

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](#)

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



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

Universities asleep at the switch

By Daniel P. Fitzpatrick Jr.

Website at <http://www.amperefitz.com> where you
can click on the same links that you see in this book

Dedicated to Fulbright Scholar Dr. Milo Wolff who was the first to
mathematically prove Mach's principle by showing us the electron is a scalar,
standing wave.

Chapter 1.

How wrong are these universities?

This is the most incredible true story anyone has ever told. It will be talked about
as long as humans are here. Others may tell this story better than I have. I merely
lucked out and have been able to tell it first.

As this book is being first published, none in these universities can tell you why
we have centrifugal force. They can only give you the math for how strong it will
be.

But ask them, "What causes centrifugal force?"

They can't even give you the answer. It's hard to believe that they were closer to
the correct answer eighty years ago than they are today.

You can get the answer, though, by reading this book.

How wrong can the universities be you ask?

About as wrong as one can be about our science laws, in fact dangerously wrong.

In this book, you will see the serious problems that are definitely holding science
back whereas on the surface everything looks fine.

It will be hard to believe that all these science mishaps, on the road to wholesale
ignorance, actually happened. However, they did all happen. Each one of them

will be pointed out to you.

It's not one single factor that caused this naivete but many factors, that all added up, which you will see as you go through this book.

I grew up loving radio as a kid and had an amateur radio station W2YDW up and running as I was entering high school. I learned about the importance of standing waves and impedance matching in radio circuitry at an early age and finally found they both are extremely important to our entire universe as well.

These will be covered in detail later. But first I'll repeat what I have said in many places before:

"We now have the answer Einstein was looking for, but this universe is far different from that described by most present science laws. It is a scalar, standing wave universe and it resembles instead what we see in the quantum world but simply a lower frequency thereof with a slightly different symmetry.

If enough universities remain asleep, while one nation puts sufficient time and resources into this brand new kind of science, then that nation will not only have cheap controllable fusion power with radioactive waste existing only for microseconds instead of millions of years but it will also have enough sophisticated weaponry, to keep the rest of the world as its virtual slaves, for many thousands of years.

While Joe Sixpack will have no interest in this book, the Islamic Fascists certainly will."

The information in this book could change the world as we know it. Concentrated in the wrong hands, it could change all of our lives permanently. Your world is at risk. It is up to you to understand the issues and help do something about it. If our universities and government don't wake up and focus their energies in the right direction, some other nation will beat us to it, and they will then have the power to hold us hostage.

It was hard for me to believe that the radio shop at the Miami base of Pan American World Airways was putting correction cards on units that went to the instrument shop and there these corrections were reversed to give less accuracy rather than more. When I saw what was actually happening I went to both people

involved in both shops and got the answer that nothing like that could happen with all the safeguards the engineering department here at Pan Am had in place. I then went to the person who headed both shops but that too brought no changes. Months went by and then I saw the radioman who made out the correction cards talking to the shop supervisor who got the units. They were talking about getting the most miles out of a set of tires. I stood there listening and then at an appropriate time, I asked the man in the radio shop, who had been a chief petty officer in the navy, "Chief, if the Gertz reads 359.9 instead of true north. What do you put on the correction card?" When he answered, Rufi Lopez, who headed that particular instrument shop, screamed at him, "No! That's an error not a correction! You're doing it backwards!" I silently walked away, now knowing that it would all be quietly corrected with no problems ever arising about the mishap.

I had another problem handed to me by the head of the vertical gyro department. "This gyro keeps coming back every few weeks and they keep sending it out again. Something must be wrong with it that they are not discovering."

It turned out to be a puzzle that was hard to solve but one day, I and another man, were in the instrument shop and he was ready to leave and he turned off a switch. Just then the gyro failed and started falling off. I switched the switch back on and the gyro went back to working correctly. Then when I switched the switch back off the gyro failed to hold. I asked him, "What is that switch for?" "It's for the vacuum pump," He answered.

"Is that thing running all the time," I asked. "Yes, as long as anybody's here," he answered.

Well, I had already told the head of the instrument department that he had a worker who was improperly reading a dial indicator micrometer while measuring the end play on vertical gyro gimbal ball bearings. But nothing ever came of it. Now I saw what was happening. With the wrong end play on the gimbal bearings, as long as the rotating gyro was perfectly centered, the gyro would work just fine on a piston powered airplane that was always vibrating but not on a jet that had no such steady vibration. Although the bearings were too loose, it was the vibration that was keeping it perfectly centered. In addition, since they were checking it on a bench that was continually vibrating, because of the vibrating vacuum pump, it always worked fine there. So the overhaul shop would put a

green tag on it and send it out again. However, when it got on a jet airplane, that didn't vibrate, it fell off and wouldn't hold.

When I reported this to the head of the vertical gyro department he called engineering. I showed this to an engineer and told him, "This is probably why the poor record of Pan Am's overhauled gyros are keeping them from flying the polar route. These gyros are an absolute necessity, close to the pole, where you can't use a magnetic compass."

Then came the Pan Am cut backs and layoffs. I went to another department but later met that engineer to whom I showed the gyro problem. "Hey, did they ever fix that gyro problem," I asked. "No, I got pulled off that to get those movies running. They wanted those movies installed on all the airplanes," he replied.

Even with all this, our airlines are not as poorly run as our universities. There was not even one fatal commercial accident here in the U.S. of any scheduled airline carrier during the entire year of 2002. This was the year following 9-11 and that terrorist attack on the twin towers in New York.

Not having even one fatality in all those many millions of passenger miles flown, for that entire year, is one remarkable achievement. It can be done if everyone tries and that year following 9-11 everyone tried to be safer and they actually were able to do it and show those improved safety results. If you figure fatalities per passenger mile then you are about 50 or more times safer flying with a scheduled American commercial airline than you are driving your own car. This is a fact.

But, remember, that figure is fatalities per passenger mile, not hours. This does not mean you are 50 times safer for every hour you are in a commercial airliner than every hour you are in a car. An airliner racks up far more miles in an hour than a car does. You are indeed quite a bit safer per hour but not 50 times as safe, if you look at it that way.

Yes, these universities have graduated all these people who have given us these wonderful airliner toys. It's been neat cranking up a 40 million dollar toy and playing with it. Today an airliner costs even more than that.

What I'm trying to get across to you here, with those airline problems, is that

people specialize. They cut themselves off from other specialties because there is simply too much info for a single brain to handle. Computers now keep coming out with more and more brain capacity. Unfortunately, we humans are still using that old first edition brain with low disk space so we have to specialize and not worry about what the others are doing.

This was one factor that have kept the universities asleep but there are more.

Keeping simplicity in mind, I'm going to try to explain the present situation of science to you in an understandable manner and show you where these failures have occurred.

You must first understand that Max Planck realized something peculiar one day about the way energy worked and he gave a speech that very night telling about how energy must be sent out and received in packets. This was something Einstein immediately jumped on and with what Einstein's termed a photon (a bullet like packet of energy) the quantum theory took off running and hasn't stopped since.

Then Niels Bohr stole the show away from Einstein and Bohr's house in Copenhagen was cranking out future Nobel Prize winners almost as fast as Henry Ford, at the same time, was cranking out Model T Fords.

Bohr got the Nobel Prize, way back then, for showing us exactly how a quantum of light from a star is received by our eye.

Here's how Bohr said it works: On a distant star an electron drops to a lower orbit and an electron in your eye goes up to a higher orbit the same exact amount. This was termed "action at a distance."

If the electron only drops a short distance then it is a quantum of red light but if it drops a much longer distance (more energy) then it is a quantum of blue or (even more energy) violet light. A quantum of violet light has about twice the energy as a quantum of red light.

These quanta packets can vary in size but the energy received always matches exactly the energy sent.

Do you discern an aspect of balancing in this? Please keep this aspect of balancing in mind. We'll cover it in detail later.

The quantum theorists, after Bohr, did not keep it in mind because they wanted Bohr's Nobel Prize winning concept of the atom to be replaced with their new modern resonance picture, which happened to be void of any balancing aspect. I'm not saying it's a wrong picture but the elimination of the balancing aspect was bad. This eliminated a priceless tool and put us back almost eighty years.

Neils Bohr had the electron traveling on certain orbits but now modern quantum theorists see the electron as being in a kind of mysterious resonance orbital.

What they did reminds me of the definition of a fanatic. "One who loses sights of his objectives but redoubles his efforts." They had good reason to do what they did but in doing so lost something priceless.

This you will see as you read on.

Anyway, when light comes to your eye from a distant star via these quanta, absolutely no energy is lost in any of these quanta over that long distance. This is so important that it's the foundation of quantum mechanics and it's the very basis of this brand new kind of science that I will try to explain to you.

Now this isn't any fabrication of mine. This is the cornerstone of quantum theory as well. All the theorists there know this is true. If it wasn't then Niels Bohr wouldn't have gotten the Nobel Prize for discovering it.

This is how energy is made. We also hear of binding energy along with atomic energy. When this binding changes then we gain or lose energy. All our science folks agree with that too so try to keep that firmly in mind as well.

Now to the important question. Why does light diminish in energy with the square of the distance if no energy is lost in each quantum no matter the distance?

It is the number of these quanta (binding electron pairs) — electron on the star giving and electron in your eye receiving — that fall off with the square of the distance.

Only the number, of electron binding pairs, falls off with the square of the

distance. The strength of these bonds do not vary with distance but they do cease at the Hubble limit, which will be covered later.

Please remember this because it is so very important.

Just as things went wrong at Pan Am, they have also gone wrong elsewhere as well. This is the story of how things have gone wrong in the universities just as they did at Pan Am and all the other Airlines that I've gotten to know.

Dr. Milo Wolff's brilliant mathematical proof that both the electron and its spin are scalar, standing waves with a finite portion (the Hubble limit) of their same frequency surroundings, has fallen on deaf ears. So has Saul Perlmutter's insistence that gravity's equal and opposite repulsive force (Einstein's cosmological constant)_exists, holding all the stars and galaxies apart.

My website is at <http://www.amperefitz.com> where you can simply click the links you find in this book.

Dr. Milo Wolff's website is <http://www.quantummatter.com>

Saul Perlmutter's site is: <http://panisse.lbl.gov/public/sauldir/saulhome.html>

These two scientists have given us the final pieces of the master puzzle that show us this is indeed a simple universe. You can see approximately how it all works, and one does not have to be a math expert to see this either.

You simply can't overlook the evidence that these two scientists have put forth. Yet, these universities have.

Scientists before them have given us other important pieces of the puzzle and they too have been mostly ignored by the universities.

Kurt Gödel proved that if we were confined in a subset realm — like here on earth — without being able to see out far enough then we might believe that our science laws were universal truths when this would be far from the truth. This is exactly what has happened.

Berkeley, then Mach then Maxwell all told us surroundings were involved

(Mach's principle). Since this did not mix well with present science and made the math too difficult, it was simply given lip service and largely bypassed and ignored by the universities. The university presses printed, "Inertia is implicit with the geodesic equation of motion." Now, thanks to my good friend Dr. Milo Wolff, we have actual proof inertia is **not** implicit with the geodesic equation of motion; it's same frequency surroundings that are involved. We have computers, coming on line in the future, that will do these calculations and will give even more proof of this than Milo gave.

Dirac predicted that one day we would be able to see an approximation of how it all worked and how true this becomes. The basic building blocks of this universe are simple standing waves whose spins and orbits produce vector forces, but this fact is totally obscured by all our subset, local science laws and the tons of garbage printed by the university presses.

They do print some diamonds as well but the problem is the same as in a diamond mine where you have to go through many tons of mud to get only one diamond.

The diamond that this book is showing you is that it is surroundings, surroundings, surroundings and spins, spins, spins. It's surroundings and either spin or orbital binding. These spins are spins that bind, giving us not only binding energy but gravity, inertia, light and all the invisible forces as well.

In fact, that's what this book will be explaining.

And that, essentially, is what you should be looking at to get the big picture of how our entire universe works.

Surroundings and spins are not a big part of present science but they are everything in this brand new kind of science.

Our present science cannot give answers to the following:

Why is everything spinning in the microcosm as well as here? Notice all this separation (*99.9999% empty space*) both in the macrocosm and microcosm. Look how far we are from the sun. Light goes about 186,000 miles a second or 300 million meters a second and the sun is so far away that it takes light about 8

minutes to get from the sun to us here on earth. That's a lot of space there. Now if you make an electron as big as a pinhead then the closest electron to the nucleus would be as far from the nucleus as the fortieth floor of a tall building is from the road below. A lot of space is there too.

Once you see all this spinning, in the solar system, the microcosm and the macrocosm, and the fact that this massive amount of empty space in our world, the microcosm and the macrocosm **is exactly the same** then it doesn't take much of a brain to see there is **only one precept** behind it all. Therefore, all your science that gives entirely different reasons for us, the microcosm and the macrocosm must be very, very **wrong**.

You are about to see how wrong they are. You'll see the big picture of how it's really working. You'll see what Einstein tried to see.

This universe is built upon a foundation of scalar, standing waves that is extremely difficult not only to see but also to understand. Future super-computers will be needed to decipher all that. But today, by using surroundings, spins and Ampere's Laws the big picture emerges as clear as crystal.

It turns out that Ampere gave us the first universal true laws in the 1820s, showing us how it all worked, and we should have listened to him but we listened to Faraday instead. Ampere described these invisible forces using relative motion laws while Faraday used fields. You must use relative motion to easily unify the forces because motion is the only common element. How do you easily unify sundry fields that all have wrong underlying concepts?

Millions of dollars, perhaps even billions, of taxpayer money has gone into trying to unify these invisible fields by various mathematicians with the results that only a resemblance of unification of the weak force with magnetism has ever been achieved. Nobel Scientist Richard Feynman, who understood it, humorously said about this particular unification that one could even see the glue that held it together.

It's ironic that Ampere, in the 1820s, gave us laws that can actually unify all these invisible forces today, right now, even without using any math at all. All you need is your common sense.

Math is an important science tool. There is no insinuation here that it is not. The above paragraph merely states that the reader, in this particular instance, will need no math expertise whatsoever to see the big picture of how magnetism, gravity, strong and weak forces are unified.

Stay reading and you'll see the best unification picture ever. You'll see a universe that finally makes sense as far as the unification of all these invisible forces is concerned.

True, universal, global science must be built upon a basis of logic. This logic foundation can only be laid after these invisible forces are unified.

You simply cannot have a logical foundation for your science until these fundamental invisible forces are unified.

Once you see how these invisible forces are unified then you will know what is going on. Until then, you won't.

If your science gives you a picture of these forces being one and the same — as Ampere's Laws do — then this is true, universal, global science.

If your science shows you different type forces — as present science does — for all these invisible forces then that science is merely local gauge theory and utterly worthless in seeing the big picture of how this entire universe works.

The Michaelson Moreley experiment, over a hundred years ago, showed us something was radically wrong with our concept of motion. With this new approach, we now know a bit more about motion, in this universe of scalar, standing waves, and the parameters in which it can be safely used. Motion, along with the spacetime interval, in one frequency spin/orbit system spacetime realm is far different from motion and the spacetime interval in a different frequency spin/orbit system spacetime realm. Quantum scientists do understand a part of this, but only a part. That is why QED (*the study of electrons*) uses different math and rules from QCD (*the study of quarks*). They also understand that the strength of these individual binding energy forces does not vary with distance. It is merely the number of these individual bondings that decrease with the square of the distance.

Now that I've brought in the spacetime interval, I must tell you something about it. Mathematicians love it. It's like the hypotenuse of a right triangle with space being one side and time being the other side. If the hypotenuse (spacetime interval) stays the same and you reduce the time side then the space side must get longer and vice versa. This seems to be the way it really works in relativistic situations too. We get into these situations with higher speeds and higher mass where space changes and time changes but the spacetime interval stays the same.

Ampere's Laws immediately show you the unification of gravity, magnetic attractions and sigma and pi chemical bondings. And the standing wave action, which is the basis for these laws, show us why we have motion, space and time and even life itself because things that reproduce stay here and things that don't, don't. Standing waves utilize the energy of their same frequency surroundings to reproduce themselves and stay here.

In radio, we constantly look for ways to eliminate all the standing waves we can but in this universe, it's just the opposite and this universe uses them as its master building blocks.

Not only is all of this true but there is a lot more for you to know about — mostly mistakes — that the universities have made and you will also see why they fell into the trap that they did.

All large organizations are prone to do this.

The Catholic Church in Galileo's time was the great repository of knowledge back then and they refused to even look through the new telescope that Galileo built. Galileo was put under house arrest for merely stating the earth moved. Giordano Bruno who not only stated that the earth moved but that the sun was a star just like all the other stars was burned at the stake by that great repository of knowledge for merely expressing what he knew was a fact.

Things haven't changed much since then.

When President Eisenhower retired, he warned about the power in the military-industrial complex. The university system that we have today is nothing more than a servant to that military-industrial complex.

The universities are simply reiterating what was told in the past just the same as the Catholic Church did in Galileo's time and that simply was not good enough back then and it is not good enough today either.

Today it's surroundings, surroundings, surroundings, and spins, spins, spins. It's surroundings and either spin or orbital binding.

I know that the quantum purists will challenge me at this point telling me "The electron doesn't spin like a top." I know that. I know it is resonances and not motion, in fact that is exactly what you will be learning all about in this book.

What you will be seeing, all through this book, is that the foundation stones are indeed resonances and not motion. This is exactly what quantum theorists imply. Because this is far too complicated for our minds, at this present time, then simply use the Occam's razor approach and simplify it by seeing it as motion.

That's what Niels Bohr did, and it worked.

That's all I ask you to do now and it too will work.

Many quantum scientists dislike seeing this as motion in the world of the electron but we do have evidence of angular momentum orbit changes and spin changes the same as when orbits and spins change here. Niels Bohr won the Nobel Prize for showing us the orbit changes and some years later Dirac showed us the fine structure evidence of spin changes. So there is sufficient evidence the electron does orbit and spin. The reason that we see it as resonances is that we are not inside the electron's spin/orbit spacetime realm. We are in an entirely different spacetime realm and from where we are looking out here, to inside of the microcosm, we will see it all as resonances. What the quantum theorists fail to realize is that you will not see things as resonances in your own spacetime realm. There you will see them as solid entities, spinning and orbiting, the same way we see the planets and stars and the very way that the electrons must "see" themselves.

The word "see" has been used very loosely in that above paragraph. That's why it is in quotes. This, seemingly, is the best way to explain it.

This adamant refusal, on the part of the universities, to understand this motion

concept in the microcosm not only cost Goudsmit and Uhlenbeck the Nobel Prize but it has set us back dearly in our understanding of this universe. So just hang in there all you quantum experts. I'm sure you too will finally be satisfied with the entire explanation where there is more on this very subject and a caveat on motion and the parameters in which it can be safely used. But as for right now, let us go back to about 1920 where Neils Bohr described it as electrons spinning like the planets and orbiting around the nucleus (*We now know it's a quark nucleus.*) like planets do in the solar system.

