. Its individual pieces don’t meld together when placed touching each other.(At normal temperatures) This is because due to individual sizes of the fragments they each have their individual vibrations that are no longer in sync. What we see here is not just the resonant ‘existence permitting’ vibrations, we also see a ‘body mass’ individual vibration. An example of this effect is if you put two mobile phones, together on a desk. They can touch each other quite easily. Now phone each of them up with ‘silent ring’ set to on. They instantly jump apart when they vibrate. Push them together and they again will violently jump apart. Clamp them together (same make of phone same spec.) and they may just synchronise. (Like two pendulum clocks will, when fixed near to each other on the same wall) Together with the ‘clamp’ the body as a whole, will take on a new ‘frequency of vibration’. In the real world, without the clamp, the two phones would probably still grow out of sync and push apart but this would be due to manufacturing discrepancies in body mass or different frictions on the desk surface etc. With similar metals, ‘welding’ can be the medium by which the two different bodies of vibration can normalise and become as one. Another effect of two bodies meeting with different ‘whole body’ levels of vibration is displayed as static electricity or charge.
Electricity is not gone into in great detail in this essay, but the electron can be probably be treated as a photon except that it is at a different frequency or energy level, making it transmittable or ‘disruptive’ to different materials than this other ‘feedback modulation’, (the photon.)
When two dissimilar metals or even non-metals are forced together, their, resonant frequencies are different and will, where they touch, try to get in sync with each other. If they can, they will ‘bond’ if they can’t they will corrode. Or sometimes react violently like the two phones above. I think most chemical combinations and reactions can be explained in terms of their resonant frequencies being more or less compatible at various temperatures (levels of disruption above from their base, ‘perfect resonance’ frequency

Fission and fusion are similar (But greatly magnified) effects, except one element is decaying or melding into lighter or heavier elements. In the case of fission a complex harmonic resonant ‘node’ albeit an unstable one, ‘degrades’ into two or more, lesser more ‘sustainable harmonics’ or ‘lighter elements’ and in doing so the difference in the energy, needed to sustain the heavy element and the two resulting lighter elements (whose combined atomic weights are never as much as the original heavy element) will be seen as backfed energy into that resonant field. Unlike the atomic bomb scenario where there was an abrupt and absolute stop to the ‘flow’ and consequential shockwave. Here there is huge disruption or overspill of energy, but the sustaining vibrations can still get through to maintain the two lighter elements. A steady backfeed of disrupted waves with be observed from this process. This in the case of a nuclear rector will ‘feedback’ into the walls of the reactor where its level of disruption will increase, seen as heat and this heat used to turn turbines which go on to turn generators, which use magnetic transfer to disrupt copper ‘conductors’ which in turn carry this disrupting vibration along their length seeking a ‘damping’ mechanism which can attenuate the disruption.(so as to return to perfect

resonance) If none is found, a standing ‘charge’ (Voltage) is left in the copper. If one is found, like an electric kettle, the…….well you know what happens it gets hot and we can all have a cup of tea. I’m getting fed up with this ☺ Conservation of energy and all that…….it happens ok?

Now let’s do ….**Gravity.**

To surmise….If one field supplies the energy to maintain resonance, even though the field may be infinite (to all intents and purposes), it will need to flow, more accurately its vibrations will need to flow. The vibrations will be drawn into (or through,) the ‘point of resonance’ or say an ‘atom’ of hydrogen. This flow of resonant field vibrations, is a very important concept. A property of the field must be that it tries to maintain a constant ‘pressure’ throughout its volume.

Here’s a water analogy:

Imagine a submarine a mile down in the ocean and a mile clear of the ocean floor.

It has a 2”diameter plastic tube say 30 foot long attached to a large empty, tank inside the sub, which has been pumped out to form a partial ‘vacuum’ (or as good a ‘vacuum’ as we can get.)

The tube is held at full length, away from the sub by a rigid hydraulic arm. Now, the ‘order’ to open a valve is given, and executed, which allows the water from the ocean to enter the tank in the sub via the plastic tube. Just consider the effects on the ocean at the point around the open end of the tube. The water would rush into the ‘hole’/’hydrogen atom’ (the end of the tube), at a tremendous velocity from all the directions that it could. The pressure of the ocean at the tube entrance would be lower than elsewhere (externally) at the same depth. The ocean would flow into the tube from all directions, ‘trying to maintain its pressure’, yet there would be no ‘gaps’ in the water. The velocity of the water in the ocean would vary with the distance from the mouth of the tube. The effect of the flow towards the mouth of the tube would exist throughout the whole ocean, albeit, diminishing at the square of the distance. (Not quite true because the hole at the end of the tube is not a sphere.)

Because all the forces exerted by the ocean on the end of the tube are equal. The tube would not move (even if it weren’t held by the rigid arm, as long as we ignore the ‘reverse loose fire hose’ effects etc.)

This is an analogy of how I see the vibration flow toward a single atom of hydrogen on its own, away from any strong ‘gravitational influence’. The constant, three dimensional, flow of the resonant field’s vibrations into the atom would give it the properties known as ‘inertia’ its reluctance to move, and its ‘atomic weight’, both dependent on the diameter of the ‘tube’. (The more complex harmonics (the greater the tube diameter) would require more vibrational flow hence would exhibit more inertia and greater gravitational effect. (see below)

To understand the ‘gravitational’ effect between two points of matter ie two similar atoms. I’ll use the water/ submarine analogy again.

