The Final Theory

The Shrinking Theory (Roland Michel Tremblay)

Vs.

The Expansion Theory (Mark McCutcheon)

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The Final Theory, a Book by Mark McCutcheon

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Summary

To be continued…

Preface

It has been a while since I worked on my **Shrinking Theory of the Universe or Universal Relativity** as I came to also call it eventually. In a way it is a good thing that I didn't develop it further, because I understand now that I was not on the right track, though I sometimes feel I was closer than any other theoretical physicists out there. Perhaps if I had continued I could have come up with what Mark McCutcheon realised, especially if I had paid more attention to gravity, and how it turns out that expanding electrons and hence the expansion of all objects in the universe explains gravity completely. However, Mark McCutcheon (also a Canadian like me) wrote such a great book about it all, it is as well that he also was interested in this way of picturing the universe.

My problem, and why I started working on theoretical physics in the first place, is that Einstein Theories did not make any sense to me. For a long time I assumed that it was because I couldn't understand, and when you are confronted with such mind boggling ideas, you can spend an eternity trying to figure out how this all works in practice, without even realising that altogether the theories were wrong. And this is what I did, I tried to push it as far as I could, to understand the real implications of that logic, and trying to fix the problems I was encountering in Einstein's theories. I could only come to the conclusion that somehow matter must shrink and must expand, as it was the only way Einstein's ideas could work. So I was on the right track when I assumed that somehow matter was expanding, I just needed to forget Einstein and push the idea further.

I came across Mark McCutcheon's book very suddenly as well. I was only attracted to the book in the first place because anyone suggesting that somehow all matter could be expanding sounded like my own theories. I have come across such idea so seldom since I started writing my ideas in 1995, that of course I jumped at the chance to read anything upon the subject. I wasn't prepared for what I have read, McCutcheon is in my mind a genius, and on that scale, if it turns out that he is right (and I cannot believe for a second that he is wrong), I feel he will be remembered as a genius mind surpassing Newton and Einstein, because in the end, he would be the one who finally figured it all out.

What is impressive, is how the simple idea and principle that there is only one fundamental particle in the universe, the electron, and that this electron is expanding at a constant rate, can lead to so much understanding about physics, and revolutionise everything. I admit that sometimes it is what the Standard Theory states, and Expansion Theory is just another way of interpreting it, different ways of calling certain phenomena, but the revolution is still there, because now we understand everything, and this could lead to better technology, even perhaps new technology we never imagined could exist. As for Science Fiction though, I'm afraid, just like the Standard Theory, it has just been killed. A lot of creativity will be required indeed to come up with great new sci-fi, and I have already some great ideas boiling inside.

I have read the book The Final Theory twice now (and perhaps more as I kept re-reading many passages) and I am now reading it a third time. Frankly, I feel it is really worth reading. I have read the comments on Amazon.com and .co.uk, I found that most negative critics were poorly developed and seemed to have been written by people who never read the book but somehow felt threaten by it. Mark McCutcheon may turn out to be right. He certainly convinced me and I am eager to read more critics by real theoretical physicists upon the subject of what McCutcheon has presented. You cannot deny that a large percentage of the positive critics must be real, so there must be something about this book. I doubt you could write a negative critic of the Final Theory after reading it. And negative critics from people who never read the book in the first place is a bit ridiculous.

As this is a report in development (a work in progress) about the book The Final Theory, many sentences will remain unfinished, or other ideas or comments poorly developed and badly explained. In the end, maybe I am writing this for

myself, in order to help me fully integrate this new physics and develop some ideas for future sci-fi books and film scripts.

I also do not see the point of rewriting here Mark McCutcheon's book, and I will not explain in details everything he has already written, especially when I feel the subject at hand is quite complicated, overwhelming, and can only be explained by a multitude of details about every single area of physics. It is not doing justice to the book, but hey, people are going to start talking about this book, as we have already witnessed in some forums over the Internet, and so, in the end, it is better to at least talk about it than not at all.

So for the purpose of this report, I will assume you have read the book. If you are not going to purchase the book, you may find it hard to follow my comments and arguments. I suggest then that you try to grasp whatever you can from what I have written, and when I state something Mark said without justifying it, you can be certain it is well explained in his book. I also encourage you to read the comments on Amazon.com and Amazon.co.uk, you might get a better idea about Mark's theories. It is not that helpful to read Mark McCutcheon's website, or the one of his publisher, you will find nothing there about his theories. You will be able to read the first chapter demonstrating where Newton went wrong with gravity, however it is in chapter two that we get to understand the solution to gravity and get acquainted with the expanding electron explaining and re-writing overnight all of physics. You will however get a very good idea about all that Expansion Theory solves when it comes to the mysteries of the old physics. And when you think about it, as you read it, it is overwhelming that the expansion of the atom could solve virtually all of these mysteries.

You will never read anything related to physics the same way after reading the book. I see the loopholes everywhere, I know the answers now, and it is extraordinary to see those struggling theoretical physicists inventing stuff to justify for example the Pioneer satellites anomaly as they exited the solar system, when they have their answer right here in Expansion Theory. My guess is that eventually it will explode all over the world and Expansion Theory will be seriously considered, I can see however that it is possible that it might never happen and the world could go on ignoring a strong candidate for the Theory of Everything. It is however so convincing, it is most probably just a question of time. At first sight, without reading the book, I admit that it sounds preposterous. However it quickly becomes serious and credible as you read the chapters. No one can dismiss it out off hand, we need proper debunking by knowledgeable people, and it is too early yet to have such analysis or critics at hand.

One word of warning, if something does not appear to make sense in what I am saying, or sounds like a contradiction, especially when talking about McCutcheon's book and concepts, it is probably because I haven't completely understood everything yet. The book is however very well thought out and I'm sure the mistake is mine, not Mark McCutcheon's. It is after all over 400 pages long. I wouldn't want you to believe he said certain things that he never stated, though I understand it may become difficult to make the distinction.

I encourage you to read the book The Final Theory, and then you will quickly understand what Mark has said compared to my additions and other comments. Don't simply assume he said these things himself, I am struggling to assimilate everything he has written and what he exactly meant by all of it. I am also trying to extrapolate his ideas further to see what kind of sci-fi I could come up with when considering Expansion Theory.

Even though his book redefines Physics as we know it, and that you will find plenty of maths and equations to justify his points, you can easily skip the hard science as it is clearly defined in certain specific sections, and then the book can remain popular science accessible to anyone. Don't be afraid of reading it even if you are not a theoretical physicist. And if you are a theoretical physicist, even if you reject the main idea outright (as I would think you cannot fail to do),

there are a lot of other points identifying real problems in Physics today, and then let's see if you can find answers to all of these questions as McCutcheon did.

Another warning, this discussion with myself assumes outright that everything Mark McCutcheon stated is true, whether it is or not. I am not here comparing Expansion Theory with Standard Theory, including Relativity and Quantum Mechanics, I assume Expansion Theory is true for the sake of the argument, and from there try to see further. If you are not familiar at all with the Standard Model, you could really get confused here and start believing things that you would never hear in class. So don't be surprised when I assume that there is only one fundamental particle in nature, the electron, when you have learnt that there were many different subatomic particles in nature like protons, neutrons and quarks. This is all taken out of context, so read the book first if you want to understand where I'm coming from.

The Shrinking Theory

Vs.

The Expansion Theory

I would like to thank everyone who read **my ideas** in the last 12 years, who sent me great comments and showed enthusiasm. Though I was never sure if I was right, especially on all my wild claims, no one was ever able to convince me that I was wrong. And God knows I was always there expecting the e-mail that would confirm that I was completely mistaken.

In times I have met one or two other persons with similar ideas, but we appeared to be going in different directions. Apart from my discussions with William Taggarth working on Scale Relativity (**that you can read here**), I was very much alone thinking my theories. I also have to say that William did not share much with me, I never read his book for example because I couldn't find it, and he was afraid of telling me more, as perhaps he felt it was dangerous knowledge. So I'm not certain how we connect with our theories.

I was attracted recently to The Final Theory, written by Mark McCutcheon, a Canadian-born Engineer with a lot of theoretical physics background, and science enthusiast now living in Australia. I only bought the book because it stated that he had a new revolutionary theory called Expansion Theory. It was instantly clear in my mind that my Shrinking Theory could have easily been called The Shrinking-Expansion Theory, whilst Mark's theory could only be called The Expansion Theory, from what I could gather from his book.

So after reading his book, and being completely convinced that he went much further than me on the topic and must be right, I feel I have more to add which could contribute to his ideas. This is why for the first time in many years I have decided to get back to explaining my theories further, helped with what Mark McCutcheon has claimed. I feel that I have never been so close to the truth and it is now demonstrated how matter can expand and how it would explain just about any weird phenomena in physics, even though according to Mark all matter only expands at the same rate at all time, and so it remains for me to find out if electrons can also shrink, or if at least the expansion rate could be variable. According to Mark, the answer is no.

I don't know how Mark came to his conclusions, or how he first thought that all atomic structures were expanding at the same rate (could it be after reading the book Flatland?). Once someone told me: what about gravity in your theories? And right there I knew I had never thought of the role of gravity in my

ideas, and I was supposed to investigate it later. Unfortunately I never had the time, with my full time jobs. Is it possible I would have made the link between gravity and expanding matter, to the point of eradicating all Newton's theories on the subject? I don't know. However Mark did it for me now, and he described it with clarity.