The reason that we have to go back to the way Niels Bohr described electrons eighty years ago is that our minds simply cannot understand what is really going on if we see it as it really is, a universe of resonances within their same frequency surroundings.

Quantum mechanics fell into a "Catch 22". They found the right answer before they received the computers, programming and entire theory that could utilize that correct answer.

Stephen Wolfram, mentioned later, got it right. The correct answer is far too complicated, right now, for our minds to even begin to deal with it. We will need future super-computers for that.

Presently you will see a method whereby our minds can deal with it today, right now. You will get an approximate big picture of how it all works. Dirac even predicted this approximation would arrive. It did. It's here now in this book.

See it as Niels Bohr saw it. Give the electron, and the quark, a spin and orbit and visualize the electron as an oblate spheroid the same as the earth but naturally much, much, much smaller.

Niels Bohr looked at the electron correctly. He saw these electrons as they saw themselves in their own microcosm world. This is the way it has to be done using today's slim resources.

You must look at them from within their reference frame, not from within ours.

If this is done then all these entities will appear as solid spinning entities similar to what we see in our macrocosm.

Nevertheless, the fact is today that this is not being done. Quantum theorists are looking at them from within our reference frame and seeing them as resonances. I'll go into this reference frame concept more in detail later.

This new science tells us the quantum theorists are right about seeing these resonances. Not only these resonances, but all repetitive geodesic spins and orbits, are equivalent to scalar, standing waves. Matter that is made up of these spins and orbitals must also be considered equivalent to scalar, standing waves. Therefore, electrons, stars and galaxies are all constructed basically the same and being repelled, from each other, exactly for the same reason. And we'll get to that later in this chapter and chapter 2.

Ampere's Laws plus the gyro precession, that this brand new kind of science shows us all spinning entities have, tell us why all these spinning entities repel each other when they are free.

Quantum theorists did get the resonances right but they didn't see the importance of what Ampere taught us.

The spin frequencies of everything are the key in this brand new kind of science.

This new science shows us all spinning entities must have a form of gyro precession to same frequency neighbor similar entities in their surroundings. This means their same frequency surroundings and not necessarily what you will see as gyro precession in your spacetime realm. Whereas our realm is homogeneous and isotropic (*no privileged spot and surroundings evenly spread out*) the realm of the electron is definitely not.

You only have attractions, in this universe, when things are moving on parallel paths in the same direction. This is Ampere's Law. This is why you are attracted to the earth. Ampere showed us electrons *repel* when they are moving on parallel paths in opposite directions. This is why stars and galaxies repel as well.. This brand new kind of science will be showing you the scalar wave phase rules responsible for Ampere's Laws working as well as they do.

However, there is more: To have an attraction, according to this brand new kind of science, something must not be free but it must be "locked" into position some way.

Therefore totally free spinning items such as electrons, stars or galaxies will never attract each other.

But once they get "locked", into orbitals such as electrons do or close to us like the earth is locked to us, then these things certainly can attract one another and Ampere's 1st law shows us how.

Ampere's Laws show us why magnetism works.

A good example of the old rubbish still being taught is that in magnetism opposites attract.

This may have been good enough before we knew the electron had spin but this should have been changed after we knew the electron's spin caused magnetism.

An electron will attract another electron when their closest sides are going on parallel paths in the same direction relative to the surroundings if they are locked some way as in orbital shells. Sometimes they will even get locked in an unbalanced spin position such as the *d* and *f* shells in iron that cause magnetism.

Magnetism is caused by these *d* and *f* shells in iron having more electrons spinning one way than they do any other way. Electron spins are generally balanced elsewhere.

Scientists agree that the smallest entity in magnetism is the spinning electron.

Two electrons will attract when their **closest sides** are moving in the same direction.

Attraction and repulsion forces will have an *equatorial* vector and an *axial* vector component.

Scientists agree there will be two positions (*equatorial* & *axial*) in which two electrons will attract each other:

Einstein made mind pictures to see what was going on. Please do the same with these next two paragraphs. Look at these electrons as spherical, spinning entities.

The weakest (*equatorial*) position of attraction in magnetism will be between a

spin up and a spin down electron where their spins are in the same equatorial plane and their spin axes are parallel. Their **closest sides** will be moving in the same direction and acting like gears meshing and not clashing. You get this type of magnetic attraction when you put two pole-reversed magnets side by side and you also get this type attraction in sigma bonding. Light is derived via a sigma type, side to side, binding that I'll give you all the details about in Chapter #18.

The strongest (*axial*) attraction in magnetism will be between two electrons, spinning the same way, on the same spin axis because then not only the **closest sides** but also both entire electrons are spinning on parallel paths in the same direction. You get this type attraction with magnets that are not reversed, but have same poles pointing in the same direction and placed pole to pole. This is the way it works in pi bonding. But pi bonding is the weaker of the two chemical bonds because it is only a short duration, repetitive binding and not a steady bond such as in a sigma type bond where the orbitals of both electrons remain in the same plane.

So in truth we have magnetic attraction when geodesic paths are similar.

So opposites don't really attract do they?

However, this is what is presently being taught in the universities today and it is absolutely wrong.

And not only is it wrong, but it is the exact opposite of what is right.

Refusing to see Bohr's motion in the microcosm, by adamant quantum purists, blinded them to seeing the correct solution. Moreover, this kept a very bad wrong religion of opposites attracting alive to fog the minds of students who would be trying to find the correct answers.

Stephen Wolfram was right: This is extremely complicated, exactly as he states in his "New Kind of Science" and as he predicted we will be asking future super-computers for the answers. Now, something that Stephen Wolfram doesn't tell you is that these super-computers will be programmed with a new type of frequency math that we are only now learning and a new frequency structure that we are now also learning about for the first time. Everything will have to be translated from this wave world in which these super-computers work to the

world of present science that our ancestors thought they understood and that most of us still believe is correct because this is the type thinking we have always relied upon.

I'm not advocating doing completely away with our science laws. They will be with us as long as humans remain here simply because they give us accurate answers to 99.9 % of the science problems. Besides, they are simple in theory and math.

In some things already, our science laws have to be corrected with either special or general relativity corrections for us to get accurate answers. For instance, your GPS Global Positioning System uses built in general relativity corrections to give you accurate latitude and longitude readings.

Moreover, in the future even these relativity corrections won't be quite good enough. Super-computers will have to be using a frequency-based math related to the actual standing wave resonances that are really building our universe. Only then will we get controllable fusion power.

Don't take this as it may sound. I'm not one of those birds saying general relativity is wrong. It isn't. What I'm saying is that future super-computers programmed to this brand new kind of science, standing wave world will do a better job of it than adding relativity corrections to our present science the way it is being done now. And this can be used in the microcosm as well where general relativity cannot.

Chapter 2.

Trading Ampere's Laws for all our present science laws

If you really want to know what is going on and get the approximation that Dirac predicted then you must forget all the present type science you have learned. Start over again with this brand new kind of science and use Ampere's Laws where you can actually see the big picture unfold right before your eyes.

To see the big picture, this is what the universities should be teaching.

Frequency and impedance matching had to be added to these laws of Ampere. You will have to know that it is all standing wave reactions that are the basis for Ampere's Laws. You must also know the caveat about motion that we'll cover later, but here are Ampere's Laws and his corollary almost the same way he wrote them up in the 1820s:

Please feel free to type up any new expressions that you are unfamiliar with (such as spacetime interval) on Google so that you can follow my path of reasoning. Also throughout this you will find many links giving you more detail on my site <http://www.amperefitz.com> and other sites.

The website is free and you will find hundreds of times more reading there than in this small book. At my website, I will do my best to always give you links to other interesting sites as well. I'll try to pick those that are not trying to sell you something.

Where there are no force fields involved, the spacetime interval will be invariant in each frequency spin/orbit system allowing the use of special relativity.

You may find some of this hard if you are not too interested in science but hang in there. I'll try to make most of it a lot easier.

These "A" Laws (Ampere or Aufbau) have unified all the forces so these are now the new laws for everything, from the smallest spinning particle to the largest spinning super cluster of galaxies. These are the first global, invariant laws that can be used both in the microcosm and macrocosm.

When you use these laws, think of quarks, electrons, stars and galaxies as all being the same spinning, scalar wave entities. Try to make a mind picture, like Einstein did, to see how they all work.

* The **1st. "A"** Law shows us where all scalar, standing wave entities in *relative motion* produce the least space-time between themselves:

The spacetime interval is created the least between any two scalar, standing wave entities, the closest sides of which "see" themselves spinning in parallel planes 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 shows us where all scalar, standing wave entities in *relative motion* produce the most space-time between themselves:

The spacetime interval is created the most between any two scalar, standing wave entities, the closest sides of which "see" themselves spinning in parallel planes 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.

Of great importance, in the two preceding laws, is that these laws are frequency laws. They work separately for each separate frequency spin/orbit 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 frequency spin/orbit level views these things because space and time and indeed the average space-time interval is entirely different for each different frequency spin/orbit level.

These two laws look equal and opposite but they are not: The 1_{st} "A" law "locks on" while its opposite 2_{nd} 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 — along with "angle of lock on" that comes later — and the closeness of the harmonic linking frequencies 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 and galaxies as well.



The Ampere Corollary

The aforementioned forces, or space-time intervals, between two scalar, standing wave entities 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 these entities on both paths will be traveling in the same direction. (*almost the way Ampere wrote it*)

[Ampere shows us that:](#)

All scalar, standing wave entities 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 diminishes.

All scalar, standing wave entities 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.

Remember it's the space-time **interval** that is being diminished by the 1st "A" Law and increased by the 2nd. This can be seen as either simply **more space** or **more time** or **both**. Also, remember that this perception will depend on the observer's geodesic or path and to you it may seem as if it's always space and never time that is being created or diminished.

Remember also that this space and time that is either created or diminished

will be altogether different at different frequencies.

You can see Ampere's Laws in far more detail by clicking <http://www.amperefitz.com/ampere> while your computer is on the Internet.

You should do this to get the complete version.

Please pay particular attention to the following:

Electrons can exhibit either ferromagnetism attraction or 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 and in the **next paragraphs** you have the **best** explanation of **why electrons 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.

Ampere's Corollary, written in almost Ampere's own words, tells us that if we have two free spinning electrons then each of them will try to make the other line up with them so the spins are in parallel planes and going in the same direction. This force comes in as the cosine of the angle of the planes of the two spins. This would indeed make the spins parallel and make both electrons attract each other. But it would only do this if we did not have gyroscopic torque in both electrons. Remember, this torque acts at 90 degrees to the way Ampere's corollary works

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

So because of this gyro torque, two free electrons can never remain in a full attracting position. They will therefore be forced to stay more in a **repelling** position and 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 paragraphs explain not only why electrons repel each other but they also explain why any two perfectly free similar spinning objects must repel each other. So now you also know why electrons, stars and galaxies stay well away from each other.

Not only will they be put into this position but they will constantly be held in this position as well because both Ampere's Corollary force and the opposing gyroscopic force are constantly acting to keep them this way.

Therefore, this is Einstein's cosmological constant as explained by Ampere in the 1820s.

All those billions of dollars in paychecks, since the 1820s, going to all those people in all those universities and not a single one of them saw this?

Incredible!

Simply Incredible!

I used to read every issue of Scientific American when I was young. In one issue, well over forty years ago, I read about Ampere's long wire laws that took him about seven years to completely solve way back in the 1820s. Ampere was surprised when Faraday was given the acclaim for figuring out the relationship between electricity and magnetism because Ampere thought that he had figured it out first. Now we know the electron has spin. So if we use Ampere's Laws as relative motion laws then we find Ampere did not only figure it out first but that we should have seen that his motion laws were far more important than Faraday's field laws, for seeing the big picture of everything.

The reason that we are still using Faraday's laws is that Maxwell gave us the math to use with them. You cannot use any present math with Ampere's Laws because they are universal, global laws. You will see, as you read on, that all our present math is restricted to one particular local gage theory and cannot be used with global, universal laws that cover **all** gauges.

Ampere's laws, however, give you the best big picture, by far, of what's really going on in this entire universe. Try using them. You'll see for yourself.

You cannot use local gauge theory to see what is going on in another gauge. Quantum theorists will tell you this. All present math is tied to a certain gauge and can only be used in that particular gauge. This is why Einstein was wasting his time trying to find a unified field (of various gauges) using present math. You'll see exactly why this is so as you read on.

A good bit after I read that Scientific American article about Ampere, I was working on a RCA RADAR indicator problem at Pan American World Airways. I figured out a method whereby one would not install the yoke coil in wrong. I saw that if one made certain that the electron beam from the filament went to the phosphor screen in the same direction as the electrons were moving in the top of the coil then the coil would be installed right and the sync spoke would be at the top like it should be.

Then I remembered the Scientific American article, that I had read about Ampere's long wire laws, and I said, "My God, Ampere has shown me not only why the beam is attracted to the coil but why I'm attracted to the earth."

I'll never forget that day as long as I live.

I published what I found and got an approving letter from Lincoln Barnett who had written the best seller "The Universe and Dr. Einstein" and many general relativity articles for the Encyclopedia Britannica. I still have Barnett's letter although most of the things I tried to save from those days are now gone with the wind.

But that was about forty years ago and it has taken me more than a third of a century to get the rest of the puzzle solved so as to be able to write this book about how it all works.

I remember, long ago, that Trudeau, the Prime Minister of Canada, married this young chick who later divorced him stating "Politics just consumed him".

Solving this didn't consume me. I did other things such as fly airplanes and work to feed my family and I built my own house and studied for my masters degree but I do have to admit that solving this was always on the back burner simmering

all those many years. In my spare time, I always tried to picture the correct solution

The 1996 Britannica CD sold for \$1,000. When the price fell enough I got a Britannica CD in 1997 and that is when the final pieces of the master puzzle all started falling into their proper positions.

A bit later I got in touch with Dr. Milo Wolff on the Internet and with his help was able to put all the pieces of the puzzle into place. I owe him a lot. Without him, I would not have been able to write this book.

No one person is smart enough to figure everything out. Each of us contributes a bit to the common store of knowledge.

I was lucky that my father got me interested in radio at an early age and that I learned the basics of that field including the importance of standing waves and impedance matching both of which I recognized later as foundation building blocks for this universe of ours. Why all the people working in quantum mechanics missed this is beyond me.

We used a Bird wattmeter at Pan Am to find and eliminate all the standing waves we could. They use up energy from the transmitter and simply perpetuate themselves. They just sit there, on the antenna using energy, and refuse to radiate any energy.

And this is basically what Milo Wolff found the electron to be doing. It keeps rebuilding and reproducing itself, exactly the way standing waves do, while refusing to radiate away its energy.

Later Milo found the spin of the electron also to be doing what a standing wave did.

Others had tried to establish this but failed. Milo, however, discovered these were not regular standing waves but scalar, standing waves. Milo's math was the first to prove it.

It doesn't take a genius to see that the orbit or orbital of the electron must be doing the same thing as both the electron and its spin. Because when either the orbit (orbital) or spin shifts we either gain or lose a quantum of energy. Niels Bohr got the Nobel Prize for discovering the energy involved in various orbital changes and later Dirac showed the energy involved in electrons shifting from spin up to spin down or vice versa.

This can only lead one to the conclusion that we are in a binding-balanced universe. While radio people constantly look for ways to eliminate all the standing waves they can, to increase signal strength, this universe does just the opposite and puts all these standing wave entities (items and their spins and orbits) here as its building blocks.

I haven't seen any university presses printing this though. I presume that they are all still asleep at the switch while this brand new kind of science train rolls right on by them.

Chapter 3.

Isn't this an expanding universe?

As you look at these "A" Laws you can immediately see that for each single frequency spin/orbit level this must indeed be a type of steady-state universe.

We must be in a steady-state universe exactly as was put forth in an article "A Different Approach to Cosmology" that appeared in the April 1999 edition of *Physics Today* written by Geoffrey Burbidge, Fred Hoyle and Jayant V. Narlikar saying we were actually in a quasi steady-state universe.

In the previous chapter, you read about Saul Perlmutter's insistence that gravity's equal and opposite repulsive force (Einstein's cosmological constant) exists, holding all the stars and galaxies apart.

Well let's call this the Einstein-Perlmutter repulsive force. Let's suppose it is out

there holding all the stars and galaxies apart.

You must be made aware of the fact, if you aren't already, that the favored religion believed in today, and printed up in the university presses, is that we are in an expanding universe. This expanding universe religion is not as highly favored in England as it is in America thanks to Englishman Fred Hoyle, now departed.

But if the principle of equivalence states we cannot discern gravity from an **accelerating**, contraction then it also means that we cannot discern the Einstein-Perlmutter repulsive force out there, between all the stars and galaxies, from an **accelerating**, expanding universe. So this can only mean that we are really in a binding-balanced, steady-state universe — similar to the microcosm — which is the opposite of what these universities have been preaching to us for almost 80 years.

Also in a real expanding universe we would have Ashmore's paradox http://www.lyndonashmore.com/ashmores_paradox.htm and we don't.

All the signs these expansion people have read to show the macrocosm is expanding are also there in the microcosm, as well, showing them that the microcosm is being compressed. This will be covered in detail later in chapter 16. This was known many years before this expansion concept took hold. Niels Bohr had to add a microcosm compression term to his simple solar system type math so that he could slightly modify centrifugal force when he linked the various orbital drops to the different light emissions to win the Nobel Prize.

How can the macrocosm be getting larger if the components that build it are getting smaller?

That's the only way you can read it if you read it the way the expansionists are reading it. They are saying it's expanding because of the red shift. We get a blue shift in the microcosm telling us the opposite.

The university presses are presently rolling out all the latest news about this expanding universe. Saul Perlmutter's group recently found this expansion to be accelerating and since then, others have verified this as well.

Big verbal bouts are now going on in academia about whether this expansion is really accelerating or not.

But now look at what Saul Perlmutter himself says: He states that we now have Einstein's cosmological constant, a repulsive force equal and opposite to gravity, repelling all the stars from each other and all the galaxies from each other as well.

Well, this was the way most universities were preaching it almost ninety years ago in 1917 after Einstein gave us his cosmological constant repulsive force equal but opposite to gravity. This, said Einstein, held all the stars and galaxies apart. Back then everybody believed in a steady-state universe.

Then from where did we get this expanding universe?

The more massive the star, the more the red shift.

Stars that are moving away from us also have a red shift (*Doppler effect*).

Edwin P. Hubble discovered one more reason for a red shift and he found the further away stars were from us that the more we saw them as red shifted too.

That great astronomer Hubble then warned everyone about assuming this red shift to be telling us this universe was expanding.

Then out came the very concept about which Hubble warned.

It was put forth by a Catholic priest named Lemaître.