Same sub, same ocean etc. only, this time, two plastic tubes of equal diameters, connected to the same huge empty, negatively-pressurized tank. This time the two tubes are allowed to 'float' near to one another, say three feet apart.
One valve opens the two tubes to the tank. The order to open the valve is given and executed.
What happens?
The ocean flows into both open ends of the tubes. It flows in from all the directions that it can, equally. On all sides of the two pipes openings will be an equal 'pressure' of water flowing into them….. Except from a direct line (and vectors thereof) between the ends of the tubes, here there will be less pressure, because at this point the water has to divide two ways. This 'unbalance' would result in a moving together of the two floating tubes. They would appear to be 'attracted together' at the same speed as each other, but increasing in speed until they touched. And indeed, when they touched, if the flow of ocean continued at a steady velocity, they would be difficult to separate. This may illustrate gravity and 'atomic bonding'. Ie a weak force then a strong force, there again maybe not both. (I've never measured the actual forces involved, don't have a sub)
In the case of our two points of matter, the effect would be three dimensional, but the same. They would appear to be attracted together. They would in fact be being pushed together more than being attracted, but the observed effect is the same.
As more and more matter is grouped together this effect is magnified and is more easily observed as 'gravity'.
This effect in every point of matter in the universe will have an effect on every other point of matter, no matter how distant. What will vary is the intensity of the effect, dependent upon the mass of the object and the proximity to another object.
As we know, for larger groupings of matter, density distribution, and other factors such as shape, can have a bearing on the 'shape' and intensity, of the gravitational effect.

Consider a hydrogen atom (small diameter tube) placed near to a lead atom (larger diameter tube) in space would move appreciably more towards the lead atom than the lead atom would move towards it.
More on Inertia. Imagine the scenario a hydrogen atom and the lead atom placed near to each other in 'space'. Imagine the last submarine analogy with two different diameter tubes. Say one twenty times the diameter of the other. They would both be connected to the same 'vacuum' and the same valve controlling their openings. Open the valve and maybe twenty times (I don't know the maths) the flow would enter the larger tube end than the smaller tube end. The large tube's inertia would be greater. The ocean would flow into both tubes but the pressure drop around the large tube end would also be greater. Therefore a greater body of water would move toward the large pipe even while still entering the smaller pipe. The pressure drop between the tube ends may be the same, but due to the greater inertia of the larger pipe, and the ocean flow, the smaller tube would move further toward the larger tube, than the larger one to the smaller one. I bet!!!
This is why a hydrogen atom (small diameter tube) placed near to a lead atom (larger diameter tube) in space would move appreciably more towards the lead atom than the lead atom would move towards it. Once 'inertia' is understood and established as a property of matter, then the reason why all object 'fall' at the same rate of acceleration as observed on Earth.(or toward an large mass) is known.

So far I've tried to make a case for vibrating fields to be the cause of the existence of matter and hence 'The beginning of Time'.
The perhaps, 'static fields', whose harmonics are constantly occurring, some being sustained by a once 'hunting' field.
It, now stabilised by 'its job' of maintaining all the matter in the universe.
I've tried to show how this model can account for many of the properties of matter and its associated energies. (Reading back, perhaps not always very clearly, and certainly not explaining everything!
That would take a book not an essay!) ☺
However this is about the 'Nature of Time' and, as just stated I've only covered the (possible) beginning of time.
What about the (possible) end?
Well, it was all very expedient for the 'hunting field,' to stop hunting, immediately it filled the universe with hydrogen, wasn't it? Let's just suppose it had a 'momentum' behind its oscillations.
If you've ever observed a 'Lava Lamp,' you may, like me, have been fascinated by the way the heated coloured globules of oil rise and fall. How one rising can collide, merge, and then add to one that's falling, hang there as a much larger globule,' FOR A WHILE,' Then carry on its journey to the top of the lamp!
Say the hunting field is just at the 'mid point' of its 'lava lamp'? It has halted briefly, in its little 'resonance trap' (many billions of years to us!) and then it's 'momentum' carries it on, out of 'resonance range' with a final tug.
Then 'CRUNCH!!!' every atom in the Universe ceases to exist!
If you thought the big bang was loud!!! Blimey! You 'aint heard nuttin yet!!!
What I reckon is that the creation of matter was probably relatively 'quiet'. I reckon what we see as 'background radiation' may well be the distant echoes of the last REALLY- BIG CRUNCH!!! Or it might be what 'whacks the 'Jellies'!
(Of course we would all eagerly await the return cycle of the 'hunting field'.
It wouldn't take long……. as time simply, wouldn't exist!

There you go then, the beginning and end of time and 'the nature of it' in-between, and a bit beyond. What more do you want?
The answer to Life the Universe and Everything?
Well I can't explain life, and certainly not everything, but just maybe the answer to life is Avoid Excesses, (big bangs and big crunches!!!)……Modulation in Everything! ☺