

SEE, — HOW the complexities of **FIELD THEORIES** **HID** from us, the fact that **relative motion** (phase) between all these spinning entities, in the micro & macro universe, gives us all the **attractive and repulsive** **Fundamental Forces.**

Oct-29-2018.

Field Theories in html: <http://rbduncan.com/fieldtheory.html>

Also, **Field Theories** in Word: <http://rbduncan.com/fieldtheory.doc>

& **Field Theories** in Adobe pdf: <http://rbduncan.com/fieldtheory.pdf> Fitzpatrick's 1966 book showed the **relative motion** laws of **A. Ampère** unified the forces.

[Fitz's first book in 1966](#)

[Fitz's 1966 book in PDF](#)

EVERYTHING [on these links](#) herein are **FREE**, & **NO** pop up ads with these either.

This was the way the site --below-- looked many years ago. - - Dan Fitz.

QUICK Extra-Extra-SHORT

Version of

Fitzpatrick's

Theory of Everything

By Daniel P. Fitzpatrick Jr.

In a book, that the New York Times devoted a full page to in their Sunday Book Review in 1967, I showed that Ampere's laws not only worked in electronics but these "A" Laws also made sense in understanding how this entire universe works as well.

The two great enigmatic proofs of present science.

The gyroscope, pendulum, vibrating elements, helium-2 and even individual protons and neutrons, unless thwarted by decoherence, attempt to hold to the fixed stars. Scientists call this "Mach's principle" even though George Berkeley discovered it long before Ernst Mach.

So present science says proof #1 is:

There is an absolute reference frame.

But special relativity, backed up by the fact that the speed of light is a constant independent of the velocity of the source or observer, gives you the Galileo-Einstein concept or the next great proof.

And present science also says Proof #2 is:

There is no such thing as an absolute reference frame.

The present science, taught by all the universities in this year of 2002, gives us many circumstances where both of the aforementioned proofs are valid.

How can this be?

That most certainly is a riddle wrapped in an enigma but it is exactly the way present science portrays it to us today.

Believe it or not but these two seemingly diametrically opposed truths give you a superb clue as to how this universe is really built.

You cannot ask which proof is correct!

You must ask what is wrong with present science that I cannot understand this.

Einstein knew about this conflict and admirably resolved it in his general relativity where, with his tensor math. Space time---one might say---is curved, squeezed or compressed.

But general relativity is not the final answer because it does not unify the invisible forces. Einstein knew this too and was working on the final answer when he died.

Einstein said this final answer would be simple and Dirac predicted that even if it was complicated the human mind would be able to understand an approximation of it.

Both of them, it seems, were right in a way.

Because here's the answer:

Also read R. Duncan's lengthy spiel in his web page at <http://www.rbduncan.com>

Chapter One

Mathematicians Needed

Theoretical physicist Stephen Wolfram has written a brand new record breaking book called "A New Kind of Science". In the book he predicts we will find "**a new kind of science**".

Well, here is the "**new kind of science**" that Stephen Wolfram seems to be looking for.

The premise put forth herein is that this is a universe of spherical standing waves.

It's not all that complicated, really. The concept is simple and Dirac's prediction comes true because he predicted that the human mind would be able to see approximately what was really going on. And the human mind easily can too.

It's the math that will really become complicated but we are not going to worry about that right now. We'll let the people running the future super computers worry about that.

A universe constructed entirely of spherical standing waves would give us relativity, quantum mechanics and essentially what we find we actually have in this universe we see all around us.

And it will agree with the absolute reference frame that the gyro shows we have. Also it will agree with the exact opposite view of special relativity proven by the speed of light being a constant independent of the velocity of the source or the observer. This is important because any **unified field theory** absolutely must

resolve the disparity between these two opposite views.

But the most important fact is that a spherical standing wave universe would be a universe in which these new simple "A" Laws will work.

Present science simply doesn't give us the slightest reason why we have gravity, or for that matter, why we have any of these invisible forces.

Using only 20th century science, you will never fully understand Einstein's mass energy relationship. After you comprehend the various aspects of this new easy to understand "A" Law concept then you will clearly see why energy has to equal mass that is being created at the rate of the speed of light squared. In other words $E = MC^2$. You will then see what both mass and energy really are.

Why do we have this thing called inertia or inertial mass?

What is this thing called energy?

Go back to 1917 when people all believed in Einstein's **cosmological constant**, which gives a steady repulsive force between all the stars, galaxies and super clusters. Most people believed in a steady state universe way back then.

All the universities now claim that this was a big blunder made by Einstein.

But was it?

Saul Perlmutter says, "Einstein was right all the time." And now more scientists are swinging over and saying Perlmutter is correct and perhaps all these universities have been wrong now for the past 75 years.

See, if we have this acceleration that Perlmutter's group recently discovered---and others have added to Perlmutter's findings---then we are back 75 years again to a repulsive force, steady state universe and here's why.

Let's apply Einstein's **principle of equivalence** to this equal and opposite force of gravity because if it applies to gravity then it also must apply to gravity's equal and opposite force as well.

Einstein gave us this **principle of equivalence**. In it gravity is equivalent to an

accelerating contraction.

Then with gravity's equal but opposite force, this **cosmological constant** all around us, this encompassing repulsive force would be equivalent to an accelerating expansion.

And this is what we think we see, isn't it?

But it must be only a **perceived** accelerating expansion caused by Einstein's principle of equivalence.