I came to my own conclusions, I would say, following a different logic than Mark. I did think that matter was expanding and shrinking with acceleration or deceleration, but this is not part of what Mark states in his Expansion Theory. However as you read my comments, this way of explaining the universe could still be applicable when you travel faster than the speed of light, even though it would be more like an optical illusion than reality. He described it in more technical terms and with maths, something I could not do. And now, I feel I can contribute to identify more of the underlying principles of the mechanics of physics, though I'm hoping that Mark has not already finished the job.

In any case, this is early days for this brand new theory of everything, and since it is still quite unknown, I feel like some sort of pioneer assimilating new theories, with a great and unique chance to be one of the first to comment on it. Nice change, because there is little you could have added to the Standard Theory, most of it being over a century old. My uncle once told me that in this day and age we could now only contribute a little detail, nothing more, and when you look at the people who won the Nobel Prize in recent years, you have to agree that there has been nothing revolutionary in there for decades. And now Mark McCutcheon has proven that one single little idea, can change just about everything we thought about physics.

I will first start by quickly explaining what Mark's theory states. For copyrights reason, I will not be able to go too much in details, and eventually, if you are interested in this subject, you will have to read his book. It is anyway difficult to convince anyone of the credibility of this theory if they have not read the book. Many proofs are available there that I could not write here without rewriting the book. So for the purpose of this report, I will assume that you have read his book, or will eventually read it. So I can only state the main lines and move on.

Then I will go on to describe other things I thought over the years that could be added to what he said, or how it can connect. Questions also, more questions, as I need to understand better the implications of Expansion Theory.

Links to discussions expanding on Expansion Theory

It might be helpful to read these before going any further, it will help you get the basics of Expansion Theory according to Mark McCutcheon (but you really need to read the book to get the whole picture):

http://www.usenet.com/newsgroups/sci.physics.particle/msg02546.html
(follow all the linked-answers at the bottom to read the whole discussion)

(I will add more links as I find them.)

Comments or clarification

about Expansion Theory

Difference between matter and energy, considering that both are made of expanding electrons either in the subatomic realms (within the atom, forming neutrons, protons and bouncing electrons, ie matter), or in the atomic realm (outside the atom structure, free electrons or externalized), or freely expanding electrons in space (electron clouds being electric and magnetic fields and radio waves, or electron clusters being light, heat and radiation).

Everything is made of expanding electrons, they always expand at the same expansion rate (Xs). Within the subatomic realm, they are trapped within the structure of the atom, in itself composed of expanding electrons forming protons and neutrons (nuclei) and bouncing electrons. As such they are matter and can create the different elements of the table of elements via chemical bonding, and hence form the bulk of all metals, rocks and biological matter.

When the electrons expand freely in space once they are externalized from the subatomic realm, they are defined basically as all forms of energy including electricity, radio waves, magnetism, light and radiation like for example heat and microwaves.

Important note is that the electrons always expand at the same expansion rate, whether they are expanding in the subatomic realm or the atomic realm. The difference being that in the subatomic realm they are tightly compacted together in atoms to form matter, and in the atomic realm they are outside the subatomic realm, and then the electrons can expand as electron clouds or clusters. Electrons expands at a different rate than the rate at which atoms expand, it could be a much higher rate. Within the atom, despite the fact that electrons expand much faster, the atom does not expand as fast.

Any machine or technology we have developed to produce energy is a machine or technology destabilizing atoms, in effect freeing the electrons from their compacted subatomic realms, so they can be turned into energy. In that respect, a power plant does just that, freeing electrons from atomic structures to create for example electricity. And this electricity (expanding electrons outside the subatomic realm going on a wire, pushing each other as they expand) can be stored and sent via wires to our homes so we can have light, heaters, conventional ovens and microwave ovens.

These machines we use are taking advantage of already freed electrons to create all forms of radiation, including light, microwaves and even the heating in the conventional oven. These electrons are not only free from the subatomic realm at that point, they have now become free expanding electron clouds (electric fields, magnetic fields, radio waves) or free expanding electron clusters (light and other forms of radiation like X-rays and gamma rays).

We could say that these free electrons, once they have gone through one of our machines, or even in natural occurring phenomena like thunderstorms or northern lights, are now being moved to the speed of light, and the resulting phenomenon depends on the speed (intensity) and concentration (power level) of production or release of expanding electrons.

Key points to investigate

So we have been quite successful at building machines capable of destabilizing or vibrating atoms and freeing the expanding electrons. We have also been highly successful at creating machines capable of turning these free

electrons into all forms of radiation by sending them through space at the speed of light at different intensity and frequencies. In old terms, we are excellent at turning matter into energy, even though now energy is simply expanding electrons, and so there is only matter in this universe.

But what about turning energy into matter? I thought the question was important, because I am looking for examples where clouds or clusters of free expanding electrons could return to the subatomic realm to form once again atoms composed of neutrons and protons and bouncing electrons (note that protons and neutrons are many electrons stuck together and maintained as such by the geometry of expanding electrons creating a binding force).

There lays the possibility to create replicators and holodecks like in Star Trek. However I was initially interested in this because I thought somehow free expanding electrons within clouds or clusters, were now expanding faster than within an atom. I understand now that this is not true, they always all expand at the same expansion rate, either in the subatomic realm or in the atomic realm, or even when they expand freely in space as magnetic fields, radio waves, light or radiation. The difference being that when freely expanding in space, they are propelled and go at the speed of light. So it is not a question of expanding at a different expansion rate, eliminating the possibility of shrinking at any time, it is a question of speed and concentration of electrons within a cluster or a cloud. And so a microwave oven for example, or a lamp, simply take free electrons moving on a wire to vibrate atoms of some transistor, and propel the electrons into the air at the speed of light, creating light or highly concentrated heat.

No proof of anything shrinking yet, no proof we can get those electrons to stop expanding or shrink. At least I may wonder if we can force them to return to form atoms. Can we? It seems so from what I read in the book of Mark McCutcheon. It is clear though that electrons outside the atomic realm can shrink back to the subatomic realm, this is what occurs in batteries, when the electrons expands on the wire around a circuit and shrink back to the subatomic realm when they reach the end of the circuit (+).

Question 1:

Apparently a battery or a closed circuit work on the premise that externalized free electrons go back at the end of the cycle to the subatomic realm, and in doing so, those free electrons, I wonder, could go back to form neutrons, protons and bouncing electrons to form atoms, or can they? They appear to go back to the subatomic realm naturally, without us having to do anything to force them to do so. Now the question is, **can we get free expanding electrons in electron clouds or clusters to become simple free electrons on a wire, and then back into atoms?**

In those particle accelerators at CERN, by creating bursts of protons propelled in these high magnetic fields, we get some of the these electron clouds to return to the subatomic realm, this is when we say that a particle has been created out of nothing, or when we say that a virtual particle or even a particle of antimatter has collided or annihilated a particle of matter. This is in fact Electron clouds returning to electrons, returning to form subatomic particles (electrons glued together, but not enough to form a proton, a neutron or an atom, or a full atom), a new particle is created. In fact these new particles are just a variable amount of electrons together. And antimatter no longer exists in Expansion Theory.

I'm still far off finding out if electron clouds or clusters can become spontaneously atoms again, or if this a process that takes a long time. Are there not simpler technology or natural phenomenon where clouds or clusters can go back to normal matter, atomic structures? Eventually a bunch of electrons

together in the subatomic realm, still expanding, must go and form atomic structures again..

Question 2:

Can we get those expanding electrons to stop expanding or even start shrinking? Stopping the Expansion of the electrons of a spaceship (shrinking it), how could we ever achieve it in science fiction, whilst still sounding plausible from the point of view of Expansion Theory.

Wow, this is a crucial question, because my entire theoretical physics ideas are based on that simple supposition.

It is true that since I have read the book Final Theory, I basically realised that, first, I came very close to the real physics underlying our world, and yet, very far in the sense that I was wrong completely, even though I had the idea that somehow matter could expand and shrink. My error, I believe, could be that pretty much everything I wrote was based on Einstein's relativity and quantum mechanics, which now, even though they were good at observing and describing models of what really goes on, anything based on these theories, or anything else in the standard theory, will most definitely fail.

And yet, I cannot stop thinking that if somehow an expanding electron could be stopped from expanding, or expand at a different expansion rate, or could even start shrinking, there could still be hope in science that we could go a long way towards creating worthy technologies, not the least creating interesting science fiction. Because in light of the Final Theory of Mark McCutcheon, the final word is that science fiction is now dead. There are no more bizarre phenomena in physics, there are no more mysteries and extraordinary or unbelievable events, it is all explained as plain as day, and we are all very limited indeed in what we can do in terms of science fiction.

As fantastic as the idea of an expanding electron is, considering that this is now described as the only fundamental or basic subatomic particle there is in this world, how impossible is it that there could exist shrinking electrons? Is there anything in science or in this world suggesting that perhaps there are shrinking electrons, or even, a variable expansion rate instead of a single one and universal expansion rate for all electrons, and hence, of everything there is in this world?

The constant expansion rate explains the speed of light and radio waves being a constant (C), so if the speed of light can be relative at all, or changing, then the expansion rate must also possibly be variable or relative. But relativity is now all gone, we will not find answers in there. And the other proof that the speed of light might be variable in time turns out that we simply didn't understand the physics involved, and that the red-shifted light does not mean that galaxies are speeding away from us at speed faster than light.