Einstein kept telling him he was wrong but then as Lemaître's speeches gained in popularity Einstein made an abrupt 180 degree about turn and told him he was right. Einstein then said he had committed his "biggest blunder" by believing in some more of his own math, that he had published a decade before, and then finally doubting Lemaître.

Thus came about that famous religious conversion, from a steady-state to an expanding universe, of all the university presses by this Catholic priest from Belgium.

It was not, however, a good enough tale for the atomic scientists. George Gamow,

who hung out with all the great ones at Niels Bohr's house in Copenhagen, was the one who spiced it up with enough atomic fusion so that even the atomic scientists would kneel down and give homage to this new expanding universe religion, which now even the great Einstein professed to believe in.

What more does a religion need than that to take hold and it most certainly did.

It hasn't been quite with us for its hundredth year anniversary celebration yet though and if this book is successful then it might never make its hundredth year either.

Einstein originally said there was a repulsive force equal and opposite of gravity holding all the stars and galaxies apart when this was thought to be a steady-state universe almost ninety years ago in 1917.

Now that Saul Perlmutter has brought that force back again then this brings us back to a steady-state universe again too.

Why?

For several reasons:

First: The Einstein force is a perfect balance to gravity therefore no expansion.

Second: And even more important is the fact that we have the principle of equivalence, which states one cannot discern gravity from an acceleration. If this is true then you will not be able to discern gravity's equal and opposite force from an acceleration either, will you? So there is no way that anyone can discern that Perlmutter-Einstein repulsive force out there from an accelerating, expansion. So, welcome back to 1920 or thereabouts and into a steady-state universe again.

Third: The force holding gyroscopes to the fixed stars (Mach's principle) should be weakening if this universe is expanding. There has been absolutely no evidence of this.

Moreover, this third reason is an absolute certainty: If the gyro force hasn't weakened — which it hasn't done — then we have to be in a steady-state

universe.

So the truth is gang, you see that red shift, which Hubble discovered then warned about, because of all those repulsive forces out there, between all the various stars, and nothing more. There will be more about the reason for this particular type of light dispersion, because of those many repulsive forces between all the stars, later in Chapter 10. It works sort of like a diffraction grating.

You will see even more proofs of a steady-state universe as you continue to read.

If I and many, many others already see this is a steady-state universe then I think the multitude will also eventually join the team to remove that religious conversion and restore some common sense and sanity back into the scientific community.

Things are greatly simplified this way as well. Watch and read on. You'll see.

This is a binding-balanced universe. The microcosm is perfectly balanced and so is the macrocosm.

See, as you already have learned, distance has no effect on this binding strength. It is all balanced-binding with the surroundings. If binding energy always equals mass lost, then isn't hydrogen fusion energy a binding shift from the surrounding fixed stars of a quantum of some binding that is then gained by the final hydrogen nuclei that came closer together with fusion?

When two hydrogen nuclei are brought closer together (fusion) then more binding is developed between themselves resulting with them having fewer of these bonds left now to bind with the surroundings.

Binding with the surroundings is what is giving us inertia.

Inertia is the resistance to a change in position. That's why we say a spinning flywheel has gyroscopic inertia. It resists a change in position.

Mass is not weight. Mass is the measure of inertia, the term used to measure the resistance to change in position that an item has.

The units we have in mass are used to measure this resistance to a change in

position (inertia) that an item has.

So isn't mass (the measure of inertia) binding with the fixed stars?

Remember, the strength of these spin-bindings do not vary with distance. Only the number of them decreases with the square of the distance.

What is ironic is that Saul Perlmutter, who headed the group that discovered this acceleration, had the choice of accepting it or Einstein's original cosmological constant repulsive force. He made the choice to choose Einstein's cosmological repulsive force that is equal and opposite to gravity.

This is the very first time, that I'm aware of, that a person who made a major discovery also made a pronouncement telling the world that the discovery means something entirely different from what everyone thought it originally meant.

Thank God, we have people like Saul Perlmutter.

And no more Catholic priests preaching science — please. We need to go forward and not backward again for another hundred years.

This universe constantly strives to stay in balance with the surroundings. This balancing is the key. With this balancing, you end up with a steady-state universe.

It will be hard for the average reader to believe that our surroundings affect us. Nevertheless, this was discovered by Berkeley and then pronounced by Mach and then by Maxwell and then finally mathematically proven, beyond a shadow of a doubt, by Milo Wolff who showed us it is same frequency surroundings that are important as well. All this doesn't fit in well with any of our present science. But it certainly does fit in well with this brand new kind of science though. You will see how it works.

Ampere showed us that when electrons travel the same direction on parallel wires then these wires would attract. You are also traveling the same direction as the earth and on a parallel path with the earth — compared to the surroundings — and you are attracted to the earth too.

Is this what gravity is all about? It doesn't sound like present science does it?

It isn't. It's this brand new kind of science though. It works, and what's more it does unify gravitational forces with magnetism and the electrical forces. And this is what is truly important. This was what I discovered at Pan American Airlines in 1966.

I saw it was all indeed explained by Ampere's Laws but then I spent more than a third of a century asking myself what was the rest of the story and why do Ampere's Laws work so well?

All in this book was what I eventually discovered had to be happening.

I could have kicked myself for not seeing it all earlier because I had the top radio licenses and should have seen it far sooner than I did.

It is all frequencies that are either in phase or out of phase. So like the quantum theorists are saying, "It's all resonances."

Space or rather the spacetime interval will be created the least between entities that are in phase and most between entities that are the opposite from this which normally would be 180 degrees out of phase.

You would see the items in phase as attracting and the 180-degree out of phase items as repelling and the average items half way between both extremes as being neutral.

And this is the way we actually see all the forces isn't it?

Gravity is seen by present science as different from all the invisible forces in that it is seen as a monopole, by present science, instead of a bi-pole force like all the others.

But now we can see it correctly as a bi-pole force with the Perlmutter-Einstein repulsive force that is equal and opposite to gravity.

So behind Ampere's Laws is this phase relationship that is either creating a maximum amount of space, causing a repelling force, or reducing more space than average causing an attractive force.

Einstein told us gravity was a wave and with this, you can actually see how it works can't you?

Einstein's, general relativity, tensor math shows us that more or less space is equivalent to a force and you now can see how this works too.

We will also see that space is only space at some certain frequency. Einstein was right, gravity is a wave. You'll even see the frequency of gravity (attraction made by less space than average).

General relativity's tensor math has either more or less space because there is no element of force in the tensor math so it is doing exactly what this brand new kind of science is doing. The tensor math of general relativity gives us more or less space in place of force. This universe creates more or less space thereby giving us force via the uneven distribution the same as in general relativity. So the tensor math of general relativity has been showing these mathematicians what the universe was doing all these years but nobody was paying even a bit of attention. At least if they were paying attention it was never printed up by any university presses anywhere.

Our time evidently is dependent upon the rate that the scalar standing wave of the electron reproduces itself whereas space seems to be related to the average of all the vector spin forces generated by the electron's spin.

The electron's clock ticking is related to c .

The quark's clock ticking is related to c^2 .

If you keep reading then you will discover the important spacetime relationship between c and c^2 , and this is something that even those in the universities are still not aware of yet.

Having two ticking clocks, giving us two different times, gives us problems. The electron is giving us its spacetime via c and the quark is giving us its spacetime via c^2 . And these are both different. As we proceed you'll see a few problems that this causes. One of these, by the way, might be the fact that we must wait about 8 minutes for a quantum of light to come to us from the sun or even longer for it to come to us from a distant star. The electron pairs, however, doing this exchange

may "see" it as being done instantly. There will be more about this in Chapter 7.

Why do we have the spacetime interval?

I'm still working on that one.

But I do know it is a relationship frequency between scalar wave frequency and spin frequency that does not change even though the relative scalar wave frequency (time) changes and the relative spin frequency (space) also changes with a speed or mass change.

Chapter 4.

Surroundings

Berkeley, Mach and Maxwell were right; surroundings do give us our inertia. Dr. Milo Wolff showed us it's same frequency surroundings that produce the electron and its spin, which gives us the attractive force. Therefore, it must be same frequency surroundings and some sort of spin that gives us gravitational attraction and inertia.

Yes, it is the electron's spin that gives the electron its inertia and it's the quark spin that gives the quark its inertia too.

In the last chapter you saw the more an entity resists a change in direction the more inertia it is said to have.

Mass is the measure of inertia.

Why do objects resist a change in direction?

Why do objects prefer certain geodesic paths to travel in?

This chapter answers those questions.

Newton gave us the math, so many in present science claim they have answered that last question because they can do the math. But have they given us the answer to all these planetary orbits?

As you read further, then you will see they haven't.

Also present science can give no good reason why the gyroscope holds to the fixed stars.

This brand new kind of science can. It's spin-binding.

We know that the electron spin causes magnetism and we get a binding attraction whenever the planes of these spins are in parallel paths going in the same direction.

The strength of this binding does not decrease with distance, only the number of these individual electron spin to spin bonds decrease with the square of the distance.

Quarks also bind via their spins and the strength of these bonds do not diminish with distance either. What we now know is that the strength of any electron bond (where one electron is in our vicinity) does not extend past the Hubble limit. However, we do not yet know the limit of the quark bond but there is a definite limit. It's important that this limit is found.

Gravity could not be caused by relative motion, printed the university presses, because we would see interference fringes and we don't. What they didn't realize was that while magnetism is caused by the electron's spin, gravity is caused by the quark's spin and we have no receptors to see any fringes at that frequency, which is the square of the electron spin frequency; hence $E = mc^2$. These spin frequencies are the key with which you can now unify gravity with magnetism.

Quantum theorists had us thinking the quark strong force fell off entirely within the confines of the proton and neutron. That mathematical guesstimate on their part simply wasn't true because they didn't understand the importance of same frequency spin-binding.

The entire concept that quantum theory has that the quark strong force is fully

contained inside the proton and neutron is absolutely wrong. They failed to look at the super high density of the three quarks in both the proton and neutron to see how that would affect spin-binding frequencies. You will see what is actually happening in Chapters 5 and 15.

Quarks merely find it hard to spin-bind inside that tri-quark high-density area. It's as simple as that. Outside of it they spin-bind the same as electrons do.

Gravity cannot be caused by anything the electron does because electromagnetic radiation can all be shielded and gravity can't.

The attraction of magnetism comes from the electron's spin. This, quantum theorists know.

The attraction of gravity comes from the quark's spin. This, they don't know.

It's all surroundings, surroundings, surroundings and spins, spins, spins. It's surroundings and either spin or orbital binding. This, they don't know either.

All attractions come from spin-bindings. This, they see a bit of.

We know that electrons are the important source of all chemical actions but we have forgotten the quarks.

This quark to quark spin-binding plays a part not only in atomic and molecular binding but is the main element in the binding energy of atomic energy.

We know that electromagnetic radiation can be shielded but what else do we know about shielding?

We know that gravity can't be shielded by anything. This is significant because it tells us that the electrons encircling the tri-quark protons and neutrons cannot possibly, in any way, keep those quarks inside the proton and neutron from spin-binding with other quarks, even those in the distant fixed stars. This knowledge is of vital importance.

Virtual proof that this does indeed happen is in small clusters of elements of two or three or four atoms where insufficient encircling electrons can not make full use of their own spin-bindings. We therefore see a higher percentage of the quark

binding forces whereby these small clusters take on entirely different aspects as to what the same atoms normally do in larger groups that have the full amount of electron encirclement.

Three quarks bind together to form the neutron and proton. However, this close binding of the three quarks might be more a polar type bonding. Because of the extreme density, the three quarks will not even recognize that they are spinning at the same frequency unless they are separated from each other by about the diameter of a proton or neutron. You will have frequency dispersion here as well. This is what causes the asymptotic freedom of the quarks inside a proton or neutron.

This necessary distance, because of the extreme density, is another aspect of the super dense quark world that quantum theorists failed to grasp.

This is so simple to see. Didn't they understand general relativity?

Didn't they understand that when mass increases then time slows and frequencies change as on super dense stars? Didn't they also understand frequency dispersion?

What they also didn't understand was what Ampere told them over one hundred and eighty years ago.

Not seeing this spin frequency aspect of the strong force had everyone believing that the strong force was fully contained inside the proton and neutron.

The quantum physicists didn't see that the quarks could not bind strongly at a close distance because the density was too great for one quark to fully "see" the frequency spin of the other until it got the diameter of a proton away from the other two.

Seeing the strong force this way tells you that quarks can **not** strongly bind in the high-density tri quark area and they **can** strongly bind anywhere else.

This is the very opposite of QCD gospel.

And people listened to that gospel too.

Therefore, no one even looked for any evidence of quark to quark distant

spin-binding such as we knew the electron had.

That was a super disaster.

That set us way back.

Quarks that are inside the proton and neutron bind with other far distant quarks in the surrounding stars via a spin up spin down, side to side binding when their spins are in the same spin plane. This is what gives all the quarks their massive amount of inertia.

This quark spin-binding, like the electron's spin-binding, does not fall off with the square of the distance.

Whereas present science has centrifugal force, this new science does not. What it has in place of centrifugal force is binding with the surrounding stars and translational motion where speeds start moving up higher on the asymptotic energy curve wherein relativistic mass will be increased.

This may sound like a lot to chew but it isn't really.

When you rotate or spin something then you are also moving the quarks, which are inside the thing you are spinning. Since these quarks are also rotating around themselves as well, then you end up with an added translational motion, part of the combined motion, where the mass of the quark is significantly higher at some particular point on the combined travel path. Since the quarks are already going at a speed high up on the speed of light curve then this added rotational speed, you are giving the flywheel, really gives a big jump in mass to these quarks at certain points of their travel. This is fully covered in Chapter 13.

When you add impedance matching to these quark to quark bondings, then this means that your higher massed quarks now have to pick higher massed quarks in the fixed stars to bond with.

This is why you gain so much inertia with a flywheel. This is also what holds your bicycle up so well.

Berkeley7 Mach and Maxwell told you inertia and your bicycle were working via

the surrounding fixed stars. Now this brand new kind of science has given you a far better picture into how that actually happens.

Now you have learned something of vital importance which is: in this binding-balanced universe all orbits of planets or orbitals of quarks and electrons are determined not via centrifugal force but by a binding-balanced spin or orbit geodesic path. This geodesic orbit path keeps a binding-balance between the thing or things it is rotating around and its same frequency surroundings.

The spin is also a geodesic balanced path.

The angular momentum, of all spins, has to be conserved. As any entity moves, relative to the surroundings, the spins of its components, electrons and quarks are constantly shifted as the entity moves.

The reason that an entity's spin is a geodesic balanced path — as stated in the above paragraph — is that the angular momentum of the spinning entity itself equals the total of the angular momentum of all the electrons and quarks that the rectilinear or orbital motion is constantly displacing.

Newton showed us that every action has an equal and opposite reaction. Therefore in a binding balanced universe, angular momentum must of necessity be conserved. So both orbits and spins are **balanced geodesic paths** between entities and their surroundings.

This is one of the most important lessons anyone will ever learn and absolutely no university press anywhere has printed it.

Why?

Your tax money has been paying them super salaries to find out about these things.

But instead of finding out the truth they were all printing fiction stories about an expanding universe and many other fictitious things, such as opposites attracting, that poisoned the minds of the young who would in turn be taking important university positions.

Any nation that allows its universities to continue down this road of ignorance —

letting them do whatever they want to do — will be flushed down the tube by a country that finally puts the fear of God into **all** of its educational systems making them do what they are supposed to do, educate the public.

No one can foresee the future but one can get a high probability of certain outcomes. In the coming years the country that establishes a no-nonsense, high science input, educational system that works, will win and the others will be the big losers.

That finishes this opinion section and now we'll get back on track to the science again.

This is a binding-balanced, steady-state universe from microcosm to macrocosm.

There will always be those folks around who will stay with the ancient centrifugal force concept.

But if centrifugal force pulls things towards the fixed stars then there must be some sort of force there. It's a spin-binding force between the thing rotating and the fixed stars. It has to be.

If it's something else then you tell me what it is.

When future scientists of a thousand years from now draw the line through the date when real science departed from this affenstahl science then the date will be 2006 when this book first came out.

No, I'm not conceited, in fact, I don't even think I'm half as smart as I really am.

But I have been on this earth a really long time so I can afford to joke now and then.

That's what life is all about. Isn't it? But believe me this book is no joke. The big joke will be on those who will continue to argue against this brand new kind of science. You had better think twice about remaining in a country whose government goes to sleep on this one. It might be too dangerous. It may take a while to put this all together into computers then again it might not. One never

knows. It is impossible to predict exactly what will happen in the future.

Marconi said others had made all the important discoveries and that all he did was to put them all together to give us the radio.

That's really all I did as well. I simply put together what others have discovered to give you this brand new kind of science that finally unifies not only the four fundamental invisible forces but also all invisible forces. It's really so simple that after this book comes out many are going to say, "Why didn't I think of that."

A new type frequency math will be used later but right now there is no math whatsoever that is going to help anyone see the big picture better than by simply using Ampere's Laws and this standing wave concept. It is plain to see that any math is restricted to one frequency spin/orbit system such as is presently being done in QED, where electrons are studied, and QCD where quarks are looked at. Both of these are using far different math and rules from each other. And these are both far different from our science rules and math that we use here in everyday life.

The pioneers in this next era are going to be frequency searchers. They are going to be searching, among other things, for the spin frequencies of electrons, quarks and galaxies.

All our science laws can be explained by these frequencies.

They are the basis for Ampere's Laws.

It's a shame that Einstein didn't stick with his belief in the surroundings and Mach's principle.

In fact it was Einstein who made the phrase "Mach's principle" popular. Einstein didn't know that Berkeley had proclaimed it first. Einstein claimed that his general relativity was based on Mach's principle and the importance of the surroundings being homogenous and isotropic.

I'm certain if someone had discovered that acceleration, like Saul Perlmutter's group did, while Einstein was still alive then Einstein would never have listened

to Lemaître. Einstein then would have seen gravity as a bipolar force and he would have seen the other acceleration half of his principle of equivalence. So we lost almost a hundred years on that one.

Einstein also should have listened more to his good friend Kurt Gödel. They both worked together on a few things at the Institute for Advanced Physics in Princeton. In addition, they both spoke German.

Each had discovered important pieces of the grand master puzzle but neither Einstein nor Gödel put those two important pieces together and they could have easily done so over half a century ago and saved us a lot of wasted years.

This goes to show you that we all make mistakes, even the best of us.

Chapter 5.

Surroundings and Binding Energy

Now we will go to surroundings and binding energy.

The atom bomb works because of binding energy.