With Einstein's old concept you can say---because of Einstein's principle of equivalence---both the red shift and Perlmutter's acceleration comes about solely because of that repulsive force out there (Einstein's **cosmological constant**) between all the stars and galaxies. You could also visualize this force between atoms and molecules. This would make our macrocosm more or less steady state and similar to our microcosm.

Saul Perlmutter's newly discovered acceleration, therefore, makes a lot of sense with Einstein's old 1917 view of the universe but **not** with the most popular expansion view of the universe believed in today.

So it looks like Perlmutter's group has returned us back in time 75 years or so and we have once again returned to a repulsive force, steady state universe.

Moving on from there, it's my view that we had a Big Bang but it stopped expanding a long, long time ago.

As I said, the red shift and Perlmutter's discovered acceleration are caused by Einstein's **cosmological constant**, which as I stated, is this repulsive force holding everything apart. Read on to see why.

Perlmutter's newly discovered acceleration clashes head on with today's popular present science belief.

So it most certainly looks as if this popular view of science, that the universities are dishing out to us today, is wrong as theoretical physicist Stephen Wolfram implies in his popular, best selling book "**a new kind of science**".

Let's see what else this old view that Einstein gave us of a repulsive force, steady state universe shows us:

Look! With this old view of Einstein's you can now see Einstein's mass-energy equivalent because you can actually visualize what mass and energy are.

Mass is the permanent binding of entities with the macrocosm surroundings.

Energy is any CHANGE of this binding with the macrocosm surroundings.

Now---as you read further---you will understand why a gyro works.

You will then also understand binding energy because when an electron and proton join together with MORE binding energy, to form a hydrogen atom. This is binding they have LOST to the macrocosm surroundings.

Voila! You now understand the reason we have Einstein's mass-energy equivalent!

But we must see everything then as spherical standing waves and perfect Milo Wolff's frequency math if we want to use future super-computers to show us what's really happening as Stephen Wolfram says will happen someday.

Einstein's formula $E = MC^2$ above could be read, as **Energy is mass that is being created at the rate of the speed of light squared.**

From the above formula, we can see our space and also our time as being created at a much slower rate than we know mass is actually being created from pure energy.

We could therefore see our time and our space as being created at a rate that is the square root of the rate that mass itself is actually being created from pure energy.

From Einstein's formula above, **our space time could be visualized as being created at the speed of light.**

This new concept not only shows us what causes gravity and these invisible forces but it also shows us that Einstein was initially correct when he claimed we had this other invisible force that he termed the "**cosmological constant**".

I, myself, am certain that this new science is closer to the way the universe actually operates than this popular 20th century science in use today.

I am also certain that in time, with better computers using a type of math similar to Milo Wolff's new frequency math, this "**New Kind of Science**" will provide more accurate answers to many things than this 20th century science ever could. This seems to be Stephen Wolfram's opinion as well.

Our present science was developed as we looked out from this single reference frame here on earth. But these views are all views from one single, lone reference frame so these are all views from a **SUBSET** reference frame.

Kurt Gödel, who worked with Einstein at the Institute for Advanced Study at Princeton, has proven that you cannot trust views from **SUBSET** reference frames no matter how good they look to you from within that **SUBSET reference frame**.

While 20th century science looks good, it is still **SUBSET derived science**.

Even though I will present this new hypothesis to you, I am not implying that this new concept will be seen as better than the 20th century science you now have. It's quite the opposite because I am certain that the science we have now will be here until mankind lasts simply because the human mind can easily understand it. And for 99% of what humans will ever want to do, inside this galaxy, this 20th century science will work just fine.

The problem, with this present 20th century science, comes when one looks into the microcosm or outside the galaxy: One simply cannot properly extend this present 20th century science and math in these directions.

This new concept will be totally unfamiliar to today's scientists. But since it will work not only here but in the microcosm and in the extended macrocosm as well then, as time goes on, it will become the accepted method to solve questions where a unification of the forces is necessary and where Heisenberg's uncertainty

is a problem.

This new concept can be used today to give you the "big picture" of how this universe actually works and the "big picture" of unification of the invisible forces.

Einstein gave us the mathematical patches to Newtonian mechanics but Einstein could not give us a full picture of how this universe is really built. For a century now we've been searching for this answer. We've been looking for a credible Theory of Everything.

If you are a good mathematician then you had better take a look at this.

I'll give you a workable Theory of Everything concept but then you will have to supply the math for it. Andre M. Ampere gave us a bit of the math for it but much more is needed.

Here's the problem: All our present science uses math that calculates things measured from a certain place of rest (**one singular reference frame**). While this seems fine to us who feel we are at rest here on this earth, there is a problem with this because there is nothing really at rest in this entire universe. We are on this earth, which is actually on a geodesic path and this is the closest thing to a place of rest.

But this geodesic path the earth takes most certainly can not be considered a place of rest if we want to put together a Theory of Everything, which has to take into consideration everything in this entire universe. This will include all the particles in quantum mechanics & all the macrocosm objects we will ever want to deal with in general relativity.

Some will say our science laws will work OK in all reference frames but a proviso must be added and the truth is that our science laws will change with different surroundings.

Foucault was the first to demonstrate what Berkeley, Mach and Maxwell claimed that our surroundings cause our inertia. **Our present science totally ignores this even though Einstein initially predicated his theory of general relativity on the principle that the surroundings were homogeneous and isotropic (more or less**

evenly distributed throughout).

The proof that Berkeley, Foucault, Mach and Maxwell were right can be seen by looking at the proton and electron. When they join to form a hydrogen atom, their combined joint mass is less than their original individual masses. This loss of mass is called a gain in "binding energy" (because mass = energy).