If somehow at some point in history the speed of light was different than now, then the expansion rate must also have been different. With it, all gravity would be different as well, because gravity depends entirely on the constant expansion rate of electrons and all matter. However, the idea that the speed of light might have been different in the past comes from the idea that galaxies are accelerating away from each other all the time, but Expansion Theory shows that red-shift in the spectrum does not mean necessarily that galaxies are moving away from us at high speed. But Expansion Theory does states that whilst the electrons originally expanded at the birth of the universe, there may have been a time when the expansion rate was different, or at the very least that as they were not all of identical size at that point, it seems that their expansion rate could have been higher compared with larger electrons, proportionally speaking. But then the laws of physics must have been very different then and atomic structures as we know it must have been a difficult process that most probably came later as the electrons became more and more of identical size.

The distance between all objects in the universe shrinks constantly at the same rate, even though proportionally larger objects (not more massive or heavier) will quickly take over other smaller objects, which explains why we are stuck on Earth all the time and objects fall back to earth at a constant speed (9.8 m/s^2), no matter how heavy or light the object is. It is now known (according to Expansion Theory) that the earth expands at a rate of 4.9 meters per second. So you always appear to be falling back to earth at a speed of 9.8 meters per second-squared, when in fact, you never truly move at all, the distance between you and the earth shrinks at that speed. And this expansion is actually accelerating. You will have to read the book to understand all that, I'm explaining it wrongly.

If you can travel faster than the speed of light, and there is nothing in Expansion Theory to prevent you from doing so, then you would in fact be moving faster than what light can report to you, and hence, you could at least see the past.

If for example sometime in the future we invent some technology capable of letting you travel at 50 times the speed of light, for example, you could reach another star system almost instantly. What would you see then? It takes 50 years for the light from that system to reach Earth. So what you see from here is a star and planets of a certain size, but when you arrive there these are much larger than you could have imagined, because in 50 years these star and planets had the time to expand considerably compared to what you see on Earth. As you moved closer at high speed, they would grow much larger under your very eyes. So this is a way to get instant higher expansion rate than the reality, as this star 50 light years away would have to expand from what you saw into the past to what it is now. So in fact, whenever you accelerate towards an object, that object expands faster than usual, even though this is just an illusion. That star simply expands at a rate of 0,00000077 metre per second squared in real time.

And as you go along at speed faster than light, the Earth behind you would start shrinking from your point of view, because once you are on that other star, the Earth would look like it was 50 years ago, the time it took for light to reach that star, and so the Earth would look much smaller than it really is. You would be looking at the past of the Earth, 50 years into the past, and as the Earth expands a full 4.9 meters per second, and double in size every 19 minutes, the difference in size will be huge.

Going back to Earth at 50 times the speed of light would bring you back to the present. If you came back to Earth at a speed of 100 times the speed of light, could you travel in time? Not really, the Earth would simply expand at a higher expansion rate than if you were to return at 50 times the speed of light.

Could you actually shrink or expand at a different rate than the 0.00000077 m/s^2, which is the universal expansion rate of everything in the universe? Could there still be some sort of weird relativity as Einstein stated? Or else, what would happen exactly when travelling at such velocities?

It is perhaps possible that acceleration and deceleration have an effect on the expansion rate of the accelerating and decelerating object, most especially on objects going faster than the speed of light, as in essence, those objects would be going faster than the rate at which expanding electron clusters expand, and then perhaps the electrons composing these objects would also expand faster than normal electrons at rest. I don't believe McCutcheon would accept such an idea, but he has not talked about this kind of relative motion in details in his book.

If the electrons in the subatomic realms can go faster than the speed of light, what happens then when suddenly you vibrate a few atoms and electrons start expanding freely into space to become electron clouds? Would these freely expanding electrons still only move at the speed of light? I guess so. It is weird that electrons in the subatomic realm could go faster than light, but as soon as they expand freely into space, they would expand and move at the speed of light. So how could you see anything if light would be travelling slower than you do?

How could you heat up your spaceship, when heat is basically expanding electron clusters which would expand at the speed of light, and could not keep up with you? And what about radio waves? Could you still use your radio and your TV, or even computers?

I don't think there is even a chance for time travel just by going faster than the speed of light, however with a powerful telescope it would certainly be possible to see the past of the Earth if we were to travel at many times the speed of light away from the Earth before looking back.

I cannot shake up the fact that as soon as you start moving faster than the speed of light, suddenly the old Theory of Relativity from before Einstein (including the equations of Lorentz), might apply. And my old Shrinking Theory (which could also be called Expansion Theory), might also apply, even though in reality these objects would not be expanding and shrinking at extraordinary rates, even though they would appear to be doing so from your point of view.

All right, what is it that I have not understood yet about all this? I need to think more upon the subject.

Time for some calculations (there is always a first). VY Canis Majoris is the biggest star we have identified in the night sky and is about 5000 light years away from us. At the moment we have estimated that it is about 1800 to 2100 solar radii in size (using the old physics, so all these figures could be horribly wrong, however it will do for the purpose of this exercise). So, let's assume this star is 2000 solar radii, in itself this is really huge, and if we were to replace our sun with VY Canis Majoris, the circumference would go up to the orbit of Saturn (in at least one of the interpretations about how big that star really is).

Now, as it is 5000 light years away, what we see is the size it was 5000 years ago. As its size since then continued to double every 19 minutes, in fact, this star is so huge, it might as well be in a different scale universe. I tried to do some calculations about how big it really is, but all I got was mind boggling numbers and I'm afraid I may have made a mistake.

Assuming I am not mistaken, according to Expansion Theory, then most celestial bodies we see in the night sky could in fact be much larger than we think. If it is the case, it would be interesting for someone to do a computer simulation to show us what everything truly looks like in the universe compared with us, taking into account how far away these stars and other objects are, and how much they have expanded since their light reached us. With that new vision, we might have a better idea of what the universe might look like at another scale.

That computer simulation would need to be static, as if it was a photo of the universe taken from outside of it at one point in time. And then this simulation could be extended to show us what it would look like if it was in fact filmed, and how all this looks like as it expands in time.

The simulation would also need to show us how it would look to us, which would mean not showing the expansion of everything, but what we would see as we expand with it. We already have a good idea about that, spiralling things, orbiting things, but then, we don't have a complete picture as we cannot see how expanded these other objects really are compared to us, considering that it takes years for their light to reach us. And if we see them as orbiting, it is not necessarily how they truly move as they expand, if we could see it from outside of the universe and if we were not expanding with everything else. This true motion of objects in space when you look at it as they expand, and not as we see it whilst within it and expanding with it, is what interests me most.

Question 3:

Are there any instances where light or the speed of light or a radio signal does not appear to be constant? This in order to suggest that the expansion rate could also be variable, relative or not so constant.

When light goes through certain materials, sometimes it appears as if light can go slower, and sometimes, it could even appear as if light is going faster than C. If this is not just a trick of reflection or an optic illusion, at that point, at the very least, the expansion rate might not be so constant, and perhaps there is a way to change the expansion rate of electrons, to perhaps stop it, and then, maybe we could think of an experiment where the expansion rate can be reversed, and electrons and objects could now shrink instead of expanding. Then travelling anywhere instantly, or communicating instantly with anyone anywhere in the universe, might be possible.

McCutcheon spoke of light going through a material, and being slowed down by the matter of the material as the electron clusters collide with it, and states that the light coming out at the other end, instantly continuing to expand at its normal expansion rate, must have lost a few expanding electrons in the process. I think this is what he said. But has this truly slowed down the expansion of electron clusters for a while? And could we then stop this expansion somehow?

At the time that the film Frequency went out, it was said that some people did experience for real some strange communications from the future and the past between two users of HAM radio. It was said that somehow possibly the signals travelled into space and were deflected back to Earth, and so instant communication with the future and the past was possible. I don't know how this could be explained from the point of view of Expansion Theory, but it would be interesting, because if it is true, you could in theory change the future. Maybe the extra material on the DVD is the source of this having happened in real life, I need to look at it again.

If radio wave signals are just compressed band of freely expanding electron clouds, could they be deflected back after travelling for quite a while into space to permit different timeframe communication? Even with a 10 years up to 30 years time difference?

I have to mention that McCutcheon believes in instant communication at speed faster than the speed of light, and that if people living in other solar systems were to try to communicate with us, it is likely they would use the very light of their Sun to do so in order to communicate with us instantly instead of waiting for the expanding electron clouds to cover such time consuming distances. As a light beam is a continuous flow of expanding electron clusters all touching each others, by vibrating one at one end, you could instantly vibrate them all up to wherever that light has reached so far. So in theory you could instantly communicate with another solar system thousands of light years away from here, as you have a direct connection of electron clusters from here to there as soon as you see the light from their sun. The process is similar to these Newton's cradle toy or bearing balls suspended on strings. You move the first one and then instantly the last ball pops up much faster than it would take for the first ball to swing the whole distance. This came out of his debunking of Quantum Entanglement. So at the very least faster than light communication should be possible and might very well be the way to receive any communication from outer space. SETI might wish to investigate that further, how to listen to such communication from the light of distant stars. Could there be any unusual pattern in those light beams, hidden communications?

In Star Trek TNG, there was an episode called New Ground about a ship travelling on a soliton wave in space, or something similar. It was going faster than the speed of light anyway, so I don't remember exactly what it was. Could somehow the fact that we have a whole link of electron clusters all the way to all the stars we see in the sky be used for more than just instant communication?

Question 4:

Are there any instances where gravity seems to be variable, or changing? Are there any observed objects which perhaps expand faster or slower over time, and even change their rate of expansion?