If you will look at <http://www.amperefitz.com/FitzUSR> then you will see item #21:

21. Just as we know energy can neither be created nor destroyed, it is the same with binding. Binding can neither be created nor destroyed. It can only be shifted. We know that an entity on an orbit has equal binding with the surroundings as it does with the item or items around, which it is rotating. If it removes a quantum of this binding away from the surroundings then it must give this same quantum of binding to the item around, which it is rotating. Our present science sees this orbit or orbital as losing energy. If the reverse happens and if this same entity shifts a quantum of energy from the central item to the surroundings then we say

this orbit or orbital has gained a quantum of energy.

So now, we can finally see what energy really is.

Energy is nothing more than an upset of this binding balance.

This is something a person believing in an expanding universe would never spot.

But you have to realize that educated people once believed in phlogiston which supposedly was a substance that weighed less than nothing. Isaac Newton believed in phlogiston along with most of the educated people of his time.

I read a copy of Mackay's "Extraordinary Popular Delusions and the Madness of Crowds" that millionaire Bernard Baruch had given to the Public Library in Miami. He said, reading it had saved him a lot of money.

An expanding universe fits right in with all the rest of Mackay's stories.

The logic of later times is generally not the same as the logic of previous times.

We don't have witch-hunts anymore either.

Now let's go to the atom bomb and then to the hydrogen bomb and see the difference between fission and fusion energy.

We know we get fission energy (the splitting of heavy uranium nuclei) in the atom bomb.

We know we get fusion energy from the fusing together of the lightest hydrogen nuclei. This gives us the hydrogen bomb.

The energy in the hydrogen bomb comes from fusion energy wherein the hydrogen is wrapped around a uranium atom bomb igniter. Then the atom bomb inside explodes igniting the hydrogen fusion bomb for an even greater bang than the atom bomb alone would give.

The big quest now though is for controllable fusion energy. We still haven't been able to get to that stage of the game yet. However, this really doesn't seem to be something that our military-industrial complex is vitally interested in at the

moment.

Our military-industrial complex wants the mid east oil used up well before any controllable fusion power comes online. They have plenty of shale oil in Canada that will come out at a another notch higher in oil prices and this will give us plenty of time to work out controllable fusion energy. It's the opinion of a few people that this is the present policy desired by our military-industrial complex.

One of his generals asked Fredrick the Great, "What will everyone say when you attack that country?"

"Oh, my universities will prove to everyone why we had to attack them," replied Frederick the Great."

Today's universities are still telling us what the ones in charge want us to hear. This hasn't changed that much since the time of Fredrick the Great.

Our military-industrial-university complex sees this following lesson of the past: By giving millions of people heavy buffalo blankets that they put over their legs when horses were pulling sleighs, this not only kept the people's legs warm but it starved out the Indian (Native American) population here that yellow journalism was saying needed to be starved out.

The ones running things in the military-industrial-university complex are smart enough not to tell us to waste oil. They are telling us just the opposite to make us believe we've created this problem by ourselves. But we don't run things; they do. And the military-industrial-university complex has things all set up for the average American to do, this same thing again with oil, as was previously done with buffaloes.

Everything has been put in place to use up the oil the same way we did using all those Buffalo robes. Then this will deplete the cheap oil sources of the Moslem world and we'll be rid of them once and for all like we got rid of the Indians. There are about as many Indians living now as when the first ships brought the first settlers here. The population of the newcomers certainly increased. It's just the Native American population that didn't.

I got off the beaten track there for a bit so let's get back to fission and fusion

energy.

So far, we have gotten fusion energy from hydrogen nuclei (the lightest element) and fission from uranium nuclei in the heavier end of the scale. But we haven't done nearly as well as the stars have. They have done far better getting energy out of far more elements than we have.

Theoretically, iron is the dividing line between the fission and fusion elements.

Iron is where the binding is balanced best. Remember that it is all balanced binding.

All the elements lighter than iron (to the left of iron on the periodic table) are theoretically capable of giving off energy via atomic fusion. All the heavier elements than iron (to the right of iron on the periodic table) are theoretically capable of giving off fission energy.

These stars are doing all this now, leaving the universe with more and more iron every year they operate. Iron is the pile of ashes left over after both fission and fusion energy has been going on. There is no possible way that either stars or we can get any atomic energy out of iron.

When this universe finally is filled up with enough iron, then even the stars will be all burned out at last and our sky darkened. However, long, long, long before that our sun will expand and become a big giant star with the flames scorching the earth.

But not to worry, none of us will live long enough to see any of that.

Anyway, both fusion and fission is all done by releasing nuclear binding energy and here is how that works in both bombs:

Remember, the energy of each individual spin bond does not decrease with distance.

When the nuclei of two hydrogen atoms shift a quantity of binding from their surroundings, and transfer this quantity of binding to themselves, so that they bind themselves closer together then this upsets the binding balance of all the

nearby hydrogen nuclei. This creates a domino effect among close neighbor hydrogen nuclei which then upsets the binding balance even more and shifts even more binding away from the surroundings and this is fusion energy.

When a uranium nuclei splits, then those two pieces of entirely different atomic nuclei each gain a quantity of binding among themselves and this same amount of binding is transferred from the surroundings. The binding balance is thus upset. This then creates a domino effect among the neighbor uranium nuclei and more binding is shifted from the surroundings upsetting the binding balance even more. This is fission energy.

Look at the most important curve in science, the binding energy curve:

<http://hyperphysics.phy-astr.gsu.edu/hbase/nucene/nucbin.html>

Therefore, energy is merely an upsetting of the binding balance. That's all energy really is. Moreover, that goes for chemical as well as atomic energy.

Present science preachers, in the universities, however, haven't listened to Berkeley, Mach, Maxwell or Wolff. They don't believe in same frequency surroundings having much to do with this. So they have no place whatsoever for a binding, balanced universe, thus they can't give you a simplified answer as to what energy really is. They do know it is binding energy but they haven't learned about all these bindings being balanced. Now you have and that puts you far ahead of them in knowing what's really going on. But although they are dumber than you in this respect, the military-industrial-university complex will ensure that no paychecks of their employees are cut because of this massive amount of ignorance on their part.

Now to symmetry:

You can build things with Tinker Toys but they will have an entirely different symmetry of things that you build with Lego blocks.

This is the same way it works in the universe as well.

The microcosm has a far different symmetry from our larger world here.

But the construction (aufbau) laws are the same.

This is something that has escaped notice from the universities as well. They think the construction laws in each different frequency spin/orbit realm are entirely different simply because they are using various different fields instead of seeing all invisible forces as being built up the very same way. The building blocks in each spin/orbit spacetime realm are nothing but standing waves. Although they all behave in common in some respects, their frequency differences and closeness of linking harmonics ensure that there will be a distinct difference of symmetry in each different spin/orbit spacetime realm just as there will be a symmetry difference in things built with Lego blocks and Tinker Toys.

Our Euclidean geometry imparted with Newton's laws of motion gave us a wonderful world of accuracy that satisfied everyone until the Michaelson Moreley Experiment just before the beginning of the twentieth century.

Lorentz, Hilbert and Einstein then rushed to our aid with patches. That's all those things (such as relativistic corrections) are. They are mere patches.

They patch up a system that isn't quite right but it does, to its credit, give us accurate answers 99.9% of the time. So it's going to be here for quite a while regardless of how many people, like me, write these books saying it's all wrong.

You must understand this system constructed by Euclid and Newton only works accurately at very, very, very slow speeds (compared to the top speed) and in the vicinity of low mass. However, it does indeed give good approximate answers at even faster speeds.

If you click <http://www.amperefitz.com/FitzUSR> (Type capitals exactly) then you will find this:

5. Motion (Newton's concept of it is restricted to less than .00016 (.016%) of the speed of light) can be utilized also in the microcosm to give us an approximation of what is really happening in the microcosm. This is true although it may horrify some of today's quantum theorists.

Therefore, Newton's mathematics, as it pertains to motion, is right only for less than .016% of the available slower speed range and wrong for more than the other

99.984% of the faster available range of speeds.

Because people have lived for thousands of years only in this far lower range of speeds, no one even suspected anything was wrong until the Michaelson-Moreley Experiment. In that experiment when the speed of the earth, in its orbit, was added to the speed of light it just didn't add.

Our ancestors believed Newton was right because they never encountered any of the faster speeds.

This is common knowledge. Even these universities print things about this. But since we usually only travel at these slower speeds anyway and the answers come out right most of the time, we keep using this old method.

But that's not the route future scientists are going to take. They are going to use the correct methods and get it right every time and not just most of the time.

Chapter 6.

Vector and Scalar Quantities

A scalar quantity has magnitude in all directions such as a globe of light that shines in all directions.

A vector quantity has magnitude in only one direction such as a flashlight that shines in only one direction.

We were told by Einstein that gravity was a spacetime distortion and this is a fact because this brand new kind of science, just the same as general relativity, shows us that all the invisible forces are spacetime distortions. But this new science shows you exactly how these distortions are produced and general relativity doesn't.

Milo Wolff has shown us that the electron and its spin are both scalar standing

waves.

We can presume from this that the electron's orbital, that mimics the spin in giving us energy quanta, is also a scalar standing wave. In magnetism, for instance, both the orbital and the spin produce magnetism but the orbitals all cancel themselves out (98% do) leaving only the spin as the important cause of magnetism.

From what you have learned so far in this little book you can now put the picture of this universe together.

First, you must understand something quantum physicists understand: Frequency is synonymous with energy. The higher the frequency then the higher the energy.

Once you know this then you can see where the higher frequency entities can afford to build lower frequency entities because each lower frequency entity is only being built with a fraction of the higher frequency entity's energy.

That makes the following possible:

We'll start with the fastest spinning, matter building particle, the quark. It is a scalar quantity that spins and aligns its spin (in phase) with other close and distant quarks to produce attractive vector forces (gravity in one direction, inertia in all directions). It also produces non-aligned or out of phase repulsive vector forces thereby keeping itself away from other quarks. We see the average of these attractive and repulsive forces as space.

These attractive and repulsive vector forces of the quark produce the scalar forces of the electron and its spin and its orbitals. The electron's spin is at a much lower frequency than the quark's spin. The electron's spin is the square root of the quark spin frequency. The electron's spin produces the vector forces that give us magnetism, sigma and pi bonding and light, which is a long distance type of sigma bonding. A quantum of light is given off by a sigma bond between two special electrons that have impedance matched over a distance. No strength is lost in a sigma type bond right out to the Hubble limit.

These forces, together with the quark vector forces, give us the scalar standing wave resonances of matter that build into the symmetry forms of atoms and

molecules.

These atoms and molecules congregate together, via spin and orbital vector forces to give us the scalar entities of stars and planets with their scalar spins and orbits.

The spins of the stars provide vector forces that give us the scalar galaxies and this keeps going on and on and on into infinity perhaps?

The spins of the stars, in this brand new kind of science, keep the stars repelling each other. In present science, the direction that a star spins is not of primary importance but in this brand new kind of science, it most certainly is. Every star has to repel its neighbor star so it can **not** be spinning where any of its closest sides are going in the same direction as the closest sides of the neighbor star. Of the hundred thousand million stars that we can discern, we can see no neighbor stars, except binary spin up, spin down stars, that are spinning with any of their closest sides in the same direction. So this borders on virtual proof of this brand new kind of science working for stars as well as electrons.

Ten to fifteen percent of the stars are these binary spin up, spin down stars that, rotate around the same point, and work exactly like spin up, spin down electrons on orbitals. And two binary stars where one is spin up and the other spin down, of the same mass, will work exactly like the two electrons. See:

<http://instruct1.cit.cornell.edu/courses/astro101/java/binary/binary.htm>

After clicking the above link, on your computer, make the masses of the two stars the same number then press ENTER.

The bond holding these stars together is a sigma type bond.

A sigma chemical bond is where the **overlap region lies directly between the two nuclei**. Translated to stars, this would be in the centers of both star orbits. You are looking at a sigma type bond when you look at two binary stars.

You can plainly see that the closest sides, of the two stars, are attracting because of Ampere's Law the same as with electrons in magnetism and sigma bonding. In both of these cases of stars and electrons, the attractive force between them equals exactly the attractive force from the surroundings. In other words their binding energy in both, inward and outward, directions are balanced.

So what else do we learn from these spin up, spin down stars and electrons?

We learn that this is a binding-balanced universe in the microcosm as well as in the macrocosm.

Please note that Ampere's Laws obey the tensor math of general relativity and restrict the torsion tensor to have only a vector and an axial vector component.

This spin factor also relates to the hundred thousand million galaxies that we can discern as well and of all those we can see, it's the same.

So this is a frequency universe where the spins of scalar entities make vector forces that produce lower frequency scalar entities that spin and produce vector forces that produce even lower frequency scalar entities that spin and produce vector forces that produce even lower frequency scalar entities which. . . . And this must go on and on and on and on ad infinitum perhaps.

It's like a universe grand piano with a keyboard of conceivably infinite length.

This is not the way we see it though. We see higher frequency scalar resonance entities as smaller and lower frequency scalar resonance entities as larger.

The Russians seem to be way ahead of the Americans in scalar wave knowledge.

Sound is a longitudinal waveform where the wave is in the same direction as the wave travels while water waves are transverse waves where the wave goes in right angles to the direction the wave travels.

Radio waves, light, and heat waves are seen by present science as transverse waves the same as water waves.

All of these waveforms can be represented on an oscilloscope that shows them changing direction with time. A scalar wave though cannot because it has no direction that changes with time. Therefore, you cannot detect a scalar wave as a wave. You can only see a scalar wave as an entity providing it is at the same frequency the scalar wave components are at that build you or some close harmonic thereof.

This is why you cannot see into these event horizon spaces that surround the singularity of a black hole, in the middle of the big galaxies. Around the black hole singularity is a space we notice that we also cannot see into. This is called the event horizon. We cannot see into the singularity point simply because the mass is so great that it bends all light trying to escape. This is also the reason that it is an imperceptibly small point. In fact it is so small a point that we couldn't see it even if it wasn't a singularity. But around this point is the event horizon space that we also notice is a black space. There are other reasons we cannot see into this event horizon space. The relative scalar frequency (and relative spin frequency, hence also relative mass) of the electrons inside the event horizon is too much higher than ours.

With this brand new kind of science comes a common sense look at black holes and their event horizons.

There are atoms, just like yours, inside these event horizons but they all are more massive than similar atoms in you. Therefore, all their electrons and quarks are at a higher relative frequency from your electrons and quarks and their scalar resonance frequencies are too high for you to see them as entities.

It's impedance matching and your electrons won't impedance match with any in the event horizon.

But guess what? This doesn't mean what you can't see, you can't detect. When you spin a flywheel or spin a gyroscope at a fast enough speed then some quarks in the rim of the wheel become massive enough, for a few microseconds at a time, to impedance match with the quarks inside these black hole event horizons. So without all these black holes and their event horizons inside these galaxies you couldn't even ride a bicycle because there would not be enough attraction with the surrounding fixed stars to hold you up as well.

So now, you will have to add Fitzpatrick to the list of those that said or are saying surroundings matter. The universities are still fast asleep on this one. And this is another bit of knowledge that you are way ahead of them in knowing.

Now to space:

Space has to be produced just the same as you have to be produced.

Are you the same person that you were in the first grade?

The answer is no.

Your brain merely thinks you are the same person because, as these repeating standing waves show us, all your components have been completely replaced many billions of times since you were in the first grade.

You are like the first airplane to fly across the United States.

I bought a book, about the flight, from the widow of Calbraith P. Rodgers who flew the Vin Fiz across the U.S. and I saw it where it is now in the Smithsonian.

The only problem is that the carbonated grape juice company, who sponsored the flight, sent many airplane replacement parts in a train along with Rodgers. The only part on the original airplane to get to California with Rodgers was a strut to which the bottle of soda pop was attached. Even the original bottle of Vin Fiz never made it completely across America.

Nevertheless, there it hangs in the Smithsonian today.

And this is the same with us. Legally we are the same person even though all our parts have been replaced over and over again many billions of times.

In fact, these standing waves are why we have space and these waves are why we have motion. These waves are also why you are here and why you have life.

There is no real space or real motion per se for this entire universe of frequencies. This is a universe of resonances where these things such as space and motion can be sensed only within a certain frequency spin/orbit system.

The quantum folks see a good part of this picture and this is why they are so adamant about the electron not being something that spins like a top. Most quantum mechanics people see it all as resonances.

However, seeing it all as resonances is for tomorrow's super-computers. Today

we have to use Neils Bohr's concept and see it as we see spherical things here.

We can't see into the electron's spacetime realm but there are harmonic linkages from there into our spacetime realm by which we can ascertain things there.

The motion laws of Ampere are not the reason that things behave the way they do. We use this motion concept as a sort of Occam's Razor tool to simplify the resonance aspect of it. Even when this is known, it will be far too hard to understand without future super-computers that we do not yet have. Stephen Wolfram tells us a very similar true story in his book "A New Kind of Science".

Milo Wolf is particularly interested in scalar standing waves and their math. He once asked me when I saw things as spherical standing waves. I couldn't answer him exactly. But I did publish in 2000, perhaps even earlier, the following:

"If the polarization of these standing waves change rapidly enough and trace out a sphere, then they actually become a spherical particle. They will then behave like spherical particles especially to all their exact sister particle copies."

From this, you can see, I saw some of the standing wave picture before I met Milo but he was the one who showed me they had to be a scalar wave. This I didn't know and with that, and more that he has taught me, I have been finally able to write the book I have dreamed about writing all my life. So, thank you Milo Wolff. I thank you indeed.

Chapter 7.

In the formula $E=mc^2$, what does c^2 imply?

As previously stated, the frequency of the quark spin is the square of the spin frequency of the electron's spin and from this we are deriving c^2 in our math. In

some way that we do not yet understand, these spin frequencies are directly related to the maximum speed in that particular particle's spacetime realm.

Now we get to the tachyonic, or faster than light speed, aspect of the quark

Mathematicians will say you cannot square a speed and get another faster speed and this is true. It's the frequency really that is squared. Later, please note the distance is being squared, not the speed. I am simply relating what is happening in our math and giving us the quantity c^2 , which frequency denotes far too fast a speed for our realm but **not** too fast a speed for the quark realm.

Where you take time twice (per second squared) you really have acceleration and this is what c^2 is. This is **why** we have the **principle of equivalence** or that earth's gravity can not be discerned from an acceleration.

Our space is being manufactured by the spins of various electrons, at the rate of the speed of light or 3×10^8 meters per second. But the **quark** spins are generating gravitational attraction (**their space**) at the speed of 9×10^{16} meters per second, which some might see as the **square** of our speed of light — as it appears in our math — or an **acceleration** as seen by us. This is **why** we get the principle of equivalence and gravity equates with acceleration.