Present science fails to see this as a binding energy exchange. By coming together, the electron and the proton lose some binding with the surroundings (*inertial mass*).

This small bit of binding that was lost with the surroundings (*binding energy*) was now gained by the particles exchanging the binding to bind with each other.

The electron and proton both lose a percentage of their binding with the rest of the universe and transfer this small amount to binding together with each other.

All energy creations are nothing more than binding changes.

Present science states this too. Where it fails is not structuring what Berkeley, Foucault, Mach and Maxwell pointed out: Inertial mass is really binding with the rest of the universe. Once this is seen then it is also clear that energy is nothing more than binding changes with the rest of the universe. This is the mass-energy relationship given to us by Einstein.

Once you understand this then you see exactly what mass and energy are all about and you realize that space time for these tiny particles must not be the same space time that you see.

Now on to another facet of these surroundings.

Quantum Theory is built on the fact that we cannot take Newton's laws into the microcosm.

Niels Bohr was able, after a bit of fudging, to actually take centrifugal force into the microcosm and with this he showed that certain electron orbital drops produced certain quanta (spectral lines) but he could only match these in the single electron hydrogen & helium atoms. With different surroundings, of heavier atoms, his modified centrifugal force no longer was valid.

This is one more message telling us that the Galileo-Einstein concept that all reference frames are identical simply isn't true whenever surroundings are sufficiently changed.

But there is a way around this different surroundings difficulty. Ampere essentially gave us a method in 1822---even before James Clerk Maxwell was born---to unify not only the four fundamental forces but also all invisible forces. The trouble was Ampere couldn't do the math for this even though he was a math prodigy and knew all the math of his era by the time he was 12. We can add a few very simple modifications to Ampere's original 1822 laws, plus consider surroundings, and "Presto" we have a top notch universal law we can use to give us the Unified Field that Einstein was looking for. Or it gives us the "big picture" of a modern Theory of Everything, but unfortunately---like Ampere before us---we still can't do the math for it yet today.

Chapter Two

The "A" Laws

Science teaches us that the tiny spinning electron acts exactly like the magnet that millions of them spinning in the same direction make. Science also tells us that a gyroscope always holds its position to the fixed stars. And you know are attracted to this earth so you are remiss in you acquisitiveness if you do not look for some common reason for all these invisible attractions.

The first "A" Law gives you this common reason for all these invisible attractions: Things that travel in the same path or geodesic---compared to the surroundings---will attract.

It's hard to believe, but true, that all the scientists in all the universities have missed this important fact.

The "A" Law premise is that space time is being constantly generated by entities moving in various geodesics.

Thus you get the **LEAST** space time creation (attractive binding force) between entities where their closest sides are traveling in exact geodesics at the same frequency or a harmonic thereof.

This "A" Law premise is a simple premise but you must now look at force in much the same way it is seen in general relativity.

For instance a vacuum does not really cause a suction force. It is the air pressure surrounding everything that pushes into the vacuum and causes a pressurized force.

Use the same pressure analogy in dealing with these invisible forces too because force in both methods is obtained in almost exactly the same way

In this new concept things on various different paths actually cause a creation of

space time and this we can visualize similarly to the aforementioned air pressure.

When a strong magnet aligns electrons in a piece of steel so all the spins are going in the same direction, each locked in place electron behaves like a tiny magnet.

We are now going to forget lines of force emanating from the north and south poles and say this alignment was caused and now holds because the spins are all going in the same direction. Then the polar attraction will be greatest because then all electrons on the same spin axis will see the others moving in the same geodesic path at the same frequency and therefore less space time will be generated between them giving this vacuum effect mentioned earlier.

But this happens only once these electrons are "locked" in place.

What if every spinning entity from electrons to galaxies behaves the same as the electron?

Once you realize that all these FREE spinning entities are gyroscopes and will precess 90 degrees to any applied force then you see why all of these FREE spinning entities we see in the microcosm or macrocosm, no matter how small or large, will repel each other similar to electrons.

If a FREE electron would happen to attract another FREE electron when either its poles or closest sides were going in the same direction then **both of these electrons would be forced to precess and twist 90 degrees AWAY from this applied attractive force.**

Therefore they would be forced to remain in a position to their nearest neighbor where more repulsion than attraction was taking place.

Thus you have Einstein's cosmological constant which Einstein said was a repulsive force between everything.

So I guess Einstein was right all the time and Saul Perlmutter is right today.

While these "A" Laws are laws that work in any surroundings, **these are also laws that depend on the surroundings to work.** None of our other science laws seem to be based on anything like this and therein lies the problem in developing the math

for these new "A" Laws.

George Berkeley, Ernst Mach, James Clerk Maxwell and a host of others all claimed that our surroundings caused our inertia. Einstein was also of this opinion when he first published general relativity and he saw the importance of the surroundings not being changed. He, in fact, emphasized that our surroundings were evenly spread out all around us with a consistent density. Since taking these surroundings into consideration would make all the science math far more complicated, mathematicians rationalized and felt no reason to consider the surroundings. They completely forgot about what these important people said and what Foucault showed us. We fitted our scientific theory to the math we already had and that seemed to work well enough for everyone even though we were warned by these great men. Kurt Gödel gave us another extremely important warning we were completely deaf to. Kurt Gödel proved, beyond a shadow of a doubt, that when you view from a subset single reference frame, such as we do from here on this earth, then you may THINK all your science laws are true laws when they are not true laws for the **ENTIRE** universe. And this is exactly what has happened.