The answer to that question might be found in Black Holes and whatever it is that is happening in those instances. I understand now that there are no such things as singularities, and so no more wormholes or possible holes in the fabric of space or of spacetime (no more time as a dimension, time is now meaningless, a simple convention, and this world has indeed only three dimensions).

There is nothing magical or impressive now about black holes, there is no such thing as so much gravity around it that even light cannot escape, and we all know anyway that light and radiation can escape. There is a lot of gravity there, simply because there is a large object there, not even a massive one. It does not appear clearly because usually it is a dead star, and dead stars are no longer shiny objects readily observable via a telescope.

If gravity is slightly different at the poles, it is only because the Earth is not circular, it is flatten at the poles. It is normal and explainable, gravity depends on the shape of an object and its size (but not it's mass or weight). The distance between two balloons as large as planets and filled with nothing, will shrink at the same rate as the distance between two massive planets.

So what is my question exactly? Gravity can no longer be used to time travel, what can it be used for? It does not even explain the slingshot effect anymore that we use to speed up our satellites and spaceships through the solar system, as this is now explained, I believe, by the expanding orbits around the Sun. Highly massive objects will no longer have tremendous gravity fields around them, it is now a question of size and shrinking distances as objects expand.

So my real question is, are there any instances in the universe where gravity could be variable or changing, meaning, the expansion rate of these objects might vary, and that not being the consequence of weirdly shaped objects?

Question 5:

What is the origin of the constant and universal atomic expansion rate of all matter and energy, of all electrons? Why is it what it is (0.00000077 per second each second (s^2)) for the atoms, and Xs (unknown) for the electrons themselves? And could we artificially change that expansion rate or is it intrinsic to our universe and cannot be changed?

Great sci-fi could come out of that, a changing expansion rate for electrons composing an object, what would happen then?

From what I could gather from Mark's book, there must be some sort of primordial universe containing ours where there could be some primordial time different than ours. As we have no idea about what that universe might look like, we cannot assume there is there a different primordial expansion rate of electrons, the only fundamental particle in nature. I also could gather that the way the whole thing started is a bit like ripples on a pond, and from there the expansion rate not only must remain constant, but if it was not, all matter and objects in the universe might stop to exist. In view of that, can there really be some electrons and even objects not expanding at a constant expansion rate?

Question 6:

Is there some missing mass in the universe, or some dark matter?

Mark McCutcheon does not mention missing mass in his book, he does mention dark matter and dark energy a few times, just to dismiss them,

proposing instead that Expansion Theory will probably bring new answers to these debated questions. I believe it, however I would like to hear more on the subject.

I understand why Mark could not venture too much into this, because it would require a lot of calculations to find out if the whole structure of what we see in the universe could very well exist just by considering the size of everything we see, instead of their mass which we know by now we have completely wrong using Newton's equations. None of the orbits and movements of the planets require a force or a mass, only the size of all the expanding objects is necessary, expansion and surfaces dictate the space shrinking between the objects and their orbits. Motion in the universe is purely a consequence of the geometry of the expansion of matter.

Already there, how could there be a missing mass in order to explain what we see, as it has been said that we would need something like ten times more mass in the universe to explain its configuration, when its configuration has nothing to do with mass? Is there still a problem then, or will Expansion Theory explain it all? I have no doubt it will, and I wish Mark McCutcheon could have ventured further on the topic, but there is also that black holes from the point of view of Expansion Theory do exist, even if there is no singularity in the middle. A collapsed neutron star could be a black hole, but it would still be large in size enough to have things orbiting it or crashing into it, and it would be impossible for us to see simply because these collapsed stars are by definition collapsed, and hence they simply don't emit light that we can see, unlike stars. It would not mean that there is anything weird about it, no singularity, no extra gravity, just a large object we cannot see which can still create orbits. And then the question is how much of these large objects not emitting light are there or would be necessary to explain the configuration of the universe? And is there such a need for a lot of these objects, or switching from Newton to McCutcheon's expansion is sufficient to explain this configuration without a need for missing mass, or missing large objects, or dark matter and dark energy? That is why Mark McCutcheon can only say that Expansion Theory will give us a new start in the study of this phenomenon, but could not state anything definite.

One fact at the very least could be taken into account, from what I gathered thinking about it tonight. First, when you look at a star 100 light years away, you need to take into account that in reality that star is very much larger than you see it, in fact, the whole sky are filled with objects that are much larger than you see them, as we see them in the past, the time it takes for light to reach us.

It doesn't really matter how much they expand in time, everything expands at a constant rate. But when you look at a galaxy, some of the stars you see are closer to you, the last ones at the end are further away, if we're talking light years in difference, then you would see stars a certain size, others a certain other size, it would not be an exact representation of how this galaxy really looks like. It could even explain why objects would look more shrunk in the direction they're going as Einstein pointed out, because you see the end at a later time in the past and so for you the end compared with the beginning has not expanded as much as they truly have in reality.

So, in order to truly make a good approximation of what the universe looks like, or what it could represent at a large scale if you could somehow get out of it, you need to assess how far away every single object is in the universe, and bring them back proportionally to their real size as they would have expanded much more in the time it took light to reach us. Perhaps then you might consider that there is no shortage of sizable objects in order to explain what we see.

Another explanation is that if there is no real speed limit in this universe and that objects can now go faster than light, as I always thought anyway, it is

still possible that there are sizable objects or even just electrons going faster than light in this universe and could still affect orbits and configuration of the universe.

Question 7:

Can light ever go faster than the speed of light? Can matter ever go faster than the speed of light?

No more speed limit, we can go faster than the speed of light. What happens then to the matter going faster than light? Does it explain why in Quantum Mechanics we see a particle at many different places at the same time? And then, what is Expansion theory saying about this? Also what are these people working on exactly when developing Quantum Computers in view of Expansion Theory killing Quantum Mechanics?

I didn't get a sense that light could go faster than the speed of light, reading McCutcheon, especially his talks about what happens in those particle acceleration colliders. However some studies have shown that it is perhaps possible to have light going faster than the speed of light, and so that could have strange effects on communication one day, as if light can go faster than light somehow, than we can talk to the future and to the past, no? Or something like that.

Matter is more what could go faster than the speed of light, so these electrons as they are still in their atomic realm could be accelerated to extraordinary velocities. The problem at the moment is that we are using energy to try to achieve this feat (in particle accelerators), energy that cannot travel faster than the speed of light. So we have to come up with a better idea to accelerate those electrons. What else could we use? And are there not in nature particles already going faster than light? What would have made this possible? In Star Trek they are called Tachyon Fields, fields imply energy. A tachyon I believe is a particle going faster than light, but none of that has been proven to exist.

I thought myself that the best proof we had were these experiences we do in Quantum Mechanics where a particle has been observed at many different places at the same time, which spawn all the theories about parallel universes. If these particles can be a many places at the same time, then perhaps it is because they are going faster than light, many times the speed of light in fact. But as we use light to observe these particles, then we are limited in our measurements, we would in fact find a particle at five different places in one measurement if these particles go at five times the speed of light. And if Quantum Computers become a reality today, they would not be using particles in parallel universes, they would in fact be exploiting the fact that these particles are going faster than light, even without perhaps realising it. And then as usual it would be through trials and errors that some new technology would work and reach the market.

Right, after re-reading McCutcheon's book, the main reason if not the only one we believed that a particle could be a two places at the same time, was because of the double-slit experiment. McCutcheon has sort of explained that we were badly interpreting this experiment, and so a particle is never at many places at the same time, it is most probably that what we called a photon is in fact many electrons in an electron cluster (even when we thought there was only one photon), and so some electrons must be going in one slit whilst some others are going in the second slit. They are not going faster than light, they do not multiply, they do interfere with each other just like molecules of water would in a wave-like manner in a pond. So no more wave-particle dual nature to light. no more Uncertainty Principle or probabilities, no more Schrodinger's Cat, no more Parallel Universes, no more Many-Worlds interpretation of Quantum Mechanics. We might as well commit suicide now, as this is so disappointing!

As to the explanation about the pattern on the screen on the other side of the double-slit experiment, light does not act like a wave, it is composed of particles, and there would be many unseen and undetected electron clusters in that experiment, and so they would still interfere with each other.

Now, the implications of this, is, what are they actually discovering with these quantum computers? What is the point of view of Expansion Theory about that? Instead of entrapping an electron, they think they are entrapping a photon with many different spins, but then, one photon is probably just a sea or burst of electron clusters, freely expanding electrons. So instead of entrapping one electron in the atomic realm, they are entrapping many freely expanding electrons in clusters. What could they hope to achieve in that kind of scenario? Or more to the point, how do we explain what they have already achieved? And finally, how will Expansion Theory helped them develop quantum computers further, or will it be the death of Quantum Computers as it is now for Quantum Mechanics? This is also a crucial question for me, it is included in one of my short stories in my novel **Anna Maria**.

Question 8

Could we get back to the structure of an atom which actually looks like what we observe in our solar system?

What I am most disappointed about when we consider Expansion Theory, or more specifically what Mark McCutcheon states about the structure of the atom, is that the electrons are no longer orbiting the nucleus, they are bouncing on it. I understand his reasons for stating it as such, it corresponds very well with observations and the model of Quantum Mechanics, and now that we no longer need to talk in terms of positive and negative charges, and other nuclear forces, then they might as well just be jumping on the damn nucleus, and justify chemical bonding by simply electrons bouncing from one nucleus to the other nucleus of another atom. I also understand his main argument that if an atom was like a solar system, atoms could not bounce off each others the way they do. Orbiting planets around the sun is too fragile an object, that if another solar system came to hit ours, it would be chaos, but it would not bounce off into space leaving it all intact. Or would it?