What we learn from c^2 is that the Speed of gravity is 9×10^{16} meters per second
<http://www.amperefitz.com/Gspeed.htm>

In addition, this faster than light speed has been proven by Van Flandern.
<http://www.ldolphin.org/vanFlandern/gravityspeed.html>

He may have been the very first scientist to see that while there **is** noticeable aberration with light, there is **no** noticeable aberration with gravity. This proves the speed of gravity has to be much, much faster than the speed of light. Astronomical students at Yale and many other major universities have been taught — for many years now — that in order for this universe to be stable, gravity must be acting much, much faster than the speed of light.

Isaac Newton told us that gravity was acting instantly. Einstein told us that gravity was acting at the speed of light. It turns out that Newton was closer to the

actual fact than Einstein.

This c^2 or the 9×10^{16} meters per second — in the tri-quark proton or neutron realm — relates to the speed that spinning quarks spin bind with other either near or distant spinning quarks via Ampere's Laws <http://www.amperefitz.com/Ampere> to give us gravity and inertia.

Quarks spin-bind with other near or distant quarks at the speed of 9×10^{16} meters per second giving us inertia and gravity. Electrons spin-bind with other near or distant electrons via Ampere's Laws <http://www.amperefitz.com/theALaws.htm> at the speed of c or 3×10^8 meters per second to give us magnetism and sigma and pi chemical bonding. The electron's spacetime interval is therefore vastly different from the tri-quark's spacetime interval. We can see every move that is made in the macrocosm as we look at galaxies. This is not so as we look into the microcosm where the electron's blitzzeit (shortest interval of the electron's time) allows us only to see the square root of the happenings in one quark realm blitzzeit (shortest interval of time in the quark realm)

In both of these abovementioned quark and electron cases, the individual spin-binding force does not fall off with distance. The **number** of entities binding is what falls off with the square of the distance.

Spacetime intervals <http://www.drphysics.com/syllabus/interval/interval.html> (today's accuracy) are only invariant throughout their own particular spacetime, frequency spin/orbit realms as long as no force is involved. Remember, both space and time are frequency conscious.

If Wheeler and Feynman are correct, we would be able to detect this speed of 9×10^{16} meters per second (it's already been done in our math) but we should never be able to measure this speed directly in our spacetime realm.

Quarks spin-binding equatorially with other quarks to cause gravity implies the possibility that Christiaan Huygens was right all the time. Note [the following Britannica 1997 CD article](#).

[Huygens visited London in 1689 and met Sir Isaac Newton and lectured on his own theory of gravitation before the Royal Society. Although he did not engage](#)

in public controversy with Newton directly, it is evident from Huygens' correspondence, especially that with Leibniz, that in spite of his generous admiration for the mathematical ingenuity of the Principia, he regarded a theory of gravity that was devoid of any mechanical explanation as fundamentally unacceptable. His own theory, published in 1690 in his *Discours de la cause de la pesanteur* ("Discourse on the Cause of Gravity"), though dating at least to 1669, included a mechanical explanation of gravity based on **Cartesian vortices**. Huygens' *Traité de la Lumière* (Treatise on Light), already largely completed by 1678, was also published in 1690. In it he again showed his need for ultimate mechanical explanations in his discussion of the nature of light. But his beautiful explanations of reflection and refraction — far superior to those of Newton — were entirely independent of mechanical explanations, being based solely on the so-called Huygens' principle of secondary wave fronts.

As a mathematician Huygens had great talent rather than genius of the first order. He sometimes found difficulty in following the innovations of Leibniz and others, but he was admired by Newton because of his love for the old synthetic methods. For almost the whole of the 18th century his work in both dynamics and light was overshadowed by that of Newton. In gravitation his theory was never taken seriously and remains today of historical interest only. But his work on rotating bodies and his contributions to the theory of light were of lasting importance. Forgotten until the early 19th century, these latter appear today as one of the most brilliant and original contributions to modern science and will always be remembered by the principle bearing his name.

Did Huygens' **Cartesian vortices** correctly predict quarks, spin-binding with other quarks?

QED, with its different math and rules from QCD, is sending us a message: the gauge rules of QED are different from the gauge rules of QCD. These are both different from our gauge rules here in our spacetime realm determined by Planck's constant, h . This h seems to be the power or momentum in one complete cycle of the electron's precessing orbital shell while it orbits, until it makes one complete precessing orbital shell, as it drops to the lower orbital.

The quantity h (Planck's constant) is the amount of power given in joule seconds in an orbital drop. You can also view h as momentum in Newton seconds. But in the spacetime realm of the quark we saw we were able to use time twice and get an acceleration. Merely do the same thing here with h .

Then simply use time twice as in acceleration: If that orbital drop takes a certain time and we get red light then when we get violet light, that orbital drop must be taking **half the time** it does to produce red light. The amount of power h is always the same. It is the quark's accelerated time in which this power is being done that, I believe, gives us the color of light that we see and the energy hf .

Remember, we have not one clock giving us our time but two clocks c and c^2 .

An electron will go around the nucleus many, many, many times before it completes one precessing orbital shell while it drops. It shouldn't be too hard to figure exactly how many times it orbits, once we learn how many separate light oscillations (waves) there are in a single quantum of light. We will know for certain that h is as described two paragraphs above if a quantum of red light has the same number of light oscillations as a quantum of violet light. This will prove that the entire quantum sequence of violet light waves was produced in half the time that the red light was produced because we know each wave of violet light is produced in half the time that it takes to produce a wave of red light. The wave length of red light is double the wavelength of violet light.

The electron probably has to make many orbits and precess many times, during its drop, before it returns to its initial, although smaller, orbital shell position. If I'm right, it does all this with the power or momentum of h in various times (using time twice as in acceleration) to produce the various **colors** with the energy hf .

You would not be allowed to do this in our reference frame alone but I think this situation is a bit different. Let's see if I turn out to be right, or not, on this one.

Everyone, however, agrees with the following:

The power or momentum h is the same in each quantum of energy.

And the same with \hbar in the spin shifts.

The energy hf in quantum theory comes from discrete orbital changes (drops).

And the energy $f\hbar$ comes from discrete spin shifts (flips).

Therefore, you must conclude that the micro world is really some sort of 3D that we can't see because it is another spacetime realm.

If today's accuracy is all that is needed then this above message tells us that each frequency spin/orbit realm is best seen as a distinctly different spacetime realm having its own invariant spacetime interval and its own time, space and **motion**.

Since force equates with space — the same as in general relativity — then space must also be generated in quantum units the same as energy is generated in quantum units.

Present science compels you to see things in terms of a **single** reference frame that cannot be moved closer to the microcosm or macrocosm. If you wish to see things in the micro or macro worlds correctly then you must completely **forget** present science. Use this Ampere method and move into different, individual frequency spin/orbit realm, reference frames. Understand that these will have entirely different symmetries and entirely different spacetime intervals, yet the few laws Ampere gave us will work in all those the same as they do here.

Einstein gave the example of a man riding inside a super-fast railroad train who saw two lightning flashes while passing a man standing next to him on the ground near the tracks. The man on the ground saw the two lightning flashes, one in front of the train and one behind it, at the same time. The man on the super-fast train, however, saw the lightning flash ahead of him first and the one behind him later. Einstein gave this example to prove that simultaneity simply doesn't exist for two separate reference frames.

It is possible this is happening to us because of the two different reference frames imposed upon us by c of the electron and c^2 of the quark.

If you can remember what was said in Chapter 3 about these two different clocks c and c^2 and the fact that the higher frequency can build the lower frequency because as frequency rises so does energy. These things may be contributing to

the fact that we must wait about 8 minutes for a quantum of light to come to us from the sun or even longer for it to come to us from a distant star. For the two electrons involved, it may be happening instantly. Now you can see exactly why this may be happening. The electron's clock c is actually being constructed from much of the energy of the quark's clock c^2 . In this particular instance we have the background of what the quark "sees" as instantaneous being impressed upon the spacetime realm of what the electron "sees" as instantaneous and in this case they are not the same. We have the space being given to us by the electron spacetime realm of c because the electron balance is the thing being disturbed with light being transmitted. But all this is being done via the energy of the quark system c^2 from which, in this instance, we could be deriving our background of what the quark sees as instantaneous in its spacetime realm of c^2 .

Another way to view this is that Milo Wolff's math shows the electron is being built via a scalar wave that is traveling at the speed of light. Simultaneity that exists for the scalar wave traveling at this speed is certainly not going to be simultaneity for you not traveling at this speed as witnessed by Einstein's man on the train example.

In other words Bohr's electron dropping an orbit in the star and the one going higher in your eye might be simultaneous to these two electrons but not to you.

Also we must observe that space and time are really a combined equity or spacetime. We know Milo Wolff has proven the electron reproduces itself from the electrons in its surrounding space. We must consider that these electrons are producing themselves from the surrounding electrons as well, as this time wave travels through space.

Quantum theorists should have seen all of this but didn't. They also should have seen that if the electron's spin caused magnetism and this spin-binding energy did not decrease with distance then the quark spin-binding also would not decrease with distance either and this would give us mass and inertia.

All those experts, with all those important university degrees, missed all of this and saw none of it whatsoever.

Chapter 8.

Motion

What no one seems to realize is that there is no math for universal laws such as Ampere discovered. Our present math is only designed for subset, spacetime realm rules. If Kurt Gödel's proof is correct, which I think it is, then all our science is nothing more than a vast collection of subset rules that we incorrectly **think** may be universal laws.

About the same time, in the early 1800s, Ampere and Faraday gave us their rules for electricity and magnetism. We built our science upon the Faraday subset rule structure, which ensured we would never be able to unify the forces using this type science. We did not realize that Ampere had given us not only laws for electricity and magnetism but he had given us universal laws utilizing relative **motion** that showed us how this entire universe functioned.

Nobel Prize winner Feynman realized that our concept of **motion** was a very important concept that we were actually using as we were beginning to unify the fundamental forces. Look at this short quote from Feynman's famous QED.

QED

The Strange Theory of Light and Matter

author

Richard P. Feynman

(Please note the emphasis Feynman puts on **motion** being the unifying element in all these separate fields)

". . . it was soon discovered, after Sir Isaac explained the laws of motion, that

some of these apparently different things were aspects of the same thing. For example, the phenomena of sound could be completely understood in the motion of atoms in the air. So sound was no longer considered something in addition to motion. It was also discovered that heat phenomena was easily understandable from the laws of motion. In this way great globs of physics were synthesized into a simplified theory. The theory of gravitation, on the other hand, was not understandable from the laws of motion, and even today it stands isolated from the other theories. Gravitation is, so far, not understandable in terms of . . . "

(I'll finish the above.) motion or relative motion that produces not only gravity but also all the forces, which I explained and published in this 1966 relative motion book. (This e-book is free.) Link below:

<http://www.amperefitz.com/page1.html>

ABSTRACT of the above book:

You do NOT need to visualize four separate fundamental forces when these are really only one force that can easily be viewed by using a frequency modification of Ampere's Laws. <http://www.amperefitz.com/aufbaulaws.htm>

This Britannica article <http://www.britannica.com/eb/article?tocId=9074111> tells you about Uhlenbeck and Goudsmit who were denied the Nobel Prize in 1925, when they discovered electron spin. They were denied the prize because of quantum theorists who insisted that spin **motion** — similar to what we see — was not there even though the spectrographic evidence for it was there.

The quantum scientists are correct, in a way, because all **motion** gets balanced out in time, if viewed from a lower frequency spacetime realm. The **motion** in the microcosm is on repetitive geodesics. Time in the microcosm goes much faster than time does for us. Our clock beats at a lower harmonic from the microcosm's clock. In the shortest interval of our time — one blizseit of our time — everything in the microcosm has returned to its original spot so we see no motion. The only thing we see is spectrographic evidence of light or heat or other type waves showing it has shifted to a higher or lower energy level.

Quantum theorists still adamantly insist that our type of spin **motion** is **not** in the

quantum realm although we find, as Goudsmit and Uhlenbeck did, all the signs of **angular momentum** there, which our type of spin **motion** produces.

In a way, (for good and substantial reasons, in fact) the quantum theorists are correct.

Why isn't our type of **motion** seen in the microcosm?

Motion, space and time are all things that are restricted to one single, subset, frequency spin/orbit realm.

Why?

Because all detectors (ours too) have oscillators in them detecting exactly as a superheterodyne detector does in a radio or TV receiver.

Only the **evidence (of motion)** can be **transferred out** of a certain frequency spin/orbit spacetime realm. We can not see motion either in the microcosm or macrocosm. All we can see is the evidence of it being there.

The fastest planet in our solar system is Mercury. It is going around the sun at a speed of 48 thousand meters per second and that is .00016 (.016%) of the speed of light. Comets also travel close to this speed. We need to use relativity corrections at approximately this speed as well. The fact that comets begin to sublimate when approaching the sun at this speed makes every sensible scientist wonder what lies in store for the first humans who might try to emulate this speed of the planet Mercury.

This brand new kind of science may be telling us that this is too fast a speed for humans to endure even in the distant vicinity of a star.

Find other planets circling other stars to colonize? This has been recently suggested by that great Cambridge University sage Stephen Hawking.

Not if humans can't even travel as fast as the planet Mercury while in the vicinity of another star.

Surroundings that are being totally discounted by present science now take on a

whole new role, which may make the event of humans leaving this solar system almost in the realm of pure science fiction. What I do agree with Hawking about is that we are destroying this earth.

This brand new kind of science is going to lead to revolutionary new weapons. The ones with all this new weaponry first are bound to use them to eliminate a huge portion of mankind from this earth because they will see the same destruction, of this earth, that Hawking sees.

This thought occurs periodically throughout this book because I honestly feel there is a high probability this is going to happen and I should therefore warn of its possible forthcoming.

Newton's laws of motion — that we all firmly believe in — start falling apart at relatively slow speeds when you compare these speeds to the speed of light. Now you see why I previously stated we **could** use our concept of **motion** as long as we keep it within correct parameters.

Instead of quantum theorists saying adamantly that the electron does not spin like a top, perhaps they might see that Euclid, Newton and others have impressed upon our minds that **motion** is a mathematically correct concept. Yet this concept starts falling apart when only .00016 (.016%) of the seemingly available range of speeds are attained. So it's wrong for 99.984% of the available range of speeds

If only the quantum theorists had looked further they would have seen what our minds recognize as **motion** is not really here. **Motion** is really a complicated in phase out of phase resonance situation in this all wave universe. So what we see as motion are really resonances that quantum scientists correctly see.

But if we can't understand these resonances and we can understand motion better, then why not use motion to make it simple to understand?

That's all I'm saying.

Isn't that Occam's razor?

"Make it as simple as you can so people understand it." said Occam.

In other words take the razor and cut through tons of all the university facts that they have been unable to correlate together yet.

What we see as Euclidean **motion** is not only restricted to our single spacetime realm but most probably also to other frequency spacetime realms of .00016 (.016%) of their available speeds.

Quantum theorists may be right and **motion** may not even exist in the microcosm as such. Nevertheless we **can** use this powerful concept of **motion** to see how this entire universe functions if we realize that it is restricted to perhaps .00016 (.016%) of **any** single frequency spacetime realm. It also cannot be transferred out of that spacetime realm; only the evidence (**angular momentum**) of it can.

I am in agreement with the quantum theorists that no **motion** — such as we see here — exists in the quark-electron realm. I also add the caveat that if you say it doesn't exist there then you must also say it does not exist in this **entire** universe per se.

And, believe it or not, there cannot be any such thing as **motion** per se for this **entire** universe because to have **motion** you must keep the spacetime interval within certain accuracy parameters and this is only possible (today's accuracy) in one single frequency spin/orbit system.

Chapter 9.

Our concept of Motion

Motion (our concept of it) only exists in subset, frequency spin/orbit realms of this universe and it is restricted to those subset realms. The constants c and c^2

prove this.

However, don't throw away this powerful concept of **motion** in the microcosm.

Use Occam's razor and move your mind into **each separate frequency spin/orbit realm at a time**. View it having our concept of **motion**. Although quantum theorists view it as improper, view the electron as orbiting and spinning like a top. This is improper, say quantum theorists, because of SU (2) symmetry where the electron has to spin 720 degrees to end up in the same spot. Our new science tells us to look further because this could be some quark background frequency, reacting with the electron at twice the electron spin wavelength, causing this as well.

By using Ampere's Laws, you can see it all as one force and not the 4 fundamental forces that present science views it as.

SORRY

You can't do the math this way though, as Ampere himself found out even though he was one of the math experts of his time.

I'm afraid that math, along with our concept of **motion** is restricted, to **one single frequency spin/orbit system at a time**.

A bit of general relativity also must be used here as well as you think about **motion** and the transfer of energy. Energy can neither be created nor destroyed. This means that the spin frequency of an electron producing light in a heavy gravitational situation of a massive star will appear, here, in the lower gravitational confines of earth, as a lower spin frequency. Time is going slower on the star as it is here on earth according to general relativity. A faster spinning electron on the massive star matches up with a lower spin frequency electron on earth to transfer light. Electrons will not "see" each other spinning at the same relative spin frequency. They may not actually spin at the same exact frequency either, however, they all spin close to the same spin frequency. Their spin frequency band is much narrower than the spin frequency band of the quarks. The lesson in all this is the frequency that you see the light produced at will be at a lower frequency than the electron on the massive star "sees". This is why the light on massive stars is red shifted.

Because it works this way, energy can come from a high energy level area to a lower energy level area. So now you know something else these experts don't. You know how energy actually is able to come from a high energy area to a lower energy area.

This concept of **motion**, that human minds have developed, is really a remarkable concept. Instead of totally banishing the idea of **motion** from the microcosm, as quantum scientists presently do, I would suggest doing what Uhlenbeck and Goudsmit did: See the microcosm as having its own **type** of **motion** the same as we see **motion** existing in our spacetime realm here. Doing exactly this won Niels Bohr the Nobel Prize.

Once this is done then all the forces become unified with their own different **types** of **motion** using Ampere's relative motion law.

Instead of plus and minus charges it then becomes more in phase type of **motion** than average or more out of phase type of **motion** than average.

Instead of gravity's attractive force and Einstein's original cosmological constant repulsive force between all the stars, this also becomes more out of phase type **motion** than average for the repulsion and in-phase type **motion** than average for the attraction.

Gravity then loses its monopole look and, for the better, takes on a bi-polar appearance much like all the other forces.

And someday these future super-computers, that Steven Wolfram talks about in his best seller "A New Kind of Science", will even eliminate our concept of **motion** entirely from computation. With satisfactory computers determining all phases of all waves there will be no need for relativity corrections to our concept of **motion**. Our concept of **motion** can be completely done away with just as it is now done completely away with, in the microcosm, by the quantum theorists. These future super-computers will see it as space being created more than average via out of phase scalar waves reacting with each other and less than average space being created via scalar waves that are more in phase reacting with one another. **No space is being created between scalar waves that are perfectly in phase.**

And this, by the way, is exactly what is really going on in this all resonance type universe.

Far in the future we will have the super-computers about which Steven Wolfram talks. But they are certainly not here yet. Therefore, instead of hard to see phases, use **motion** to see what's really going on. You get a better **big** picture of our universe this way than by using any other present method.