When you see you cannot take your science laws into the microcosm then this is Kurt Gödel's message to you that something with your precious science laws is awry.

Even Einstein gave us the proof that Newton was wrong. Einstein gave us the corrections for Newtonian mechanics but Einstein failed to find the correct "big picture" of how it really all worked.

But I can give you the "big picture" of how it all works but I cannot do the math for it. Can you? If you can then a splendid place in history awaits you.

Now, I'm going to change the scientific theory a bit and put surroundings back in. The problem then will be to find new math to fit this new theory that includes these important surroundings. But it's a much better theory than anything we've got now because **it actually gives you a "big crystal clear picture" of unification.**

Remember, surroundings are the key here: And here's the Aufbau Law Theory or Construction Law Theory of our entire universe.

Einstein wanted a simple answer and this is really simple but it's different from what your peer group is handing out presently.

Look! You can see that you live in a universe that does have quantum theory and that does have general relativity and this is also a universe in which the speed of light remains a constant. When you see all this then you must see something is drastically wrong with the ideas handed to you by your ancestors.

Change your thinking to this new concept. Then you will immediately see exactly why you will have quantum theory and general relativity.

We are going to add to what Berkeley, Mach, Foucault and Maxwell pointed out. We are going to say that not only is inertia created by our surroundings but, in this new Aufbau Law Theory, **that space time is also generated by the surroundings, especially generated by all this motion in these surroundings.**

Another important item is that we are going to say space time is frequency conscious.

But the main thing you must realize is that all your various invisible forces are nothing more than various space time creations. You must remember that space time can be generated at various frequencies. But the space time that you see is only the space time generated at this quark-electron subharmonic frequency,

These "A" laws agree with what we find is happening in the world of general relativity and the quantum world.

Now, consider the *surroundings* in all of this and these "A" Laws will show you the whys & wherefores **of space time creation, which can also be seen as all those invisible forces we know so well but that we've eliminated now for this special viewing.**

Some quantum purists will resent the concept of physical spin being brought into the microcosm. I fully understand their concern but the word spin does approximate what is really going on. I would remind the quantum purists that Dirac predicted the human mind would eventually find an "approximation" of how this all worked. The following laws are such an "approximation" of how it all works.

Remember these are the laws for every spinning, scalar, standing wave resonance, from the smallest spinning particle to the largest spinning super cluster of galaxies.

* The **1st**. "A" Law where all objects in motion produce space time between themselves:

The space time interval is created the least between any two objects, the closest sides of which "see" themselves spinning or moving on parallel paths in the same direction at the same frequency (*like gears meshing*) or a close harmonic thereof. You can also say these two objects will attract each other.

* The **2nd**. "A" Law where all objects in motion produce space time between themselves:

Both space and time are created the most between any two objects, the closest sides of which "see" themselves spinning or moving on parallel paths in opposite directions at the same frequency (*like gears clashing*) or a close harmonic thereof. You can also say these two objects will repel each other.

I use the quoted word "see" to emphasize the world in which these entities actually find themselves.

^

Of great importance, in the two preceding laws, is that these laws are frequency laws and they work separately for each separate spin/orbit frequency level which means these individual wave-particles must "see" themselves doing these things from their viewpoint in their local gauge environment. It does not matter how

some other spin/orbit [frequency](#) level views these things because space and time and indeed the average space time interval is entirely different for each different spin/orbit [frequency](#) level.

These two laws look equal and opposite but they are not: The 1st "A" law "locks on" while its opposite 2nd sister law never does. This is because the total force is generally centralized and you can feel this 1st "A" law "lock on" when two magnets come together. These two laws result in limits of aggregation being established all throughout this universe: This is why there are limits to the size of atoms and limits to the size of stars as well.

* The Aufbau or Ampere Corollary

The aforementioned forces, or space time intervals, between two objects will vary proportionally with the cosine of the angle of their paths. And they will have a torque that will tend to make the paths parallel and to become oriented so that objects on both paths will be traveling in the same direction.

Or

All objects that "see" themselves traveling *in the same direction* on parallel paths at the same frequency will attract and/or space and time, at that frequency, between them is created the least.

All objects that "see" themselves traveling *in opposite directions* on parallel paths at the same frequency will repel and/or space and time between them, at that frequency, increases or is created the most.

^

Chapter Three

Spherical Standing waves

Since no one has offered a credible picture of what type of universe we are in then I'll give you one right now: This is a wave universe primarily built from spherical standing waves.

People who work on radio transmitters are constantly aware of the problem caused by standing waves. It takes energy to make them and they do not radiate energy. So for people working with transmitters the battle is constantly on to reduce the number of standing waves down to a miniscule amount. They can never be totally eliminated.

But to the universe it's just the opposite. This universe thrives on standing waves because they are a type of energy wave that does not radiate any energy. This universe uses them to build with.

This universe uses a special type of standing wave called a spherical standing wave.

Our ancestors didn't know about standing waves and they built up the science that we use today. But this science they built up can be seen as derived from wave laws that no one has entirely figured out yet. But these "A" Laws are only the beginning to untying that great Gordian knot.

Our present science laws are nothing more than derivatives of what this wave universe is all about as we look at it all from our [one singular reference frame](#).

The following "A" Laws are also derivative laws of the functions of this wave universe.

But the "A" Laws are a way to look at it all from [multiple](#)

reference frames

And this is what makes these "A" Laws so powerful because each standing wave entity from quark to galaxy is operating at a different, distinct frequency. With this new "A" Law frequency & surroundings concept, we can now see exactly how the entire setup is really operating.