Why am I disappointed? First because of the science fiction story I had in mind for many years now, that **I already started to write** and will write again soon in **Anna Maria**. In there we shrink a ship to the size of an electron orbiting a nucleus, and it turns out it is an M class planet capable of supporting life. I will still write that story, but it kind of not exactly agree with McCutcheon, and this is what is annoying.

Not only that, how could it be that the damn solar system looks exactly like an atomic structure, and that we are talking about these things expanding and doubling in size every 19 minutes, and yet, they would be two entirely different things? How long does it take for an atom to get to the size of a solar system as it expands in nature? Not long I would reckon, that tiny structure will be at our scale, exactly where we stand now, in no time. How could it have bouncing electrons on it instead of orbiting ones? It has got to be the same thing. And I don't care about how we justify it, how we justify chemical bonding and what we have observed so far.

It stands to reason that these electrons are in turn composed of smaller electrons at another scale, and our stars and planets (our electrons) are part of another structure at a higher scale. Thinking any other way would be unthinkable.

I think that the structure of our solar system is not as weak as Mark McCutcheon thinks, and when he talks of the inside of an atom being another realm of reality, I think it is simply that electrons are expanding faster than the atoms, because they are part of the smaller scale universe that is composing

ours. Just like our own planets must be expanding much faster than our overall solar system, which in turn must be a slower expansion rate for atoms composing the larger scale universe.

I think that if the inside realm of an atom is acting weird for the outside of the atom, then it is quite possible that a solar system is also acting weird taken outside the solar system. After all, McCutcheon said it himself, the whole solar system is expanding as one object, the orbits of the planets are not only expanding as well, we can use these solar orbits as slingshot effect to boost speed of travelling satellites and spaceships. It sounds very weird to me, and perhaps if another system was to come our way, it could crash into us and bring chaos, or it could orbit around us bringing about the chemical bonding of some other molecule at a larger scale. Perhaps atoms don't bounce off each other, could they simply be orbiting around each other, or coming for an orbit and then go on to continue on their way?

I don't know, I don't know enough about what we have observed so far in the infinitely small world that is the atomic world. All I know is that these electrons must be orbiting the nucleus of the atoms. And if truly the inside of an atom is more another sort of dimension compared to us, then surely inside, it could be orbiting instead of bouncing.

Not sure what I am going to do about this. It should be interesting for my novel.

As far as I can understand in expansion theory, electrons are the only subatomic particles in existence (fundamental particles). Together they form protons and neutrons within the nucleus of an atom as well as bouncing on it to keep it all together, though it seems they would keep together no matter what, the proton most especially, since it reforms or try to in particle accelerators after being hit. Neutrons, once they lose one or two electrons, become stable protons.

Anyway, electrons exist within the atom in the subatomic realm, they also exist outside the atom in the atomic realm where they can go on wires and be part of the basis of an electronic circuit, they can also expand freely in space as electron clouds, which means electric field and magnetism including radio waves, and they can expand freely in space as electron clusters, like heat, light, x-rays, and other radiation. Not only that, they are all the exact same size and they all constantly expand at the same expansion rate (Xs).

Well, if electrons are supposed to be planets, I'm not out of the woods yet in order to explain how it could be. We have never observed planets suddenly expanding freely in space, unless there are some events in the heavens which could correspond to that. Planets are not the same size, far from it, and they will never be. So how is it possible that all electrons are exactly all the same size and all identical?

McCutcheon brought in this analogy of circles in the pound expanding, and that if you have two circles, one 5 times larger than the other, after a while they will become the same size, and this is an observed fact. But how do I know if this analogy is any relevant to electrons? It is certainly not true when it comes to planets, and surely it should be the same thing? After all they are all expanding objects, whether they are very small or large. Granted one is supposed to be a subatomic particle which is indivisible (apparently), and the other is composed of these indivisible subatomic particles, there may lay the difference.

What about atoms then, are they all the same size as well, despite the fact that some of them have more electrons in it, more protons and more neutrons? If they are the same size, how would you explain it? If they are of different sizes, then my mistake, I guess the electrons might be in a class of their own and when they expand, they eventually all become the same size. I think the analogy is not very convincing, however I understand the other arguments stating that if the electrons were not all the same size and expanding all at the same expansion rate, the universe as we know it simply could not exist.

So electrons appear to be nothing like planets. And our sun does not appear to be composed of a bunch of electrons (it is, but I mean electron like objects at our own scale), or neutrons and protons. Have we oversimplified what an atom really looks like? Or are they radically different from solar systems?

I find it hard to believe that in this universe there could be an indivisible particle. At least I will only accept it the day we will have proven it beyond doubt. At the moment I feel that not only physics knew nothing about nothing until Mark McCutcheon came along, but on top of it our technology seems incapable of truly confirming any of our theories. It does not seem that we can actually see clearly at that scale, and if we have not done it by now, I wonder if we will ever be able to see more clearly. If it was a question of adding mirrors to get a better resolution, I'm sure we would have built those microscopes by now.

And if the stars, other solar systems and galaxies are supposed to be bonding in some sort of chemical bonding in order to form molecular structures, is there nothing we have observed so far in the sky which could suggest such a thing? Maybe. I remember reading something and looking at images of reconstruction of larger scale universe images. Altogether the distribution of matter looked like it could form branches of a tree, or synapses of a brain, or even potatoes. But then, it didn't seem that all that matter forming all this in the sky had to touch each other in order to create this chemical bonding. It could be that even at a distance, all that matter could form altogether molecular structures. And so, maybe atoms are not touching each other in all those chemical bonds. I really need to look at all this more closely. I'm throwing stupid ideas in, just in case it lights up some ideas in your minds, and also it will give me some avenues to explore. I'm pretty sure this is all wrong, I need to at least mention it.

In fact, if we are to truly acknowledge planets as electrons, there could be a very good reason as to why they are not all the same size right now, and even some evidence that eventually all planets in the universe would be the same size with the same expansion rate. After reading the end of Final Theory, where some primordial time and some primordial particles would exist in a primordial universe supporting all the matter within ours, you cannot help but imagine that if there was any primordial universe to our stars and planets, that primordial universe would be the subatomic world. Because what is it that drives the expansion of our planets and stars, it is the expanding atoms, which expands because of the intrinsic expansion rate of electrons. What would then be the primordial ocean driving the expansion of the stars and planets composing the atoms and molecular structures of a larger scale universe?

Let me put you in the context. According to McCutcheon, the realm in which the electrons expand, or more specifically what initially decided the rate of their expansion, must have something to do with a primordial universe having its own primordial time defining the rate or speed at which the ripples on an ocean expand. This analogy of ripples on a lake to described the spheres that are electrons is obviously an important analogy to McCutcheon, even to the point that he talks a lot about the primordial ocean from which the electrons came from, as if they could have been created by a multitude of pebbles thrown into the ocean, and from there the ripples or circles started. Just like on a lake the ripples always expand at the same rate, as the circles expand ever more, they expand relatively less, to the point where all ripples become identical in size, even though the original expansion rate never changed, neither their absolute size difference, their advance amounts always remain identical (p.343).

First I thought that perhaps electrons were living in a different realm than us, that instead of being all of different sizes and simply expanding just like planets and stars, they follow some other law of nature, the expansion of ripples in a lake, which eventually leads to all of them being the same size. We could never imagine that the planets could follow the same pattern and eventually, through their relative growth, could tend to all be of the same identical size, can

we? But why not? If it is true of spherical electrons, then it must be true for all spherical objects in nature, whether the larger spherical objects are made of this fundamental subatomic particle that is electron or not.

It would also explain a lot of things. McCutcheon mentions that some astronomers might have uncovered through the background radiation that somehow in the past the laws of physics might have been different, like the speed of light, the speed and strength of electricity and magnetism, etc. In fact, he talks about an expansion rate that was much higher until the primordial time slowed down and the expansion rate kind of balanced itself as all the electrons reached an identical size.

This would mean that the rate of expansion of the Earth compared with the rate of expansion of Jupiter, might not be the same, and that eventually the Earth and Jupiter would be the same size, at which point they would have the same expansion rate. Of course McCutcheon sort of state that this is impossible, because then the laws of physics would be different on Jupiter compared with Earth. And maybe they are slightly different.

If you were to blow two balloons side by side, but one of them was already half blown when you started blowing them both, would it obeys the laws of ripples on a pond? Would both balloons end up relatively the same size after a while (assuming these balloons could not burst for some reason)? I feel they could end up the same size after a while, as their overall expansion rate slows down as they become larger. Once again, the amount of air going in would not change, as the expansion rate of the Earth and Jupiter does not change either, it is more, I believe, that relatively speaking as they grow larger they would expand less compared with other smaller objects.

That would mean that us, smaller objects on Earth, should expand proportionally faster than the Earth, but according to McCutcheon it is the total opposite. Overall the larger size of the Earth means that, even though its expansion rate is the same as ours, it overtakes us as it grows proportionally much more than us.

The explanation to this might have something to do with the number of atoms composing the Earth and us. As there are infinitely more of them in the Earth, it expands faster than us altogether. Just like with Jupiter could proportionally expands faster than the Earth and would quickly overtake it if the Earth went anywhere near it. So this may compensate for the fact that really it seems that smaller ripples on a lake expand much faster than larger ones initially until they all become the same size. Or how else do we explain this difference between the expansion of ripples in a lake and of all electrons, and the expansion of planets and other objects in our scale? Both cannot follow different laws of physics, either they will all grow to become the same size or they all are of different sizes and should remain so forever as they continue to expand. Or what am I missing?