The reason that this works is that there are spherical, scalar, standing wave resonances in every frequency spin/orbit system and these will have spin and orbit scalar wave resonances as well and these will be obeying Ampere's Laws.

Once you see this then you also see the importance of developing this scalar wave concept further.

Einstein was right to look for the simple answer because there it is in the above paragraphs.

Dirac was also right because this concept is the very approximation that he foresaw.

Chapter 10.

Mach's Principle versus an Expanding Universe

You can have one or the other but **not both.**

Milo Wolff emphasizes the importance of Mach's principle and I am in complete agreement with Milo on this.

Please note [the following Britannica 1997 CD article](#)

[Mach's principle,](#)

in cosmology, hypothesis that the inertial forces experienced by a body in nonuniform motion are determined by the quantity and distribution of matter in the universe. It was so called by Albert Einstein after the 19th-century Austrian physicist and philosopher Ernst Mach. Einstein found the hypothesis helpful in formulating his theory of general relativity--i.e., it was suggestive of a connection between geometry and matter--and attributed the idea to Mach, unaware that the English philosopher George Berkeley had proposed similar views during the 1700s. (Berkeley had argued that all motion, both uniform and nonuniform, was relative to the distant stars.) **Einstein later abandoned the principle** when it was realized that inertia is implicit in the geodesic equation of motion and need not depend on the existence of matter elsewhere in the universe.

It is the opinion of this writer that Einstein's biggest blunder was in listening to Lemaître and abandoning Mach's principle because inertia is **not** implicit in the geodesic equation of motion. Dr. Mio Wolff has proven that. He's proven Mach's principle.

Inertia is the result of quarks binding with other distant quarks in the fixed stars and gravity is the result of quarks binding with other closer quarks in nearby objects.

What Einstein correctly saw was that you cannot have **both** Mach's principle **and** an expanding universe.

So he gave up Mach's principle to obtain Lemaître's expanding universe. It was a bad exchange. It messed Einstein up for the remainder of his life.

Yes, we did have a Big Bang but it was not the Lemaître - Gamow type scenario. The CMBR or Cosmic Microwave Background Radiation comes not from a tiny expanding explosion but from a beta decay <http://education.jlab.org/glossary/betadecay.html> in an already gigantic neutron only universe. This **beta decay** scenario arrived because this was, once upon a time, an all neutron universe for many hundreds of billions of years in which Mach's principle (*inertia caused by the surroundings*) also existed just the same as it does today.

Studies of the CMBR prove that this explosion had to have happened all

throughout the entire universe at the same time therefore proving some sort of a universe framework had to be there first before the explosion. Therefore, the CMBR proof doesn't jive with what these universities are claiming happened.

The proton is the stablest of the tri-quark entities today but long ago, before the fine structure constant changed to what we now have, the neutron was stable for possibly many hundreds of billions of years. But as the fine structure gradually changed enough then came a massive **beta decay** changing half the now unstable neutrons into protons and electrons via **beta decay**. Inside newly created atoms (*hydrogen at first*) the other half of the original neutrons were safe and again stable as long as they remained within an atom.

This gigantic **beta decay** left us with the CMBR.

What Saul Perlmutter's group discovered, will eventually end enthusiasm for this red shift based expanding universe.

I know this is being redundant but I must go over what was in Chapter 3.

What no one seemed to realize was that if, via the Principle of Equivalence, gravity cannot be discerned from an accelerating, **contraction** then gravity's equal and opposite repulsive force, **Einstein's original cosmological constant**, cannot be discerned from an accelerating, **expansion**.

And accelerating it is because this is what Saul Perlmutter's <http://panisse.lbl.gov/public/sauldir/saulhome.html> group found.

An **expanding** universe is one thing but an accelerating, **expanding** universe is a horse of a different color. It's an entirely different animal: In fact, it is nothing but the equivalent of the repulsive half of gravity's attractive force inside of a steady-state universe. Believe it or not.

But real accelerating is impossible. While there may have been a past beta decay force there to cause some sort of an expanding universe, certainly there is **no present** force, which would be needed for such a continued accelerating to this expansion.

Therefore a real accelerating, expanding universe is not here but what is here is this repulsive force equal and opposite to gravity that Einstein predicted. This was his original **cosmological constant**. This repulsive force between all those millions of stars gives us light dispersion similar to a diffraction grating. This is what causes the red shift.

According to the Principle of Equivalence, you cannot discern this **cosmological constant** repulsive force from an accelerating, **expansion** just the same as you cannot discern the equal and opposite gravitational attractive force from an accelerating, **contraction**.

As I stated earlier, we would have Ashmore's paradox http://www.lyndonashmore.com/ashmores_paradox.htm with an expanding universe. But we don't, so this has to be a steady-state universe.

We have a redshift because of **dispersion**: Ultraviolet light is undergoing more dispersion than red light via Einstein's **original cosmological constant repulsive force** that it is forced to pass through. This starlight must pass through all these individual repulsive force fields by which all the stars are repelling themselves from each other.

This dispersion of light <http://www.phys.hawaii.edu/~teb/optics/java/dispprizm> in a glass prism is exactly the same via the many **repulsive forces** that keep all the molecules in the glass apart. Multiple repulsive spots between stars and molecules of glass is not much different from the multiple spots in a diffraction grating.

The law is that one cannot use the simpler special relativity with these force fields. One must use general relativity with its tensor math.

Even university presses have stated that Einstein's cosmological constant exists in the microcosm. I've read that one many times. So if you say you can still use special relativity in the above cases then as the judge I am going to say to you, as many judges have, "Ignorance is no excuse under the law."

So let's proceed using the tensor math of general relativity.

So this redshift that Lemaître thought was showing us expansion is really being caused by repulsive force (more space being created [*tensor math*]) **dispersion**. You cannot change the spacetime interval and avoid light **dispersion**.

Hubble was right to warn about thinking this universe was expanding because of the red shift that he discovered.

The repulsive forces between the stars, holding them apart, are many and spread out as you consider the manner that light has to come through each of these separate repulsive force fields that surround each star.

Thus, we must have a red shift via Einstein's **original cosmological constant repulsive force** causing **dispersion**. This would leave us with only red light. This would give us the same time dilation that we presently observe with supernova and it totally avoids changing the energy, thus the momentum, of a photon, which we know doesn't happen because distant objects are not blurred.

Einstein's tensor math tells you that the repulsive force between both the glass molecules and the stars is being caused by more space than average being generated in both those places. Thus the spacetime interval is being changed, in millions of different spots, in both those places as well. This has an effect on light. Look at how the multiple gratings in a diffraction grating affect light. The count of stars and the count of molecules in the glass prism are even higher than the grating count in a diffraction grating.

It's hard to believe that Einstein, who invented the tensor math of general relativity did not see what his own tensor math was telling him about the red shift. The tensor math tells us that more space than normal is being created to give a repulsive force.

Then in a prism and near the stars, via all those millions of spots where that repulsive force is the strongest, the faster vibrations will be **dispersed** the most beginning with the fastest frequencies. Because repulsive force between stars is the same as repulsive force between molecules, this works the same way between the various molecules in a glass prism as it will between all the various stars in space. First the highest frequency violet colors are dispersed, next blue, then green, then yellow, then orange. The lowest frequency of red makes the best of it when trying to come straight through whereas the others are all **dispersed** and bent away from the straight path far more.

So Einstein's own tensor math was telling him how the prism worked and what

was causing the red shift and he never listened, even though he himself had discovered one of those repulsive forces (force between the stars).

And this is ironic.

This is ironic indeed.

This same frequency dispersion, by the way, is the reason that quarks find it hard to attract in the high density of the tri-quark nuclei.

You'll even see some of this with present science but you certainly will see everything with this brand new kind of science using the laws Ampere gave us.

Chapter 11.

Using the right rules

and

the right reference frame

I don't know when the unit of capacitance, the farad, was named after Michael Faraday but it was.

And the picture Faraday painted of how he saw the universe persists even to this day mostly because math could be adapted easily to Faraday's rules.

Ampere gave us a picture that can see further into things than Faraday's and I'll prove it by asking you this question:

If you looked down at the south pole of a magnet then in which direction would the electrons, causing this magnetism, be spinning?

The answer is counter-clockwise.

Faraday's laws tell you absolutely nothing about the spinning electron while Ampere's Laws tell you everything about the spin.

Faraday's laws, that are being used by the universities today, not only hide the electron spin from you but, for the same reason, they hide unification of the forces from you as well.

The biggest problem with present science is that you are stuck in one particular frequency spin/orbit spacetime reference frame realm when you use any present science laws.

A few people in the university system understand such things as Hilbert space and that the spacetime interval must change in such a different type space.

Fewer know that the spacetime interval is entirely different for every frequency spin/orbit system. It's different in a black hole event horizon than it is here. As previously stated, that's why we can't see inside one of those. Electrons and quarks, inside a black hole event horizon, are at a higher scalar standing wave frequency than our electrons and quarks here. Their spin frequencies are higher too therefore they have more mass than ours and this makes all the difference.

The reason that QED uses different math and rules from QCD and both use different math and rules from us is not that the real laws are different in these three different frequency spin/orbit systems. It is merely that there is one spacetime interval for QED another entirely different one for QCD and another entirely different one for us here. When the spacetime interval changes substantially enough then symmetry, space, time and motion also change.

Present science uses different rules and math for each of these different frequency spin/orbit spacetime realms. However, that's not the way nature does it.

All these realms are linked. All of these are frequency realms.

They are linked via harmonics.

This is the big secret of this universe.

The universe keeps these scalar standing wave entities such as quarks and electrons far enough apart, frequency wise, so that they do not interfere and destroy each other but close enough together harmonically so that they can link via harmonic linkage.

This is why gravity bends light.

Gravity is at the quark spin frequency while light, at the electron spin frequency, is the square root of this frequency and a harmonic of the quark spin frequency. This is why electrons are slightly attracted to the quark nucleus and electrons far enough from it can be absolutely free.

This is a brand new kind of science. If scientists want to make rapid developments then either they understand these frequency relationships or fall by the wayside while others march right on past them.

Milo Wolff is absolutely correct. His scalar standing wave formula is the cornerstone for all the future frequency math that will be programmed into our future supercomputers. What's important about his formula is that he stayed within not only the frequency parameters of today but he stayed within the parameters of future supercomputers as well.

What do I mean by that?

See, I keep telling you about frequency spin/orbit systems, well that is quite a bandwidth and that is good enough for the accuracy of today as is seen in the rules for QED and QCD.

However, for more accuracy in the future that accuracy may have to be better so the bandwidth will have to be less. Note: #11 in <http://www.amperefitz.com/FitzUSR.htm>

11. The more accuracy you want, the more you must narrow the range of frequencies involved. Also, the greater the frequency range you view, the less accuracy you will have (with present math). (*Feynman taught us this one.*) Quantum scientists know this one as the rule: "Before you quantize you must fix the gauge." <http://www.amperefitz.com/quantize.htm>

QED uses what is called the square of the amplitude to correctly determine the spin up - spin down electron pairs that are in the correct position and lined up exactly right, having the correct impedance, to transfer energy, in a certain path, to and from certain points involved. Time is considered and so is space and so is the fact that the scalar resonances of both electrons will sense that they are both flashing on, in phase, at the same time.

To understand this you should listen to the Feynman lectures.

<http://www.vega.org.uk/series/lectures/feynman/index.php>

From this, you will see that the electron is not able to be detected all the time. Either its scalar wave is not here all the time or its spin is not lined up with any electron's spin in the detector until certain amounts of either space or time separate the energy emitting electron from the detector electron. Most of the time things are not synchronized between the two correctly so that a detection can be made. In other words, the electron seems not to be there more than it is there.

Quantum theory therefore is built on a certain probability of a detected electron being in a certain place at a certain time.

Einstein didn't like this probability factor one bit and publicly stated that God wouldn't have made such a universe, as Niels Bohr was describing, where this type of gambling was involved.

Niels Bohr answered Einstein back by saying, "Who is Einstein to tell God what to do."

To another single electron in a detector it is as if the electron being detected is flashing on and off (as if it was there then gone for most of the time).

Therefore, the scalar wave of an electron, that we ourselves detect as the electron, detected by the most sensitive detector, seems to be here for a blitzzeit then is gone then here again and again gone. But we don't see the electron flashing on and off — or do we.

Yes and no.

Nature has played another trick on us and to see the reason behind this you have to listen to Nobel Prize winner Richard Feynman's lectures. They are worth listening to over and over again until you get the gist of what he is telling you. They are so important that I'll give them to you again:

<http://www.vega.org.uk/series/lectures/feynman/index.php>

Electrons, as seen from a sensitive detector, are flashing on and off, believe it or not. They are here then they are gone then they are here then they are gone again. Are they real permanent things? Or is this some anomaly in our detection process? They are acting like repetitious standing waves but we only see this when we have detectors so sensitive that they can sense one quantum of light or the reaction of one electron to one electron in the detector. This is what Feynman's lectures are all about.

But it takes about 6 or 7 quanta for the human eye to see the briefest blink of the faintest star. So this means either the space or the time Feynman talks about in his lectures will be different for all 6 or 7 quanta and we will lose this flash and it will instead become a more steady light.

More of what we still don't know is Heisenberg's Uncertainty.

With Heisenberg's Uncertainty we may, in fact, be looking at it in two distinct reference frames. <http://www.aip.org/history/heisenberg>

We've seen, so far in this book, that we see c as the speed of light and c^2 as acceleration. This must be telling us that we normally are seeing the space generated by the electron and not the space being generated by the quarks because we are seeing that quark space as acceleration.

In Heisenberg's Uncertainty are we noting the electron's momentum in that same space as well?

We are noting the momentum of the electron, which is at the spin frequency of the electron. But the problem is that in the atom resides those quarks and are those electrons there obeying the electron space that we'll denote by c or the quark space that we'll denote by c^2 ? Not only that but where is most of their momentum stemming from? Inertia, we have now discovered, must come from same frequency surroundings or a harmonic thereof. Since the electron is a quark

harmonic then how much of the electron's inertia is stemming from nearby quarks?

I can't give you all the answers to this but I'm willing to bet that in the foreseeable future someone will.

My intuition tells me that Heisenberg's Uncertainty stems from us mixing these quark and electron reference frames.

There is no doubt that the two different reference frames of c and c^2 (*the electron and quark*) are causing us many more problems as well. We see now why this disparity between the two makes us see gravity as an acceleration and possibly gives us the speed of light. What else do we not see that it is also causing?

This reference frame chapter may be a short chapter but it's one of the more important ones in this book.

Chapter 12.

The picture you should look at

Getting a complicated jet airliner back into the air, after many troubles have been recorded in the log book by the crew that just landed it, takes people working on it that have years of experience working with the various systems on these airplanes. I loved working on the line because I knew all these systems and could fly as well. A bad eye kept me from flying for the major airlines though. They wanted both eyes corrected to 20/20 with glasses.

The more you know how everything works the better off you will be as a line radio, electrical or aircraft and engine mechanic who works on the ramp, on these airliners, to get them fixed and ready to fly again. You do have to know the systems and the ways in which all of them interact. It's far, far more complicated than anyone reading this book can imagine. There is no one person alive today

who knows how everything works on a modern jet airliner. I had an airframe and powerplant mechanics license and the top radio license. This allowed me to work on everything. And 30 years ago there was no one person, back then, who even knew how all the electrical and radio equipment worked, let alone the rest of the stuff. I don't imagine that this has changed in all those years.

I suppose that today computers are analyzing troubles. They were starting to use computers for this when I left but those computers were costly and weren't able to help line maintenance personnel much at all.

Every airline has people specializing and by using the compound knowledge of thousands of these specialists you eventually can get everything fixed and the airliner back into the air flying again.

I knew that this universe was complicated, just like these modern jet airliners. Therefore, I attacked this problem of figuring out this universe the same way airliners are put back into the air again. I knew it took a lot of talking to many specialists. It is only after doing this that you start changing parts and black boxes to efficiently get an airliner back into service again without wasting the company a lot of extra money.

If you don't talk to the experts then even though you may get the airliner flying again, I'll guarantee that you will waste a lot more time and money than one who does find and talk to the experts first. This does not pertain to the routine problems but it most certainly does to the major problems.

This meant that if I wanted to figure out how this universe worked that I had to know basically what was going on in every science. I had to listen to all the experts.

Learning from them by reading what they were saying took many years of my retirement.

God bless computer CDs and the Internet for giving me the opportunity to do that.

And this gave me all the information that I needed to put it all together.

And that gave me all the information that I needed to write this book.

Our present science can not be trusted because it is only local gauge theory. In quantum mechanics, there are various local gauge theories. We use one gauge theory for QED (the study of electrons) and another for QCD (the study of quarks).

This tells you something, doesn't it?

This tells you that you have a different symmetry of rules and math for each different frequency spin/orbit system.

Since our Euclidean-Newtonian laws will not work smaller than a Planck length and the arms of these spiral galaxies are moving faster than their escape velocity then that tells us our Euclid-Newton laws won't be accurate in either the microcosm or the macrocosm.

Niels Bohr won the Nobel Prize for bringing centrifugal force, space, time and motion into the microcosm but that was only for a brief time long, long ago in the dim and distant past and now it seems everyone in the quantum field wants to entirely forget all about that.

The majority of quantum experts now only wish to see resonances in the microcosm and they are adamantly refusing to allow any of that old timey centrifugal force, space, time and motion back in.

Therefore, this shows you that our Euclidean-Newtonian laws are merely local gauge rules for the frequency system of our atoms and molecules out here where we live in between the microcosm and the macrocosm.

Our rules here can't be used accurately in either the microcosm or macrocosm.

As previously stated, Niels Bohr did take centrifugal force into the microcosm and won the Nobel Prize by doing it but he could only do this with the monatomic hydrogen and helium electrons. We have to use the Hartree approximations for the others so the accuracy of our science laws suffers in the microcosm. And it suffers too in the macrocosm because by using it we see the galactic arms going faster than their escape velocity, which is an impossibility.

There is no other choice than to accept the fact that all our Euclid-Newton laws are local gauge rules or subset laws, about which Kurt Gödel warned us.

This also told me something else of immense importance.

I could trust none of our present math.

Why?

Because both rules and math must be different for each local gauge theory. All we have, so far, is math for local gauge theories. We have developed no math yet for any global, universal laws.

This basically means you are not going to get anywhere by searching for Einstein's unified field by using any of the math that we have developed so far.

Remove the math from any one frequency spin/orbit system and it's worthless.

I realized this important fact about 1997 when I got my Britannica CD.

Superstring theory really has it right in that each frequency has its own spacetime realm. In the future when we need super accuracy then this may well be the way we have to go.

But as for now, with today's human factor accuracy, each frequency spin/orbit range is good enough.