Viewing it this way, we can view how quarks are working within their similar frequency surroundings and at the same time we can view how galaxies are working within their similar frequency surroundings. Using this we now get a powerful "big picture" of how everything works together.

We are no longer restricted to viewing things from only one solitary reference frame.

It's sometimes helpful, in this new science, to view yourself as being "tuned in" to this one particular electron-quark harmonic frequency exactly like one tunes in one particular radio station or TV program. The microcosm then can be viewed as something at a slightly higher frequency than you are tuned to and the galaxies then can be seen as things at a much lower frequency than you are tuned to.

While this may seem strange, viewing it in this way gives you a tremendous advantage over viewing things as larger or smaller. And something of this order must be what is really going on for us to have the laws that we presently have in general relativity and quantum theory.

Chapter Four

A few more concept changes

In order to hand you this simple answer that Einstein wanted, I am going to chuck out all these forces (for a short time) that you've really loved to do all that math for. I'm going to completely chuck out magnetism, charge, gravity, centrifugal force, the strong & weak forces. In fact ALL the invisible forces go completely out the door for the short time that you need to view the "big picture".

In their place is a simple concept that all permanent particles are really spherical standing waves.

The electron is a spherical standing wave and so is the quark but they are spherical standing waves of different frequencies.

In this concept you must see the entities in the microcosm spinning faster or at a higher frequency than the items in our world or the macrocosm. Since the quark can be considered a further reduction of both the proton and neutron, which the electron is orbiting, then the **quark has to be considered as spinning at a faster rate or higher frequency than the electron** but yet at a definite harmonic of the electron spin frequency.

Your space & time that you see is an electron-spin & quark-spin frequency mixing to give us our space time heterodyne frequency.

We see all this space time because we are composed of BOTH electrons & quarks but those individual electron particles and those individual quark particles will sometimes behave like NOT MUCH of our space time, that we see, is present.

In other words you are "tuned" into these electron-quark frequencies much as a TV or FM radio receiver is tuned into a tiny wave band of frequencies. An infinite frequency wave universe exists but you are only "tuned into" and aware of a miniscule portion of it. You are, in reality, set up much like a radio receiver and this is, indeed, a frequency universe.

Man always makes a bad mistake when he considers himself the center of things. Neither we nor this universe around us are the center of things but only an insignificant portion of what is really here. Realizing this gives you the answer to where all the energy for that Big bang came from.

Knowing nothing but this, and these "A" Laws, we can now build our entire universe.

Watch:

Chapter Five

Inertial Qualities

Here's where we substitute something really simple for all those invisible forces that we eliminated. And here's where unification comes in.

You know we have inertia but now we are going to give all spherical standing wave particles inertial qualities. All permanent particles of any type whatsoever now will have inertial qualities handed to them by all the other similar particles in their surroundings.

That's all we really need to eliminate centrifugal force, charge, gravity, magnetism, and the strong and weak forces (all the invisible forces).

But this new concept changes our inertia somewhat. Our inertia now is caused mostly by the spin frequency of all the quarks that surround us in not only our galaxy but in those super-clusters and probably further than we can even see with this new 10X modification to the Hubbell space telescope.

Now let's begin to build our universe only with what we have at this juncture.

First of all, every spinning entity or particle will now have not only inertial qualities but also, a type of gyroscopic inertial torque imparted to it if it spins.

But let's say the electron has these qualities. Is your present science going to

sense this as inertial qualities?

The answer is no because present science only looks at it from one single subset reference frame.

Also, let's say galaxies get some of their inertial qualities not only from the quarks in the surrounding galaxies but also from the surrounding galaxies themselves. Will you then be able to transfer your present concept of gravity, using Einstein's general theory of relativity, to the actions of these galaxies in relation to their sister galaxies?

The answer is again no because the symmetries developed by the different surroundings will be far different. So this theory is already telling us that this fast rotation of these galaxies is an important message to us that our present concept of gravity is a bit wrong.

Chapter Six

Magnetism

Forget **all** your old laws of magnetism & look at these new "A" Laws. They give you a better picture of magnetism than the Faraday-Maxwell picture of magnetism. No poles or lines of force are needed. In fact, in this new concept, opposites do **NOT** attract. It's just the reverse.

Electrons that are all spinning in the same direction cause magnetism. The sides or poles of these magnets will always attract when the closest sides of the electrons therein, causing the magnetism, are all moving in the **SAME** direction and this is the 1st "A" Law.

The sides or poles of magnets will repel when the closest sides of all the electrons

therein are moving in OPPOSITE directions and this is the 2nd "A" Law.

If you want to get into all the electrical nitty gritty of generators, motors & transformers then these also can be easily explained by these "A" Laws as well. You can find all of this explained in the TOE herein: <http://www.rbduncan.com>

All the electrical phenomena known can be explained by the gyroscopic inertial qualities of the electron. This you can find in the e-book that you can get free by clicking that previous link.

These electrons that cause magnetism are the electrons in the *d* & *f* shells in iron. There are up to 5 electrons in the *d* shell of iron and up to seven electrons in the *f* shell of the iron atom that are all spinning the same direction and causing the magnetism.

Only the inner orbital locked electrons can attract each other like tiny magnets. In fact these inner orbital locked electrons ARE the tiniest magnets.

These spinning electrons that are causing the magnetism are all inner orbital electrons that are "locked". Free outer orbital electrons that are NEVER locked either spin up or spin down can NEVER cause magnetism. These electrons will always repel other free electrons and this is covered in the next chapter.