Also, if eventually all planets would become the same size, and they were just like in the early universe of the electrons expanding until they reached an identical size, then it would mean that our stars and planets would be a universe in its birth, which would explain why we don't see so much of the same things in the very large universe as in the very small. As McCutcheon states, in the early universe atoms would be rare, even though our solar systems shows it is not, and that molecular structures would be impossible. Well, we do have galaxies, and perhaps that is some form of molecular structure or beginning of it, but ultimately, if what we see in the night sky is representing a universe in formation, until all planets are the same size and until many stars from different solar system can be judged to have a certain amount of protons and neutrons, and based on that define what element of the periodical table of elements they represent, then maybe it is too early to try to establish what our universe might be representing. Also it would explain the major differences between the atomic world and the universe.

Question 9

Do orbiting objects always accelerate away from the object they orbit? Or does a constant speed would be enough to compensate for the shrinking distance? Is the rate at which distance shrinks constant in time or does it accelerate to shrink ever faster?

McCutcheon states that the Earth expands 4.9 meters per second, but that would not suffice to explain objects falling on the Earth, an acceleration is necessary, and that acceleration is 9.8 meters per second. This means that not only the Earth expands 4.9 meters per second, each second this accelerates to mind boggling numbers. The expansion of all matter accelerates in time. This explains the parabolic path of cannon balls, they hit the ground ever faster in time because the Expansion of the planet accelerates. If this is true and concretely seen in these trajectories, then the moon is not only moving away from us at a sufficient speed to compensate for the shrinking distance between those two celestial bodies, it must also be accelerating away from us to compensate for the ever increasing acceleration of the expansion of both objects. It means also that any orbit will only be possible if the orbiting object was ever increasing its speed away from the other object. Is this true?

If the planet expands 4.9 meters per second, and that this is constant, why would there be a parabolic trajectory to cannon balls fired from the top of mountains? This proves that not only the planet expands by 4.9 meter per second, but relatively speaking this expansion is accelerating and therefore the second second means an expansion of 14.7 meters per second (3 X 4.9m) and the third second means an expansion of 24.5 meters (5 X 4.9). This clearly means that distances are shrinking ever faster, and then any orbiting planets must be accelerating away from us in order to compensate for the ever increasing acceleration of the expansion of the planet.

Why am I worried about this? Well, considering that all objects in this universe double in size every 19 minutes, to keep the same constant distance between two objects in orbit you would need a considerable speed, and not only that, it would need to considerably accelerate as well in time. Where did these objects found enough initial push to constantly accelerate like that?

The conclusion is staggering, not only we expand extraordinary fast, but each second we expand ever more faster, and objects keep accelerating faster and faster. Where will this end and what sort of effect can this have on humans for example?

McCutcheon thought of that but dismissed it, stating that it resets itself moment by moment, as the distance between the two objects remains constant, meaning that every second we have the same scenario, and so it does not matter if the expansion keeps accelerating. I find that hard to believe, or I must have difficulties understanding his argument. Perhaps a computer simulation would help me visualise this. So objects don't need to accelerate away from us to remain in orbit, a constant speed would suffice even though the expansion of both objects keep accelerating. Interesting, though I need more explanation.

It becomes a bit clearer when McCutcheon speaks about the orbits of the planets around the Sun. These orbits constantly expand with the expansion of the star and the planets, and so it compensates for the acceleration of the expansion, and of course, the expansion of these orbits must also be accelerating, which somehow explains the slingshot effect that spaceships and satellites can experience as they switch from one planetary orbit to another.

Highly interesting. Especially this acceleration of the expansion of everything, including of the orbits. And the slingshot effect that results from it. This needs more study.

Question 10

Helium as a gas is puzzling, sound travel three times faster in helium, light can be slowed considerably when going through helium. Also that helium balloon just fly off into the air, defying gravity, and as a super fluid, helium is also acting quite strangely, moving up the walls, remaining on ceilings of the container, etc. Helium is so strange, Quantum Mechanics had to come to the rescue to explain some of its atomic properties, as it is said that helium can act very much like in the atomic world, but in the macroscopic realm, or something like that. What has expansion theory got to say about helium, can it explain all the strangeness of that gas?

I will get back to that later, I just thought I needed to consider it somehow. Is helium simply defying gravity because it is a lighter gas, and as such tends to go up when surrounded by heavier gases? Or is there a more profound quality to helium that somehow makes it expand at a different rate or makes it defy the laws of gravity (the expansion of the Earth beneath it)?

Question 11

Is Time Travel still possible in Expansion Theory?

I understand that McCutcheon dismissed the possibility for time travel in light of Expansion Theory. I need however to think real hard and find some ideas about how we could still justify time travel within Expansion Theory and how we would go about travelling in time. Science fiction could never recover if time travel was to be proven an impossibility.

I need to expand on this. The idea of being able to go faster than the speed of light must open some avenues to explore when time travel is considered.

There are also some clear reports from normal people claiming that they did travel in time (mostly in the television series of documentaries called Ghosthunters, most specifically an episode called “Ripples in Time”. It is about Parallel Existence, Travel in Time, Times overlapping in the UK (most impressive ever episode I have). There are other episodes where people suddenly find themselves in the past. There are also many other reports outside that series, reports of people who travelled to the past and the future. We could I suppose dismiss all this, like UFOs, as some sort of mass hysteria or blatant lies, but I like to keep an open mind, especially if new physics might explain a few of these phenomena, where the old physics failed miserably.

There are also many people on websites about time travel claiming to come from the future. Though many have been debunked, some still enjoy some celebrity, the most well known being John Titor. John Titor even provided schematics of his time machine built by the American army, it uses two micro-black holes with singularities. Expansion theory states that singularities don’t exist. And as for black holes, there is nothing exotic about them safe that matter as imploded after the star finished burning out, and if they look black is because they are dead stars, and so we should not expect to see them even though they could still be quite large. And now gravity is explained by the size of an object, not its mass. And so there could be very large objects out there which simply do not emit light, and yet, have stars orbiting around them or with them with some centre of mass somewhere in between.

Since relativity is dead, there is no more such idea that gravity or acceleration could somehow permit time travel or time dilation processes. The logic behind the twin’s paradox is flawed according to McCutcheon (and I sure

believe it). And so the micro black holes of John Titor, in Expansion Theory, would be of little help to travel in time, in fact they could not exist.

Of course, it is also plausible that expansion theory will be debunked to satisfaction and proven to be impossible, and I would love to read such a debunking exercise by many theoretical physicists, as long as they are impartial and objective. But for now, even though McCutcheon might have a made a few mistakes here and there, I think the bulk of it must be true. I would be surprised if they succeeded in debunking it. And so for now John Titor was no time traveller in my mind, even though I wanted to believe. Then again, who knows.

I still believe that some people might have actually experience time travel, as from other reports we have. And assuming they were not lying or were not crazy, which the investigators told us was not the case, then we may still have to explain this in light of Expansion Theory. If it cannot explain it, either we still have insufficient knowledge about all that is possible in this universe, or the witnesses were crazy or lying after all.

The question is, how would it be possible to time travel within Expansion Theory? And is travelling faster than the speed of light helps such a feat or not? I don't know. This requires more thinking.

Question 12

Are Parallel Universes still possible in Expansion Theory?

The same goes for parallel universes in Expansion Theory, there isn't much that could justify them. However, I need to justify from expansion theory's point of view if parallel universes could still exist, and how it would be possible to travel to a parallel universe.

At the very least there could still be a way out and a way for parallel universes to exist. It is if somehow parallel universes could be created by a mind over matter kind of process. One way McCutcheon explained the way the distribution of electrons appeared in the universe, is possibly via a virtual universe created by a computer, at this point the spheres that are electrons could have appeared on a screen monitor and still obey very similar laws of physics as we know them today, after a bit of programming. That virtual universe, very much like The Matrix film, would in fact exist in the memory buffer of the computer, and not necessarily on the screen.

Well, as an expert on computer games, for having played for over 25 years graphic adventures of simulated environments and universes, one thing is quite clear about virtual universes. They die when you turn off the computer, they come alive once again when you load the programme again, you can simultaneously have three games running at the same time, or if a million copies of the adventure game has been sold, then a million of these similar virtual worlds exist, which by definition, could mean parallel universes. It is an acceptable analogy.

And so our universe might not be the only one, and I mean, an almost identical one at that. They may be running on different computers at different time frames, which would mean that you could potentially travel to a parallel universe in the past or the future. I may be beginning the game, but my neighbour might be at the end of it.

Now, very much like the memory of a computer made of silicon, our own memory or brain, made of carbon, could also be a way to create in our mind some virtual universe much like our real physical universe. It is quite possible that everything we see, observe and interact with in the universe, which ultimately comes to our brain via our five senses, is in fact a pure fabrication of our mind. It may seem real, but could all be virtual, and each one of us could be living in his or her own bubble universe made of expanding electrons.