This becomes apparent as we look at the success of QCD and QED.

Remember, as you use Ampere's Laws, that you are only getting a view of one spin/orbit system at a time. Nevertheless, as you realize that all of these systems are linked together via harmonics then you can see the big picture emerging of how this entire universe works because you can look at all these different frequency spin/orbit systems **using the same laws**, Ampere's Laws.

Remember also that if you specify momentum, speed, distance, time or size then you also must specify which frequency spin/orbit system you are talking about. All these terms are nothing but local gauge terms. They are specific to only one frequency spin/orbit system and that is for today's accuracy only. You may have

to spell out the exact frequency for tomorrow's much more accurate universe. At least that's what string theory seems to be telling us.

And the math for that is going to be far, far more elaborate and far, far more expensive as well than anything we are using today because surroundings must now be involved as well.

General Bedford Forrest said, "To win, get there firstus with the mostus."

Is your nation the one that is going to win this brand new kind of science battle?

Everybody is asleep right now on this one but that will change and it may change faster than some anticipate. You may believe there won't be a rush to better weapons, as more people see these fundamental forces are finally unified. But I don't believe that.

I think the general was right.

It's not the kid in class that eventually gets it that gets the top mark.

It's the one who gets it first, before anyone else.

To get the correct picture of wave energy you should recognize that it is something that upsets the balance, because that's all energy is really.

Then when it becomes a spinning, scalar wave particle, we see that energy as mass with inertial qualities.

You could have absolute zero mass if a scalar standing wave particle had no spin harmonic links whatsoever to the scalar wave particles that are building our universe, namely the quarks and electrons.

This would be a very difficult thing to achieve though wouldn't it?

So I would guess that the existence of an absolutely massless neutrino would be something that is virtually impossible. Extremely low mass that would not be measurable to us though would definitely be a possibility.

This brand new kind of science differentiates between scalar wave particles such

as electrons and quarks and vector force particles such as bosons, gluons and photons.

Here's something that I've been saying for many years now even before I knew permanent particles such as the electron were scalar wave particles. This is as important today as it was when I first wrote it:

" To remain here as a permanent particle the standing wave or wave train sphere composing it must be at a discrete distance frequency wise from all the other higher and lower particle-frequencies (*string theory*). The standing wave(s) also must be given a certain spin and precession whereby they resemble a spheroid to their identical sister particles therefore any "tuned circuit" "lock on" with their sister particles can only be fleeting and inconsequential to the particle's spheroid structure.

A permanent particle spheroid has to be exact in that its wave train never gets out of phase in the least while retracing its steps over and over and over again. In turning all these waves into spheroid particles the universe achieves better universal balance all throughout."

Now, thanks to Milo Wolff, I know I was describing scalar standing wave particles.

Scalar standing wave particles stay on spin and orbit geodesics.

What is a geodesic?

Here's what a geodesic is: It is the path taken for the best balancing between what the item is rotating within or revolving around and its same frequency surroundings.

Chapter 13.

Gravity, Inertial Mass and Hurricanes

You are attracted to this earth because you are traveling on a parallel path with this earth and this can be seen by using Ampere's Laws. Nothing is at rest in this universe. Everything is in motion therefore much space and time is being created according to Ampere's Laws. But because you are on a parallel path with this earth and going in the same direction as it is then there will be some actual attraction to the earth and some actual repelling by your macrocosm so your simple force of gravity is really the resultant of different opposition forces and therefore this so called force of gravity is a far, far, far more complicated force than today's scientists think it is. It will require far superior super-computers than we have today to figure this all out accurately. When we are able to do this then you will be able to work out the spins of everything as well as the orbits. This is something that you cannot do now as accurately as will be done via this brand new kind of science in the future.

This brand new kind of science states that if anything in this entire universe is spinning a certain way now, then there is something setup now in its same frequency surroundings making it spin that way.

The present science concept that certain things were simply left with a certain spin or spin orientation, merely because of some past event — such as is being presently claimed, by many astronomers, for the planet Uranus — doesn't play too well in this brand new kind of science where everything is in balance.

J. H. Oort has proven to us how much material we must have in space for these galaxies to rotate the way they do and this is double what we find we really have. So where is all this "missing mass"?

University presses are telling us it's all the dark matter in space but our new type of science needs spins of things for attractions so where are all these hidden spins?

The answer is that they are the low frequency spins of the galaxies themselves. What is Ampere's Law telling you? It's saying that inside a galaxy all the contents of that galaxy are going to have added attraction because all the contents of that galaxy are spinning together on the same parallel path with their neighboring stars in the same direction. This is all being done relative to the surrounding galaxies

isn't it?

This is where you are getting the added gravitational attraction. It is not coming from dark matter.

We do not yet have either the super-computers nor the math nor even much of the standing wave theory put together to accurately figure it all out exactly yet but Ampere's Laws are a big help and they are far superior to our present science in figuring out the big picture today.

The gyroscope, pendulum and vibrating elements all maintain their position in relation to the fixed stars. This brand new kind of science shows us why. They would have to keep this reference to the fixed stars if indeed inertia was caused by the linking of all quarks to other quarks in the rest of the universe via their spin frequencies.

Certain super-cooled substances such as isotopes of super-cooled liquid helium that are being spun in a container will entirely stop spinning, even though the container does not, as the temperature approaches absolute zero. As the temperature nears absolute zero, the liquid helium inside the spinning container will come to a complete stop, holding a place at rest with the fixed stars.

Even the gyroscopes that were used aboard aircraft forty years ago were sensitive and accurate enough that they could act like this super-cold liquid helium too. Many a time I would place the axis of a rotating aircraft gyro almost vertically straight up — pointed at the sun — at noon time and come back at supper time to see the axis now almost horizontal but still pointed at the sun that was now setting in the west.

The gyro had held its position with the fixed stars and the earth had simply rotated under it.

When I first witnessed this, I immediately thought about the pronouncements made by both George Berkeley and Ernst Mach.

Besides the double right hand rule, that nobody remembers for long and doesn't even deserve mentioning here, it's easy to know which way a gyroscope is going to precess if you know **why** it precesses. It precesses simply because here again

we have these quarks in the spinning wheel that have to align up with others of exactly the same "bad quarter" mass somewhere in the universe. So take a spinning bicycle wheel and look at that portion of the tire and rim at the instant you push it to make it change direction and the first initial path that this tire and rim take at that spot you moved — projected on the sky — is the new path in which that entire wheel has to follow. You will notice this best with a bicycle wheel. You won't notice this as much with heavier wheels because the higher torque will react before you can give them much initial movement. So once you know how a gyroscope really works then it is simple to see which way it will precess. You can throw away the complicated double right hand rule. Let's move on.

You need to have **locked** items to have either a magnetic unlike pole effect or an opposite charge **attracting** effect.

Before any aggregations of anything can attract and accumulate anywhere together, they have to be first locked, in some manner, so they can no longer act as if they were like gyroscopes in gimbals.

Free items must always spin and repel similar free spinning items.

Quarks, electrons, stars and galaxies are all spinning and orbiting because by doing this they stay more in balance with their surroundings than via any other method.

In this brand new kind of science it is all surroundings, surroundings, surroundings and spins, spins, spins. It's surroundings and either spin or orbital binding.

Magnetism and the opposite charge effect are both caused by all these locked electrons where many are locked in the same direction. Inertia is caused by the locked quark triumvirate. The proton is composed of two up quarks and one down quark while the neutron is built of two down quarks and one up quark. Both of these quark triumvirates are assembled in such a way that it prevents the quarks from wobbling when they move closer together so they do not give off any waves as electrons do when they fall further to the center of the atom. This triumvirate locking is a form of locking that prevents all these quarks from ever being locked in one direction such as an entire domain of electrons on the *d* and *f* shells in iron

that cause magnetism.

Possibly in the future, we will be able to more accurately measure all of these frequencies and we may then be able to tell the locked electrons and quarks, from the freer ones, merely by their frequency change.

Inertia is a bit more complicated. To see the cause of inertia it is going to take some thinking. This is where mind pictures play an important part and we need an answer that makes sense compared to special and general relativity and quantum mechanics as well. I can not explain it to you without using Murray Gel-Mann's quark and Rachel Carson's example of the "bad quarter" of a hurricane.

First of all to understand inertia you must understand what relativity and quantum mechanics are showing you and you must also listen to Ernst Mach and George Berkeley who told you inertia was being caused by all the rest of the universe.

How can that possibly be?

OK, first let's look at a Rachel Carson statement where she said she didn't believe any wooden vessel could withstand the "bad quarter" of a severe hurricane. While this undoubtedly is true, what exactly is this "bad quarter" anyway?

The "bad quarter" of a hurricane is that sectional quarter near the eyewall and further out where the forward speed of the storm **adds** to the circulatory wind speed.

For instance if a northern hemisphere storm is rotating counter-clockwise at 120 mph and also traveling toward the North at 25 mph then if you got caught, near the eyewall, in that bad east quarter section you would get hit with winds of 145 mph *with the destructive force increasing as the square of the wind speed.* Whereas if you were in the western portion of the same storm, near the same eyewall, you might have winds of only about 95 mph.

The destructive force, therefore, would be about two and a third times greater in that "bad quarter" in the eastern portion of the storm with those 145 mph winds than in the western quarter of the storm that had those less powerful 95 mph winds.

All free, spinning, moving entities have this important "bad quarter" effect similar

to the hurricane. It doesn't really matter what the entity is, as long as it is spinning and it is moving with some forward speed: If it is both spinning and also moving with some forward speed then it will have this "bad quarter" effect. Even items orbiting on a geodesic have a certain amount of this "bad quarter" effect.

Later, when you see how light is produced, some will say this "bad quarter" effect is here producing the light and this will be true. You must remember, while making light, the electron is not on one permanent geodesic but it is **changing** geodesics.

This "bad quarter" effect plays one of the most important roles in our explanation of how all things really work in this universe and today's scientists have missed this significant road sign entirely.

This "bad quarter" plays a significant role in many things and is the prime explanation of this force we call gyroscopic inertia or angular momentum.

The "bad quarter" motion that you will see time and time again in both the micro and macro worlds is the same force that would tip a helicopter over if the operator had no cyclic pitch control. Igor Sikorsky made the helicopter a practical machine by his invention of the mechanism that allowed the pitch of the main rotor to change as the blade turned: This is called cyclic pitch. Cyclic pitch works this way: If, on a stationary helicopter, the tips of the main rotor blade are going 400 mph and now you fly the helicopter at a 100 mph forward speed, then one main rotor blade (*blade moving to the rear*) is, on one side, cutting through the surrounding air at 300 mph. The opposite main rotor blade is moving through the surrounding air at 500 mph on the other side of the copter (*measurements at the blade tip*). This would turn the copter over were it not for the cyclic pitch mechanism where the main rotor blade pitch on the 500 mph side is now reduced, and it is increased — scooping in more air — each time the blade is on the 300 mph side.

When you see a spiraling object in nature, then think of the helicopter blade that does **not** have the cyclic pitch but instead has a pre-Sikorsky fixed pitch and that has to keep turning over and over if it has any forward speed. (Electrons moving in one direction will be locked into a spiral that depends on the field.) This entire universe both micro and macro is loaded with this type of pre-Sikorsky fixed pitch precession of all kinds and it all comes because of this identical fixed

pitched blade phenomenon but instead of air it's a mass increase but the idea behind all precession is exactly the same as the fixed pitch helicopter blade or the hurricane. If you think of it in these terms then you will immediately see the other forces causing this spiral. You can even call this fixed pitch blade itself spiraling a form of precession if you want to. The electron precesses because it too has a pre-Sikorsky fixed pitch or this "bad quarter" like the hurricane.

For this next paragraph you must remember that general relativity shows us that relative mass increases as speed is increased.

Like the aforementioned helicopter blade and the hurricane, spinning and rotating items that also have forward speed are going to act exactly like the helicopter blade. Instead of having more lift on one side they are going to have more relative mass on one side and this will destroy their linking with previously linked objects and they will be forced to link with like objects also having a mass increase on one side as well: In radio an effect similar to this is known as impedance matching. And I will repeat once more that this is the reason gyroscopic inertia or angular momentum acts like a spring storing energy as the accelerated object speeds up because each linkage with distant stars in this universe takes more and more energy as the object is further accelerated. The newly accelerated particle has more "bad quarter" mass and it must find a higher "bad quarter" mass object far away in the universe to bind with as well and so the "wind up like a spring" inertial or gyroscopic effect is noticed. Again, you have impedance matching here exactly the same as you do in radio. Here it is the rotation of the quarks producing it where the quarks are all homogeneous and isotropic in the large whereas in radio the spinning electrons — that are not homogeneous and isotropic in the large — produce what we see as a magnetic effect.

This "bad quarter" effect and impedance matching, where it must be matched for binding, is the reason that energy can neither be created nor destroyed.

Keep all this in mind about this "bad quarter" and impedance matching during this next chapter and when we get to inertia later.

Chapter 14.

Generators, Motors and Transformers

"There is no royal road to geometry" a king was once told when he wanted a short cut through it all. Things may get a bit harder to grasp in the following paragraphs. This particular paragraph is a difficult one. You may want to skip it entirely unless you really are interested in science and want to see how to dispense with the Faraday picture and see it all obeying these universal, global laws of Ampere.

First of all, you must realize that, although we can't measure it exactly, the electron has a size. One absolute proof of this, that has been around longer than I have, shows it must be larger than 1.4×10^{-12} cm, (**.00000000000014 twelve decimal places to the left of the 1.4**)

From this we know the electron is not point sized. It is also not perfectly round: It is an oblate spheroid and this — much like the earth — causes it to wobble.

This electron wobble has some very important effects that you will see later when we discuss the production of light.

Before this, absolutely no one had closely examined all the spin-up and spin-down electron pairs that are everywhere. Why hadn't they? Why didn't scientists ask why we had so many of them?

The two electrons we see on normal orbitals with one spin-up and the other spin-down and the two electrons in sigma bonding and the electrons transferring a quantum of light, are **all** spin-up and spin-down electron pairs. These constantly stay in the same plane and lock with their closest sides going the same direction. The closest sides of these electrons are in phase with each other. These electrons attract each other and lock with their closest sides together using Ampere's 1st Law.

It does not matter in the least if they are rotating around the same nucleus or not: It's the spin-up, spin-down, both in the same plane that always is there. The

closest sides of both of these electrons are going in the same direction at the same frequency and this according to Ampere's 1st Law is what really matters.

It's also imperative that you analyze the "bad quarter" in sigma bondings and these side to side "lockons". Here you have a sort of Sikorsky's cyclic pitch where the "bad quarter", between two binding electrons, will actually be working together to effectively give both of them a stability similar to that obtained using cyclic pitch. This becomes of paramount importance in binding the closest sides in sigma bonding and all of this. side to side type of locking. using Ampere's 1st Law.

Everything in this universe is tied in a similar way to everything else through the attraction or if you want to put it the space diminishing process that comes because of Ampere's 1st Law.

A single locked electron can only attract another sister locked electron when either the sides or poles of each are moving in the same direction at the same frequency: This is what chemical bonding is all about really. A permanent magnet works because of electrons locking either sides or poles. A permanent magnet locks strongest at its poles, not because some fictitious lines of force are concentrated there but, because here **the complete circular path is locking** whereas in the side attractions **only the closest sides** of all the electrons are going in the same direction at the same frequency.

With everything balanced, this "bad quarter" impedance matching on the closest sides is enough to make a tremendous difference in this electron to electron behavior and quark to quark behavior.

In chemical bonding the polar or pi bonding is only momentary and hence weaker than the side to side or sigma bonding that more or less remains a constant bond especially when the closest sides of these twisting, wobbling, precessing electrons stay locked together and "**in phase**" with each other. To two electrons, their size and orbital diameter are large indeed therefore they "*see*" a far different distance than we do between their closest and opposite sides. Magnets have a weaker side to side attraction and repulsion much like individual electrons once they are locked in place. You must consider the sides when working out all these actions in sigma chemical bonding, transformer, motor and generator actions.

In the above paragraph and elsewhere the word "*see*" is italicized and inside quotes to emphasize it's the way the electrons "*see*" themselves and not the way we see them.

In all the following actions it will be spin-up and spin-down electrons attracting each other with their sides like in sigma bonding. You will also have sides repelling here too. The following are all side to side actions and **not** exact pole to pole actions which may indeed happen but which will not be quite as effective in producing the following results mainly because there is less effective "bad quarter" impedance matching with exact pole to pole attraction with an electron as there is with a quark as it acts with the other two quarks inside the tri-quark proton and neutron. The electron may indeed change frequency a bit in the electron pole to pole attractions but this is not anywhere near as pronounced as the frequency change for a quark as it is pulled further from the other two quarks in the proton or neutron. The frequency change there is so great that the quark changes to an entirely different quark.

Transformers, motors and generators can be shown all to work according to Ampere's Laws and this "bad quarter" effect. You can completely forget all about Faraday's lines of force and you will see how they all work using Ampere's Laws, the "bad quarter" and inertial type forces.

The transformer is the most interesting because this brand new kind of science makes far more sense than the ancient, one hundred and eighty year old system where you have magnetic lines of force being cut. Magnetic lines of force are local gauge, fiction rules but Ampere's Laws are real, universal, global laws indeed.

Electrical current means a general movement of more electrons in one direction. They are really moving in all directions and if you prevent the movement of electrons in one particular direction then you will have an electrical current moving in the opposite direction and this is essentially where this starts in the transformer.

The electrons in the primary wire on the first half cycle all have a forward speed hence a "bad quarter" and if you've studied and can remember Einstein's relativity, this will give them all a bit **more** mass. Please also remember, there

will be an aspect of impedance matching in this then this comes into effect right here in the secondary wire of the transformer because the conduction electrons here are moving too but haphazardly in all directions. The forward movement of these electrons through the primary wire also has an effect of locking their spins from being as free as a gyroscope inside its gimbal rings.

Using Ampere's Laws the primary wire electrons, locked via the current flow, will tune in and attract those electrons, in the secondary wire, spinning the opposite way, like those in sigma bonding. They will repel the electrons in the secondary if those electrons happen to be spinning the same way.

Therefore the electrons in the secondary coil wires are either **pushed** or **pulled** toward the surface skin of the wire. However, both these electrons are experiencing this "bad quarter" in the direction they travel toward the wire skin. If you grab a rotating Frisbee in the spot where these electrons, in the secondary have this new "bad quarter" then you will see both these electrons will be forced opposite to the original current in the primary. To understand this correctly go to <http://www.amperefitz.com/pge1.html> on the Internet where you can see the illustrations.

This is the cause of the reversed current in the secondary wire of the transformer.

For this additional "bad quarter" you must add the speed that the secondary electron is now pulled sideways from inside the copper wire to the surface of the wire in the transformer. Although the copper wire in the transformer is of a small diameter never-the-less these electrons in the secondary coil wires are being pulled to the outside surface skin of the wire — by the primary coil electrons whose closest sides are going in the same direction — each half cycle of the alternating current.