Chapter Seven

Why electrons, stars & galaxies repel each other

Remember, we have chucked all those invisible forces you are familiar with and all we have now are these two "A" Laws.

So in this new "big picture" of everything, there are no such things as plus

and minus charges.

Please pay particular attention to the following.

Electrons can exhibit either an attraction such as unlike charges when they are "locked" or a repulsive behavior such as with similar type charge or similar magnetic poles when they are "free". Our "A" Laws show us why this is so and in the **next 8 paragraphs** you have the best explanation of **why electrons and even stars & galaxies repel each other.**

Lets look at these free electrons first: They spin and hence they have inertial qualities and this includes gyroscopic inertia which always provides this force 90 degrees to any external force acting on such a spinning item.

Completely forget about charge now and only look at our new "A" Laws and what they say.

The 1st "A" Law says that there is a possibility that two free electrons can attract each other providing that any portion of their closest sides are spinning in the same direction at the same frequency. This means either their sides can be spinning in the same directions or they can be lined up so that both of their poles can be spinning in the same directions: Any such two electrons **will attract each other.**

Then we see that there is something else: This attracting force comes in as the cosine of the angle of the movement.

As this force begins to act, it in turn causes this 90-degree gyroscopic torque to **twist both of those totally free electrons away from this initial attracting position, doesn't it?**

So because of this gyro torque, two free electrons can never remain in a full attracting position and they will therefore be forced to stay more in a **repelling** position. Therefore free electrons will always end up repelling each other and this repelling is not explained by using this thing called charge: it is explained only by simply using **global** inertial qualities and our new global "A" Laws.

The above 8 paragraphs explain not only why electrons repel each other but they also explain why any two perfectly free similar spinning objects of the *same size* must repel each other. So now you know why both electrons and galaxies stay well away from each other.

This is Einstein's cosmological constant.

Something somewhere has to be "locked" in place and synchronized in frequency with the electron's spin or a close subharmonic of the spin to get any kind of attracting force:

Yes, the proton attracts an electron. When two up quarks combine with one down quark to form a proton then something in this special type of assemblage is able to synchronize in with the electron's spin frequency and "lock" it thereby preventing the electron from precessing or wobbling and therefore it can attract the electron.

This is why aggregations come together (**gravity**) and larger aggregations come together and accumulate because as these things grow in size there are more things "locked" in place strengthening the attractive force of the 1st "A" Law.

Once we know more about quarks and we learn exactly how those two up quarks and the one down quark in the proton are set up then we will know more about how this type of attractive quark **strong force** binding functions. Attraction is **always** a **synchronized frequency attraction** and it is **not** simply the old idea of plus and minus charges.

All attractions in this theory must be synchronized frequency attractions.

Both light and inertial mass are caused by these synchronized frequency attractions.

As quantum theory shows us, the orbital of an electron on a distant star goes down a certain amount while the orbital of the electron receiving this quantum of energy---in your eye---goes up the exact same amount. But what quantum mechanics does not tell you is that these two energy exchanging orbitals must be in the same exact plane. Not only that but each orbital must be a mirror image of the other with the electrons in each rotating and revolving in the exact opposite directions so that at the time the energy exchange takes place the closest sides of both electrons are going in the same direction. You can see from this that this energy change is merely a **MOMENTARY DIRECT PULL** from the electron, on the star, to the electron in your eye. These electrons will make many revolutions, rotations and wobbling oscillations during each change of those orbitals giving you the light that you see.

If two distant quarks are lined up so that their closest sides are in the same directions as the two aforementioned electrons then they too will momentarily bind with each other---even from a vast distance---and cause what we see as inertial mass. But since the quarks in the proton and neutron tri-quark entities do not oscillate and wobble quite like the electron then this pull of the two quarks is a steady momentary binding pull where **BOTH** quarks are pulled away from the other two quarks but **NO PERMANENT Energy CHANGE** is made in either tri-quark entity (neutron or proton).

When you spin a flywheel and notice the gyroscopic inertia, you should also notice that the gyroscopic torque that is always 90 degrees to the axis of rotation **can also be seen** as a linkage with the rim of the rapidly spinning flywheel to a path projected in the sky (macrocosm surroundings). The rim tries to stay in this path. This is showing you that you do have an absolute reference frame, which is Mach's principle. Billions of quarks in **BOTH** the flywheel and in the macrocosm are both being momentarily extended more than normal thus giving you this added gyroscopic inertia.

You might have to read the long TOE at <http://www.rbduncan.com> to get the full picture of what happens when you crank up a gyroscope or a flywheel or ride a bicycle and produce gyroscopic inertia. It's similar to the reason you need cyclic

pitch on a helicopter. When a helicopter moves forward then the blades on one side travel through the air faster than the blades on the other side and this tries to tip the helicopter over. (Igor Sikorsky had to invent cyclic pitch to prevent this).

The same thing happens to certain quarks whose rims line up with the rim of the gyroscope, flywheel or bicycle wheels. The speed that these items are turning---in respect to the macrocosm---now adds to portions of the quark rim speed which before was close to the speed of light and now gets even closer to the speed of light. So you are moving up an asymptotic curve close to the unsurpassable speed of light. And this---even with a miniscule number of quarks involved---gives us this gyroscopic inertia. It does this because the mass of these few quarks increase tremendously as portions of their rim speed approach the speed of light. As Einstein has shown us, mass increases with speed and especially increases when on that asymptotic portion of the curve.