It would go hand in hand with many philosophies and religions, talking about creation and the capacity to create worlds in our mind, and even influencing our actual physical world via our own mind powers. Many self-help books state just that, that if you want something badly enough, it cannot fail to actually happen. I have experienced that myself, to the point that I feel I somehow changed my future, even switched realities or timelines. Now, I understand this is all speculations, I have no proof, I may have misinterpreted the phenomenon, and even, I could be delusional. However, for a science fiction book, the idea of being able to recreate a different universe similar to the one we have today, slightly different, and even create an infinity of them in our own mind and start living in those universes, is a way to incorporate parallel universes in a world driven and explained by the expansion of electrons, which cannot permit any such thing as parallel universes. This is what I did in **Anna Maria** to justify parallel universes, the first short story.

Another possible way of explaining the advent of parallel universes, would be if first we could invent a way to justify time travel in expansion theory. If time travel is theoretically possible again, then possible parallel universes could also exist as a consequence. If you go into the past and change an event, then the future will now be different. If you were in that future before, and witnessed events that will now never exist, well, that old reality must still exist somewhere, since you experienced it, you lived in that alternate reality that has now been changed.

Maybe there is only one timeline, and by preventing yourself from being born, it would make you disappear, and then we get the old paradoxes of how you could have gone into the past and prevent yourself from being born, if in fact according to the new timeline you will never exist. All these paradoxes were solved by the advent of parallel universes and an infinity of you in all those parallel universes. But this idea came from Quantum Mechanics, and QM is now dead.

Does it matter anyway if you can justify time travel and parallel universes from the point of view of physics before you can use them in science fiction? There are still many unexplained phenomena in this world, and yet we do build science fiction around it, even though we may only get the answers much later, and maybe never. In the end time travel and parallel universes do not have to die just because expansion theory entered the scene and changed the landscape of physics forever. They may still be possible and we may eventually come up with theoretical ideas that would make time travel and parallel universes plausible within expansion theory. And who better than science fiction writers to think up some ways to justify them?

In Star Trek, there were always weird and unexplored region of space where suddenly all the laws of physics as we knew them changed or vanished. This has not been observed in nature, is not likely to be any time soon, and yet, in our mind, it could be possible, because who knows what you can meet in an unexplored region of space? In the unknown?

Who's to say if somewhere in the universe suddenly the expansion rate of electrons doubles? Who's to say if perhaps there may be universes where electrons shrink instead of expanding, and what would then be the consequences on the laws of physics? Ripples on a lake never shrink, and why not? They could grow at a different rate with all sorts of consequences.

We are still free to write interesting science fiction, even if it was originally based on old physics ideas no longer valid, as there may always be a new idea to support such phenomena that we can think of. For example, if originally this universe came to be as a simulation in a computer, then many similar simulations can exist, and they can all be different from the one we're living in depending on the initial parameters of the software, or they can all sensibly be similar to a certain extent.

Question 13

Expanding matter further, how could we achieve that considering Expansion Theory?

This is a crucial question for my novel **Anna Maria**. I can think of a way to shrink matter by simply stopping its expansion using other bombardments of electrons, or magnetic fields (freely expanding electron clouds), even though this is farfetched, this is how I will shrink matter. But how about bringing back my ship to Earth? How to expand it back to our scale?

It's got to be possible to justify, and I better justify it before I explain my shrinking process, because one may depend on the other. This would be so easy in my own theories where acceleration expands you and deceleration shrinks you. It is not so easy now if acceleration and deceleration have no effect on the expansion rate of matter and that you could not picture the universe as we see it if matter was not always expanding at the same constant rate of 0.0000007 meters per second per second. This is the solution I require to start writing the last short story of Anna Maria. I need to find a solution other than simply state that Anna is such a genius, she figured out, but then not telling how she figured it out.

Could it be possible that acceleration could somehow change the rate of expansion of the object accelerating? Relatively speaking, acceleration and deceleration, as stated earlier on, would definitely make you see other objects outside your frame of reference as shrinking and expanding faster that their normal constant rate, but this is not a true occurrence of the reality. Or else, we would need to resurrect Einstein and my theories from the dead, which I would be quite willing to do actually.

To which extent whatever Einstein stated could still be true in Expansion Theory? Good question. As it stands, great imagination on his part, great effort, and yet, all wrong, Special Relativity, General Relativity, even the Photo-Electric Effect for which he got a Nobel Prize for. If ever Expansion theory is declared the theory of Everything, I would imagine Einstein's descendants will be spinning out of control. In the meantime, I will give an expanding lollypop to anyone who could help me justify how we could expand matter instantly so it could reach a higher scale universe.

Question 14

What is Expansion Theory's interpretation of Sonoluminescence, Bubble fusion and **Cold Fusion**? (Follow the hyperlinks to **Wikipedia** to find out what this is all about.)

These three phenomena are plagued with mysteries, I wonder how Expansion Theory would interpret the data so far and if somehow could turn Bubble Fusion or Cold Fusion into a reality as a new power source? Or perhaps Expansion Theory will simply explain the phenomena and dismiss any possibility of some sort of nuclear reaction at normal temperature?

I need to think further about this, but if you wish to help, please think about it and let me know what you come up with: **rm@themarginal.com**.

Brainstorm

Scale Universes

First Brainstorm Session

I am getting desperate to write either a novel or a double short story for my novel Anna Maria called Scale Universes. I am still facing unsolvable problems that I need to discuss here, hoping that I will eventually get ideas or that perhaps someone out there could help me with. If new questions arise from it, I will add them above.

My main problem for a start is to shrink a spaceship, and if truly it would mean two much G forces, then some sort of robotic probe. A probe would mean that there would be no need to bring it back, to expand the ship with humans back to us. But then, it is far less interesting, and it would be sad travelling so far off in different scale universes either in the subatomic world or the very large, and yet, without getting anywhere. I will have to take it point by point and see if I can se the light.

First of all, there is no distance per say to travel, the distance between me and the an electron in front of me, is no distance at all for a spaceship to cross. And so, once shrunk, my spaceship does not really have to cover any distance to get back to my normal scale. Or does it? Because as you shrink, distance not only suddenly becomes much longer, but there is double effect as your measuring instruments shrink with everything else. If two electrons are separated by one meter at my scale, surely I can bring the first electron to the second in no time, without any kind of huge G forces for that electron, no?

At the very small scale, going to another solar system is easy, as long as I get help from people at our normal scale. At the very large scale, travelling to another solar system would be nearly impossible. Wherever I will end up once I am expanded to that scale, is where I will remain. Unless I were to expand to another scale, so two scales over our normal one. At that scale I should be able to move very quickly wherever I want to go in the universe in the very large scale universe. And you know what this means. It means that if I wanted to go to another solar system from here on Earth, I would only need to expand myself to the very large scale universe, and from there cross a small distance, and then shrink back to any point in our universe.

There may be a flaw in this logic. The flaw might be that when I expand, I don’t necessarily cover any distance, and so if suddenly we where to expand a spaceship here on Earth, it would simply cover the whole solar system and more and more, it would not bring me in any way to another larger scale universe. So the question is, where is this larger scale universe? If the solar systems and galaxies we see at the moment in space, are composing that larger scale universe, then all the electrons, atoms and atomic structures composing the spaceship would need to expand to a point where all these particles and structures would be sensibly the same size as our planets, solar systems and galaxies. I assume here that electrons are planets, atoms are solar systems, and molecules are galaxies, just at a different scale.

Then moving all those galaxies at high speed might be easy at that scale, any small thrust or propulsion system could move that small bubble universe very quickly compared to our scale. And then shrinking back would bring me somewhere else in our universe almost instantly. But for that, not only would I need to expand all the atomic structures of the spaceship very rapidly, I would also need to insure none of that expansion could interfere with the actual structures of our actual universe. Or else, I could easily destroy the balance of the whole galaxy, all these orbits would go out the window.

The thing is, from our point of view, if I were to shrink a spaceship here on Earth, I would basically take a whole chunk of the actual universe as seen by someone living on an electron, and bring it to the scale of the very small. Expanding back here would be like bringing back that whole chunk of that very

small universe to normal size, our spaceship here on Earth. We wouldn't be worried about expanding back to normal scale, because the universe viewed from an electron is so vast, that no one would be worried if as a consequence a few solar systems and galaxies were destroyed in the process. We would get back to some place in that universe as we expand, but it seems that the universe is large enough for that and it could take it.

And so it must be the same for a spaceship here which we would expand to the size of a big chunk of the universe we see, many solar systems and galaxies. It would be preferable to expand where there is nothing already, preventing the destruction of many solar systems and galaxies, and perhaps even our solar system, but then, we would need to expand somewhere else, or at least arrange to cover huge distances as we expand, so by the time the spaceship becomes the size of galaxies, it is not exactly within our galaxy or even the universe we can see using our most powerful telescopes. And covering huge distances as you expand larger and larger, shouldn't be a problem. As you expand, distance shrinks considerably, at twice the speed considering the doubling effect, speed accelerates as you expand, even if you were going at a constant speed, since as you expand your measuring instruments expand as well, and so any distance shrinks rapidly.

Which means also that my spaceship that I want to shrink to the size of an electron, if I wish to enlarge it back here, this expansion will need some sort of acceleration as well, or else I would be expanding right over my electron, and destroy it in the process. There are so many electrons between me and my table right now, that expanding from an electron in the table to where I sit is not only a small distance, it would not affect the electron in the table if I were to time it right.

The table would be a high density of electrons, atoms and molecules, where just outside the table there would be molecules of air, so much less density. This is where I would need to expand and move towards as I expand in order to leave the table intact as I expand. And so it must be at the larger scale, that eventually you should be able to reach a patch of space with less density, where suddenly the expansion of so many high density planets, solar systems and galaxies wouldn't be a problem. We would certainly not wish to expand within a solid object, which could very well the case if we were to expand anything right now near our solar system.