Of available electrons, only the smallest faction link with others a distance away to transfer light and heat. The same with quarks causing gyroscopic inertia. All quarks link to cause inertial mass. All these binding linkages are momentary with the electron's oscillations causing a permanent transfer of energy and the various momentary quark bindings causing inertial mass. This could be seen---in gyroscopic inertia---as only a temporary transfer of inertial mass. But if you could increase our surroundings---as will be the case when our Milky Way galaxy finally collides with the Andromeda galaxy---then anyone here on earth will find both inertial mass, gyroscopic inertia and centrifugal force have all become stronger with the more crowded surroundings.

Now let's go to the stars and you will see the same "A" Laws apply there as well and, as you can see, these too will always have to remain in a repelling position with each other.

Close binary stars of the same mass, on the other hand, will always be spinning so that their closest sides are always moving in the same direction at the same frequency.

Recently Perlmutter discovered this acceleration and showed we must have Einstein's **cosmological constant**---a repulsive force---between all the stars and galaxies.

Scientists have been wracking their brains to figure out why because nothing in our present science has even predicted such a thing.

But look at this! Right here you can see that our "A" Laws tell you exactly why we have Einstein's "cosmological constant" not only in the sky but in the microcosm as well. And they tell you why we have gravity too. Your present science doesn't even do this.

Chapter Eight

Perlmutter's acceleration

Perlmutter's group discovered the expansion of this universe is accelerating and Perlmutter, himself, said we had the repelling force of Einstein's cosmological constant between all stars, galaxies, super-clusters, etc. in this universe. So really this makes our macrocosm similar to the microcosm where this repelling force is accepted as fact.

When you apply Einstein's principle of equivalence to such a repulsive force then it is plain to see that if there was such a force out there then we would indeed mistake it for an accelerating, expanding universe. So we are really in a repulsive force, steady state universe.

So this acceleration, which now has been proven from other sources now as well, points to a repulsive force, steady state universe much the same as our microcosm. The principle of equivalence clearly states we cannot distinguish between such a force out there and acceleration.

Yes, there was a Big Bang. I'm not disputing that fact. But acceleration needs a present force. There is no present force. The Big Bang was a past force. You can't have acceleration with a past force.

Chapter Nine

Gravity

The 1st "A" Law tells you exactly why you are being pulled toward this earth. Since---compared to your surroundings---you are going the same direction on a parallel path as the earth then you will be attracted to the earth.

As I've said many times before in numerous writings: You absolutely must see all attractions---and this includes gravity---as space time creations all about pushing in the direction of the attraction in which there is the **LEAST** space time creation.

In other words you must keep in mind the idea of air pressure forcing things into the vacuum. Instead of air **pressure**, however, we have space time creation doing the pushing.

The only difference between the microcosm and the macrocosm is symmetry. From your single reference frame they will look like they obey different laws because both have a far different symmetry but both really obey the very same "A" Laws.

The earth is on a geodesic path. This means the amount of space time being generated between the earth and the sun is the same amount as the amount of space time being generated between the earth and all the far off stars in the surroundings. But the amount of space time being generated between you and the earth will be less than this because you are traveling on a parallel path with the earth in the same direction (1st "A" Law). Thus you will sense that you are attracted to the earth.

This agrees with general relativity because gravity is a slowing down of time.

You can see yourself that there is also less space time between you and the earth because you seem attracted to the earth.

These "A" Laws, therefore, are showing you the same thing that general relativity shows you with a simplicity that is nowhere to be found in general relativity with its complicated tensor math.

Chapter Ten

The speed of light & conclusion

The Michaelson-Morley experiment proved beyond any shadow of a doubt that the speed of light is a constant, independent of the velocity of the source or observer.

This is pretty potent stuff. It brought in Einstein.

So how does one build a universe where the speed of light is a constant and we have Einstein's general relativity and quantum mechanics?

The only possible way that this can be done is by making the speed of light the speed that our space time, at this electron-quark heterodyne frequency, is being produced. If we allow this then we will sense that gravity and light will both be propagated at the same speed, which we will see as the speed of light.

This concept shows why Paul Davies, Tamara Davis and Charles Lineweaver recently found the speed of light has changed over billions of years. The speed of light is really the speed at which our space time is being created and this is entirely dependent on the amount of Einstein's **cosmological constant** repulsive force produced by the surroundings. We know this force could not have remained steady after the Big Bang because the surroundings did not remain steady. So

those three Australian scientists are most probably right to claim that the speed of light is not a perfect constant.

What is one quantum of light?

Your eye needs a bit less than a dozen of these quanta before it can distinguish a speck of light.

To deliver your eye one quantum of light energy an orbiting electron on a distant star collapses to a lower orbital while an identical orbiting electron in your eye goes into a higher orbital. Present science totally agrees with this famous discovery by Niels Bohr.

Present science also tells us that there is never any radiation as long as an entity remains on a steady orbital. You only get radiation during shifting orbitals ([when your balance linkage to the macrocosm surroundings changes](#)).

The electron on that star makes many orbits and wobbling oscillations during that brief quantum collapse and these wobbling oscillations are picked up as a sort of mirror image in your eye.

All this should be showing you that you are in a spherical standing wave universe and any time something is moved from a balanced geodesic then it will cause some sort of energy exchange with the macroscopic surroundings.

Inertial mass is therefore a steady amount of billions of momentary strong bindings with the macroscopic surroundings and energy is any [change](#) of this steady amount of binding.

You now can see which way science has to head. We have to find the exact important spin frequencies and the important subharmonic linking frequencies of all these spherical standing wave entities from quarks to galaxies but these are limited and this can be done with the knowledge we now have once we think the problem through correctly.

It's like a huge calculus problem that has to be solved and we already have a

derivative (our present science laws).

Few see the importance of this now but this will change.

We will have computers, in the coming years, that will be capable of building the foundation for this new frequency math system.

The universities are perfectly set up to work out this task. It will be a monumental task taking far greater effort than it took to develop RADAR but the results achieved will be many millions of times greater than the development of RADAR because it will advance all of science so tremendously.

Kurt Gödel warned us that if we could not see out far enough then we could make laws that we would THINK would be absolutely true science laws that would work perfectly throughout this entire universe. This is exactly what has happened. We only THINK the law of gravity will work perfectly further out than our galaxy but it will not. These spinning standing wave entities, from quarks to galaxies, produce different symmetries for each distinct spin/orbit level. [Our present science laws are merely a reflection of these different symmetries.](#) The law of gravity works best if held entirely within the symmetry imposed by our Milky Way galaxy. I honestly believe that if Einstein would have listened more to his good friend Kurt Gödel, then he might have found the answer he was looking for.

We all make mistakes and I made a dreadful one decades ago by not realizing much earlier the importance of the spherical standing wave in all of this when a good portion of my lifetime was one of dealing with waves and standing waves. But I can finally offer these "A" Laws to you. I used them my entire lifetime in electronics simply because they gave faster, more reliable, answers than anything else when accuracy was not required. They do give you the proper direction and the "big picture" even though there is still no math we can use with them.

With these "A" Laws in this present introductory form we are still only scratching the surface of all that is out there to be discovered.

Others will now come along and build on this knowledge and that's the way science has worked and will continue to work.

What this all boils down to is that there are now two ways to view science: You

can view things from one reference frame, the way most now prefer, or you can view things from their frequency aspect which gives you a view from multiple reference frames.

This is a universe made up of waves

And your present science needs something such as aether for these waves to function in.

But this "New Kind of Science" doesn't.

In this "New Kind of Science" all the invisible forces are nothing more than creations of space time.

In this "New Kind of Science" space time is frequency conscious and is being created at every spin/orbital frequency.

Therefore no aether is needed. Aether is still a problem in present science.

In this "New Kind of Science" **THE AETHER PROBLEM IS SOLVED.**

This is really a frequency universe and you are built of quarks and electrons, which themselves are really only spherical standing wave entities. In this type of a universe you will only be able to accurately measure distance, space, time, motion, etc. between those items also made up of both quarks and electrons.

This is because you are tuned to this quark-electron subharmonic frequency much like a radio is tuned to one particular station.

You will run into Heisenberg's uncertainty whenever you try to pin down an individual electron or a quark simply because these individually are NOT tuned to your subharmonic frequency but they merely have a harmonic linkage to it.

Distance, space, time & motion only exist in your mind and in this present science that Einstein proved was not correct.

Distance, space, time & motion get fuzzier and fuzzier the further you get from your quark-electron subharmonic frequency world.

In fact, for this entire universe of infinite frequencies just having the idea of distance, space, time & motion becomes ludicrous.

As Stephen Wolfram points out, we will move to computers for our future knowledge. Using future super computers along with "[a New Kind of Science](#)", this new Aufbau frequency concept will be proven beyond a shadow of a doubt some day.

This is a frequency universe & nothing more.

You will always THINK you see a specified distance, space, time & motion when you view other quark-electron entities from a single subset reference frame.

While this present science singular reference frame view is the most accurate method now, it will not remain that way as better computers are built and as new math is developed for this additional Aufbau Law frequency concept.

The version above is a really short example of this new concept. For a longer, more elaborate version go to: <http://www.rbduncan.com> and read the TOE therein.

[FREE](#) - [Click Here](#) - [for the Very Latest in SCIENCE.](#)



Science & fiction E--BOOKS, pop up ad killers, software & much, much more ALL FREE at <http://www.rbduncan.com>

VERY LATEST IN SCIENCE: Do Ampere's Laws give us the *final answer* to DARK MATTER?

[7-7-2017.The final answer to the cause of Dark Matter.htm](#)

Final and SIMPLE answer to the DARK MATTER attractive force.

In Word: [7-7-2017.Answer to DARK MATTER.doc](#)

7-7-2017 Answer to DARK MATTER also in Adobe.pdf - [7-7-2017.Answer to DARK MATTER.pdf](#)

Science & fiction E--BOOKS, pop up ad killers, software & much, much more ALL FREE at the above link too.

And for that book that was described in a **FULL PAGE** of the New York Times Sunday Book Review in 1967.

It's **FREE** in e-book form

Click [Fitzpatrick's First Book](#) (**FREE**)

Thanks for reading this:

Here's one on June 12th 2018 telling about a Britannica mistake, but half way through is a most interesting dissertation on how our eyes see **COLORS**.

Britannica in html:

<http://rbduncan.com/britannica.html>

Britannica in Word:<http://rbduncan.com/britannica.doc>

Britannica in Adobe pdf:<http://rbduncan.com/britannica.pdf>

See: [Phase symmetry makes quantum theory more complete. 12-02-2013](#)

See: <http://www.rbduncan.com> and <http://www.amperefitz.com>

click: <http://www.rbduncan.com/schrod.htm>

[Order a copy of "Universities Asleep at the Switch" **NOW**.](#)

[Read "Universities Asleep at the Switch" **FREE** in html.](#)

[Read "Universities Asleep at the Switch" **FREE** in ADOBE \(slower to load\).](#)