I have no idea how many galaxies and galaxy clusters a spaceship might contain (molecules), and so, I have no idea where it would be safe for a spaceship to be expanded to a larger scale universe. Let's see, 100 billion is a magic number in chemistry and astronomy, as long as we can trust our actual laws and equations.

Here is a little story about the number 100 billion:

I made a huge discovery today. Fasten your seatbelt. There are 100 billion atoms (small solar systems) in a cell. There are 100 billion stars in your average galaxy (and it is thought it could be the number in our own galaxy, though estimates now states that it could be between 100 and 400 billion stars). And there are 100 billion galaxies in the universe (though estimates are now that it could be 125 billions). This is a good argument to prove that our Universe is actually a cell.

Also there are 100 billion cells in the human brain (and there are 100 billion neurons in the brain). The magic number of 100 billion almost help us state that the universe is an entity which is alive and intelligent. That the universe is a brain instead of a cell.

All explanations and details: Magic number: one hundred billion 1,000,000,000,000

Interesting facts that maybe we should use at some point (that I read in the book “Manifold Time” of Stephen Baxter):

“Do you know why the numbers are significant? A hundred billion seems to be a threshold... It takes a hundred billion atoms to organize to form a cell. It takes a hundred billion cells to form a brain.”

And then Baxter goes on to say that 100 billions squid in space will transcend into something else because there are 100 billion of them and it is some sort of a threshold. (Don’t ask me why, but there are squid in space because astronauts sent a pregnant one to an asteroid in the first place.) Baxter suggests that if we ever had 100 billion humans, something weird could happen, we could transcend into something else. The number is interesting because I found out more about it:

From a website: “A Galaxy, or nebula, is any large-scale system of stars, interstellar gas, dust, and plasma within the universe. The average galaxy contains more than 100 billion solar masses and ranges in diameter from 1,500 to 300,000 light-years, 90% of which is actually composed of largely unknown substance called dark matter (sic). Individual galaxies are separated by distances in excess of millions of light years.“

http://www.space.com/galaxy/

http://en.wikipedia.org/wiki/Galaxies

Many websites state that our galaxy has 100 billion stars, but many other websites claim it is between 100 and 400 billions. So I guess these numbers of stars in a galaxy might have been updated recently, it is likely that our galaxy has got from 100 to 400 billion stars. However the average galaxy has got 100 billion stars.

http://en.wikipedia.org/wiki/Milky_Way

And the icing on the cake, the universe could have 100 billion galaxies (though some claim it has 125 billions, according to new studies from the Hubble Telescope):

http://hypertextbook.com/facts/1999/TopazMurray.shtml

http://en.wikipedia.org/wiki/Universe

So I think this is quite important. There are 100 billion atoms in a cell. There are 100 billion stars (or solar systems) in a galaxy, and there are 100 billion galaxies in the universe (probably the average for any given universe).

An atom is like a small solar system. And a galaxy on its own is comparable to an atom if we push it. So it is almost our first argument to compare the universe to a cell, even though in this context, a cell would be more like a galaxy.

Then I guess cells are forming something else, and that something else could be compared to the Universe (like a brain perhaps)?

I suppose we could still say the universe is a cell. But we could push it and say it is in fact a brain. We could also forget the fact that some people say there are between 100 to 400 billion stars in the Milky Way, and stick to 100 billion. We should not forget to mention that in average galaxies have 100 billion stars.

And there are 100 billion cells in a brain, it is like 100 billion galaxies in the universe. Enough to make the universe a living and intelligent entity.

It goes on about the brain, magic number: “The adult brain contains 100 billion neurons - more than the number of stars in the Milky Way galaxy (sic).”

http://www.meds.com/archive/mol-cancer/2000/05/msg01333.html

“Your brain is the hub of your nervous system. It is made up of 100 billion nerve cells - about the same as the number of trees in the Amazon rainforest.” (Nerve cells, same as Neurons? Wikipedia: “Neurons are sometimes called nerve cells, though this term is technically imprecise, as many neurons do not form nerves (ie. the brain)...”)

http://www.sciencemuseum.org.uk/on-line/brain/1.asp

However, we have to be careful in our statistics, everyone is contradicting the others, one source says it is not as clear cut: “Average number of neurons in the brain = 10 billion to 100 billion. Average number of glial cells in brain = 10-50 times the number of neurons.”

http://hypertextbook.com/facts/2002/AniciaNdabahaliye2.shtml

By the way, wikipedia states that it is not true that we are using only 10% of our brain, we use it all.

http://en.wikipedia.org/wiki/Brain

Other stuff that has got 100 billion units inside of them, just in case it inspires you: 100 billion brown dwarfs (in our galaxy)

Extrapolating from the number of brown dwarfs they discovered, Ryan and his colleagues estimate the galaxy has roughly 100 billion L- and T-type dwarfs. This number is comparable to the Milky Way's total of all other stars put together. (Funny, they say here we have 100 billion stars in our galaxy.)

http://www.astronomy.com/asy/default.aspx?c=a&id=3451

How Many People Have Ever Been Alive? 100 billions

http://en.wikipedia.org/wiki/Wikipedia:Size_comparisons

Larger numbers

As of 2005, there are about six and a half billion human beings, each with his or her own life story. Between 25 and 100 billion more have lived and died in the past, although almost all of their lives are lost to history. As Arthur C. Clarke put this, in his preface to 2001: A Space Odyssey (in 1968, when the world population was only about 3.5 billion [5]):

Behind every man now alive stand thirty ghosts, for that is the ratio by which the dead outnumber the living. Since the dawn of time, roughly a hundred billion human beings have walked the planet Earth. — Now this is an interesting number, for by a curious coincidence there are approximately a hundred billion stars in our local universe, the Milky Way. So for every man who has ever lived, in this universe, there shines a star.

There are, as indicated above, around 100,000,000,000 (100 billion) stars in the Milky Way galaxy. [6]

“Although it is impossible to accurately measure how many people have been alive, the Population Reference Bureau estimates that from 50,000 BCE (when homo sapiens first appears) through 1995, it is likely that more than 100

billion human beings have been born. Current world population makes up about 6 percent of all human beings who have ever been alive (1)."

http://www.overpopulation.com/faq/basic_information/how_many_ever.html

Long version:

http://www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=7421

And finally, just to get back to some sort of reality, McDonald's has sold around 100 billion beef-based hamburgers worldwide with a potentially considerable health impact.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15831345&query_hl=6

So 100 billion is a magic number and that number helps a great deal in establishing and comparing objects and the sizes of different scale universes. And there you are, I forgot that a galaxy could be compared to a cell instead of a molecule. And so a molecule would have to be composed of many galaxies/cells.

And in average 100 billion galaxies/cells would be the size of a human brain. A human brain might be 5% of the overall size of a human being? And so 2000 billion galaxies/cells would represent the size of a human being. As there are only 100 billion galaxies in our universe, 20 universes would be a human being.

So I guess in the end our universe is far from being finished, or at the very least many other universes must be close by. Unless of course our whole universe represents at a larger scale one human brain floating in space, and nothing else around. If not a brain, at least something intelligent, like a CPU or a computer memory chip, it's the threshold after all. Since a brain is after all mostly a storage device, just like a hard drive (a deficiently one, I know, it seems we were better than God at designing a memory device, ours never forgets anything and can calculate and compute at high speed).

Where was I? God knows. I'm too drunk now to continue this brainstorm. I'm working tomorrow. Dear me, this is all I can truly think about right now. Panic state, need to find more ways to escape reality. Obviously thinking in these terms is insufficient. I wonder what alcohol and drugs would truly mean in view of Expansion Theory? Why would any substance get a universe to suddenly go mad and imagine things that simply do not exist?

Second Brainstorm Session

I still have to figure out a way to shrink and expand these damn electrons. I feel my initial thought of squeezing my spaceship via high magnetic fields or even bombardments of electrons would not do. It would most likely create an explosion, as they will expand no matter what, which explains nuclear bombs and why suns can go supernova. Trying to contain matter by squeezing it, until it stops expanding, is madness, it wants to expand so badly, it will eradicate everything around for miles and miles in order to continue to expand. Bad idea. And anyway, the way I will shrink things, must be the way I will expand things.

Now, the only way I can think of in order to change the rate at which an electron expands, and eventually to cause it to shrink, would have to be a method which acts directly on the damn electron. I would need to know what is actually causing the electron to expand in the first place, or at least find some way to stop that expansion, or increase it considerably.

Magnetic fields won't do. Electron clouds and electron clusters won't do. And yet, what is there left in the universe apart from electron clouds and clusters, if not electrons taken at their most simplistic and fundamental state? Nothing. If I can't change the expansion rate with electrons, electron clouds, or electron clusters, no matter what form they could take in between, then I will never change the rate at which electron expands.

I think I can safely forget electron clouds and clusters. That leaves me with electrons. Or what together electrons can form. Let's not forget the chemistry reactions. Chemistry. Once those electrons goes on to form certain atoms, and certain molecules, they form specific elements from the periodical table of elements, and when two different elements interact, suddenly you observe different reactions. There lay my solution. I must find somehow some sort of chemistry reaction capable of changing the rate at which an electron expands, at will.

At first sight, helium will have to play a role in this chemistry equation. Helium is so weird, but I cannot simply throw it into the mix and justify just a grandiose event just by mentioning helium. Why not? Perhaps I can turn it in such a way… maybe not.

To be continued…

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