Since the electron will act like a gyroscope there will be no gyroscopic action if this "bad quarter" action is exactly at either pole of the electron or exactly at the electron's equator. But at the equator you do have this 90 degree Frisbee grasping reaction that is quite different from the gyro 90 degree reaction in some respects but produces exactly the same results as the gyro 90 degree reaction as far as the secondary current is concerned.

There will be electrons in the secondary wire that will also be parallel to those in

the primary. These will have their closest sides going in opposite directions. Moreover, these — according to Ampere's 2nd Law — will be pushed away from the primary wire and will end up on the opposite side of the secondary wire. Their "bad quarter" will necessitate them going down the secondary wire also opposite to the direction of the primary wire current.

The next half cycle all electrons reverse this procedure and, depending on the alternating current frequency, some might even travel the full diameter of the wire again to the other side the next half cycle. In radio, the condition of these electrons constantly on the skin of the wire is known as skin effect.

So far we have shown only those electrons that have this exerted force at the equator but there are others where this "bad quarter" force is exerted at other points. With these electrons it will not be as if they were grasped like a Frisbee at that "bad quarter". These other electrons will all pivot much like a gyroscope when they are given this added speed crosswise in the secondary wire. These too will all pivot much like a gyroscope and all of these will also head down the secondary wire opposite to the current in the primary wire.

On the next half cycle when the alternating current reverses then this procedure entirely reverses again.

Now with this picture you can see why you have this skin effect at radio frequencies: The electrons are actually being pushed and pulled toward the skin of the wire each half cycle.

Not only is this a **total inertial explanation** but overall it's a good deal more sensible than the old magnetic lines of force explanation.

You can see all of this with pictures in my first book free at <http://www.amperefitz.com/page1.html>

Now for the electric motor:

In a simple permanent magnet DC motor the current in the armature winding gives these electrons in it a forward speed. This forward speed gives them this "bad quarter" which acts like someone grasping a Frisbee at that "bad quarter" and this 90 degree movement is what moves the armature wire.

In the generator it is the movement of the armature itself that adds the forward motion to each electron. These also are grasped at that "bad quarter" and they pivot 90 degrees like a Frisbee being grasped and they move down the armature wire as a current.

Remember the first electric motor ever made? It was made by Faraday who put a magnet, pole up, in a dish of mercury and he put a DC current into a wire that hung over the mid point of the magnet and dangled in the mercury. The wire went round and round the magnet and newspapers carried that story all over the world a hundred and eighty years ago.

You can do the same experiment today using a car battery and salt water in a metal pot. **Be careful not to short anything because you can be badly burned.** Connect the car battery to the metal pot and the other battery terminal to a metal hook suspended over the mid point of a pole up magnet that sits in a half inch of salt water. Cut a wire and form another sharp loop in it so it fits into the mid point hook. Make this wire just long enough so that it dangles an eighth or a quarter of an inch into the salt water. The magnet needs a bit of tape or some such insulation around it so it can't touch the bare wire and the bare wire cannot be so long that it touches the metal pot. Keep adding more salt to the water until it works. Reverse either the magnet poles or the battery and the wire rotation will reverse.

In Faraday's motor there are electrons whose "bad quarters" are not exactly at the equator. These do not act like a Frisbee being grasped at the "bad quarter" but these electrons pivot like a gyroscope thus moving the wire around the magnet.

Faraday's motor is also showing you that spin is preserved. If spin up electrons are the ones going into the motor at the top then spin down electrons are coming out of the wire into the salt water at the bottom. The wire will rotate in the direction of the lost spin. Faraday used mercury instead of salt water but salt water is easier to use and safer.

If you check all these examples closely, you will find all of them going in the correct directions to verify Ampere's Laws.

Chapter 15.

Energy & Mass

Inertia is being caused by the spin of the quarks with the sides of the quarks attracting the sides of other quarks, spinning in the same plane, far away in the universe. Binding quanta energy is exchanged as each moves up the relativistic asymptotic curve. The quark to close quark, tri quark strong force, bonding may be mostly polar because when quarks bind with distant quarks they are actually changing frequency enough to change into an entirely different quark. We have nothing as pronounced as this with electrons. Ampere's Laws show anything that spins, can attract exactly like a magnet. If all these quarks keep these spins perfectly balanced and never show any imbalance such as electrons happen to do massively in iron, cobalt and nickel then, of course, you would never know that the quark spin could possibly attract another quark especially if your surroundings are homogeneous and isotropic in the large. Modern science has simplified inertia tremendously so it seems to fit the present math here on earth and then even here at only slow speeds and low mass. Unfortunately, inertia changes with higher mass and high speeds so much so that your present science fails and you have to use relativity corrections. Your universe, therefore, is not anywhere near as simple as today's scientists picture it.

As almost everyone now knows, and as mentioned before, quarks — in the proton and neutron — are grouped in groups of three. Quarks and electrons both have spin. The electron's spin causes magnetism, which will attract other electrons of similar mass that are oriented correctly. The spin of the quark, in much the same way, will attract and bind onto other correctly oriented, spinning quarks, of the same mass, far, far away in the fixed stars. This attachment effect is known by us as inertia.

Just because you see these stars as far, far, away, you have to remember that when you look at a rock you see nothing inside that rock far from anything else.

When you are at rest, some of this feeling of being at rest has to be coming from as far away as the Virgo super-cluster. To some sort of super-colossal giant viewing from that Virgo super-cluster spin/orbit-frequency level — *and our mind*

must only view from one spin/orbit-frequency level at a time — the close binding distances and the distances to your fixed stars would **both** be **short range** distances.

Distance is a concept and it changes with frequency. Even present science says that when a far distant star loses a single quantum of light to your eye there is no energy loss whatsoever in that vast distance. So this is almost yelling to you through a loudspeaker and telling you that distance is only a frequency concept that is quite different for different particle-frequencies.

It's all resonances and even the particle actions that we all know so well really stem from underlying fundamental wave to wave actions.

As in light, radio and electro-mechanical actions, impedance matching is important here as well. The quark is quite unlike those electrons in partially filled *d* and *f* shells that all flip over together the same way and form magnetic domains that can be easily spotted. The quark always acts individually, locking on with far away distant quarks to cause inertia and thus since our surroundings are homogeneous and isotropic in the large then we do not notice all this quark locking. Thus present science has totally missed all of this and therefore simply accepts inertia as some unknown factor that can never be discovered. It's hard to believe intelligent people would do such a thing. But this "in-crowd" of scientists today have most certainly done precisely this, quite forgetting that there must be a reason for both gyroscopic inertia and centrifugal force. Knowing the math that tells you how strong it will be, is not the same as knowing how it works.

It's all surroundings, surroundings, surroundings and spins, spins, spins. It's surroundings and either spin or orbital binding.

As we said before Ampere's 1st Law "locks on" and Ampere's 2nd Law doesn't. So inertia is caused by all these quarks that they sense are not only spinning but **moving in the same direction** as other quarks and thus have the same matching "bad quarter" mass, as that "bad quarter" mass on the far away distant stars. Both "*see*" themselves as being exactly in the same plane as the ones they lock with and they also "*see*" their closest sides going in the same direction. Once a quark "locks on" with another quark somewhere in this universe it can hold this side to side "lock on" for a short period of time or lock on other similar "bad quarter"

mass quarks in the same spin plane. This is essentially how inertia is caused.

Impedance matching comes into this because these locking quarks must not only "*see*" themselves as spinning but also **moving** at the same speed hence their "**bad quarter**" **mass must identically match**. However, the way quarks match this energy with the other quarks in the triumvirate is, unlike electrons, they change frequency and distance from the other quarks in the triumvirate to do this.

Nevertheless, there must be impedance matching here the same as in the tuned circuits in radio.

Quantum theorists are telling us that spin is not conserved in the quark realm. I beg to differ with them on that because spin is conserved, in this brand new kind of science, as long as the angular momentum of the spin is conserved.

As you can see from the examples being discussed, the symmetry in every different frequency spin/orbit system is different.

Since there are plenty of stars out there then there are plenty of other quarks for them to "lock on". Because these are spread out so evenly we can find no direct evidence, other than a few hidden road signs, that this is what is causing our inertia.

Believe it or not, it is only to you that the rest of the universe looks far away: To these tiny particles, it doesn't. All particles "*see*" is that their "**angle of lock on**" is narrower: The **binding force**, near or far — **like quanta** — is exactly the same for quarks of the same "bad quarter" mass no matter what the distance is. This "angle of lock on" for an electron gets so narrow at the Hubble limit that no electrons beyond that point can lock on an electron here. "**Angle of lock on**" is why the numbers of quanta fall off at the square of the distance.

All these spin and orbital attractions are the glue that holds everything together. Ampere's 1st Law shows you why you have binding energy and why you have inertia. Ampere's 2nd Law shows you why we have all that space between everything (Einstein's "cosmological constant") and both of Ampere's Laws show you why we have symmetry.

All atomic particles **must** either bind with close neighbors to form their unit or

they can bind with particles far away (in the fixed stars) to cause inertia (*mass*). They must attempt to bind with something and they cannot use the same portions of themselves to bind with both near and far objects at the same time. Some may rapidly and repeatedly switch their binding to the best aligned objects whether near or far but that near-far percentage mostly stays constant. I said mostly because in an atomic fission explosion a good many do abruptly shift from far to near binding. In fact, that's the reason for the explosion.

Any mass gain where nuclear binding energy is converted to mass is a shift from near to far (surroundings) binding.

Any energy gain where nuclear mass is converted into energy is a shift from far (surroundings) to near binding or *fission or fusion*.

In this brand new kind of science, as in present science, binding energy and mass, are seen as equivalent, but in this new science they are seen as two distinctly different things: **Binding energy** is the close binding and **mass** is the far off binding with the fixed stars.

It's really close binding energy equals distant binding energy (mass), at that particular geodesic orbit.

So here's something you will find me repeating: **All energy is a temporary disruption** of the equilibrium with an end attempt at better balancing between close items and macrocosm items: **That is all energy is.**

Energy can be stored in different ways: You can either store energy by moving an item to a higher orbit. You can also store energy via binding with more massive "bad quarters" as in angular momentum (*gyroscopic inertia*) or by increasing an item's rectilinear motion. On the other hand, you can do it like the quark does to the other two close quarks and change frequency and distance.

For the quark it's the "bad quarter" effect when impedance matching, side to side, with distant quarks and a frequency change for the possible polar close attractions. While there may indeed be a slight frequency change for electrons via the possible pole to pole attraction this frequency change in the quark, as it is pulled further away from the tri-quark nucleus, is so pronounced that the quark

changes to an entirely different quark.

You must remember that as you increase the speed of an inertial object in rectilinear motion, relative to the surroundings, then you are increasing the speed of those "bad quarters" of the spinning objects that make up the unit you are accelerating. This means these "bad quarters" have more relative mass, the faster the speed is increased. Thus, you are increasing their gyroscopic inertia. Always use impedance matching with Ampere's 1st Law. If a quark has more relative mass in one of its "bad quarters" then this quark will have a stronger inertial "lock on" with things in the universe that also have a similar "bad quarter" mass on their closest sides. This is also the reason that gyroscopic inertia increases as you increase the speed of a gyroscope. I'll go over this again toward the close so you don't forget it. This is important. In addition, the following is something else that is even more important.

Scientists agree that an atom has less mass than its constituent individual components. Therefore that almost tells you outright that these electrons, protons and neutrons have a choice: They can either bind with each other to make the atom or — as individual unbound units — they can use that same amount of binding energy to additionally add to their individual inertial binding with the rest of the universe (a mass increase).

I simply cannot understand why present day scientists can totally ignore this major evidence: This is absolute confirmation that our surroundings are causing inertia. This is proving to you, in no uncertain terms, that Berkeley and Mach were absolutely right.

This is also proving to you that we are in a steady-state, binding-balanced universe.

If scientists agree that binding energy always equals mass lost, well, why isn't that mass lost considered binding energy too? Isn't it binding with the fixed stars instead of binding the individual units together in close binding?

If certain nuclei all suddenly bind inward where previously this binding was outward to the fixed stars, well, then this immediately temporarily disrupts the old matched equilibrium in the vicinity and then re balances and that's mass turned into fission or fusion energy isn't it?

This theory is positively **showing** you exactly why $E = mc^2$.

As previously stated, energy is simply a temporary disruption of the equilibrium with an end attempt at better balancing between close items and the surroundings (surrounding electrons for electrons or fixed stars for the quarks).

Remember near or far binding is momentary, repetitious and always exactly the **same** strength for the same units binding: Only the numbers of quanta, because of "angle of lock on", falls off with distance, not binding energy. "Angle of lock on" gets narrower with distance and obeys Einstein's general relativity tensor math.

When inward binding is replaced with outward binding then this is potential energy creation of potential mass. This is showing you that the initial Big Bang had to be connected to its surroundings. The CMBR proved it happened "all throughout" the universe and did not start at some central spot and travel outward.

This is telling you that you need to have the rest of the universe out there even **before** you can have any type of outward explosion. This means it all had to be out there before the "big bang" too. Before this new approach came along only a **few** working in general relativity seemed to understand this but now everyone can with this new theory.

General relativity's tensor math is extremely useful in problem solving.

Special relativity is what it says. It is to be used only in special situations where you have no force fields. George Gamow and other science fiction writers love/loved it.

It is important to note that the Lemaître-Gamow "Big Bang" could not have happened either under general relativity or the premises of this theory unless something was already out there. A much larger universe of some type **had to be** already out there under either assumption.

There is no such thing as the 19th century human idea of one all-purpose type of distance anymore. Einstein proved that. The distance we see is a composite of all of these various spin frequency distances. Distance has to be frequency qualified. Time does too because remember, it's the space-time interval that is frequency conscious. Each spin/orbit-frequency "*sees*" its own type of time and distance.

Ampere's Laws use inertial qualities, with something similar to a general relativity kind of increase in every level. Inertial qualities for each spin/orbit-frequency, however, will be different along with surroundings.

Binding energy can be extracted from mass even with chemical bonds. However, this is not as easy to see as it is with atomic fission and fusion. When a uranium nuclei breaks apart in fission then each of the new pieces have tighter binding than the original nucleus. These new pieces then gained that same quantum of binding from the surrounding molecules, even molecules in the stars in the surrounding universe. Mass was lost and energy was created in the proportion given by Einstein's famous formula $E=mc^2$. When you consider that c = the velocity of light then this formula shows that you get a tremendous amount of energy from a tiny bit of mass (*Mass is really binding with the fixed stars*).

The energy you get is merely the **upset** that you get during this change.

This is why you can have both fission and fusion energy because you get this **upset** going **both ways**.

These attractions can be both from spins and orbitals and unlike magnetism, a sideways attraction of one spin-up and one spin-down neighbor can be more powerful than a polar attraction if they bind with a higher "bad quarter" mass and/or if it is for a longer time duration such as in sigma bonding.

The electrons in the outer orbitals are the ones that bond the strongest with other electrons in covalent bonding. What does that tell you? It adds proof that this entire idea is correct and that the electron is composed of even smaller spinning inertial entities — that we'll call "de Bs" after de Broglie — because it is the binding of more and more of these the closer it gets to the nucleus that gives the closer electrons a higher nuclear binding thus depleting the amount of binding left for covalent bonding with other electrons. This difference in electron bonding also validates this theory. Since these electrons are far from the nucleus and binding less with it than the other inner electrons, then the outer electrons have more binding power left over to bind with other things won't they? Binding is an either or process: The binding that it does with the closer things can not be used — at the same time — to bind with things in the macrocosm.

You should now be able to see why you always have the most bonding in the

lowest energy state. That is simply because binding is an either or process and when there is more close binding then there must be less far off binding with the fixed stars therefore less mass.

I told you I wanted to cover gyroscopic energy or angular momentum once more before this chapter ends so what happens to get gyroscopic inertia or angular momentum? Keep impedance matching in mind: Not only is it important in radio but immensely important here as well.

You start riding your bicycle and as you pick up speed then this bicycle holds you up better. What's really happening?

You must first consider this entire universe to be composed of free orbiting and spinning things all held apart by Ampere's 2nd Law. Once you accept this then you can plainly see that everything is composed of gyroscopes in gimbals that themselves are built of smaller things that are gyroscopes in gimbals that are also built of even smaller things that essentially also are gyroscopes set in gimbals and this goes on and on and on.

So as your bicycle wheel picks up speed the quarks in your wheel have an added "bad quarter" now and thus their mass increases therefore they must now only "lock on" with higher mass quarks in our universe. Just so long as you keep this speed up then you stay up on the bicycle because you maintain this high "bad quarter" mass attachment with the rest of the universe. As you get tired of pedaling and your bicycle slows and your wheels slow down again then all these "bad quarters" diminish and things return to where they all were originally and it's time for you to get off the bicycle.

What is this telling you?

This is showing you where all this gyroscopic inertial energy is being stored! This is a **strong force** energy storage mechanism.

The weak link in our present science structure is that it doesn't show you where all this gyroscopic energy is being stored and this new theory most certainly does.

A single inertia-binding quark can be pulled a slight distance away from the quark triumvirate like a piston acting against a head of compressed air where it is

pulled further and further away as the mass and therefore the binding energy increases. This asymptotic freedom is your quark energy storage mechanism for gyroscopic inertia. As "bad quarter" mass is increased in gyroscopic inertia, the quark is pulled further out against the **strong force**.

We therefore learn that gyroscopic inertia or angular momentum is caused by a change of **strong force** reaction.

Quarks do move in and out like pistons against a head of compressed air and this is called asymptotic freedom. This quark attractive force can effectively move a bit, although the quark doesn't swivel at all, in the same spin plane to hold inertial "lock on" with other similarly massive quarks spinning in the same spin plane. Because of this triumvirate grouping of three quarks, they do not wobble and give off light waves like a single electron does when it drops more toward the center of the nucleus.

A proton consists of three quarks. These three quarks have considerable asymptotic freedom when close together because of the super-high-density of all three quarks. But when another quark in the universe gets an inertial "lock on", on one of these quarks, and tries to pull it out of the proton, the **strong force** starts acting and acts very strongly before the quark separation from the other two is less than the diameter of that proton they are building.

The **strong force** will not allow a single quark to be pulled away from the quark triumvirate, although with sufficient force quark anti-quark mesons have been obtained.

There is a big difference between this inertia given to us by the quark's **strong force** and these inertial qualities that all these other particles have. Since they don't have this particular quark triumvirate arrangement that will give them the quark's **strong force** then their inertial qualities will have to be quite a bit different from our inertia where we act against this **strong force**.

The same gyroscopic action will be there but it will not act in the intensity as our inertia. The **strong force** is why our inertia must be distinguished from the inertial qualities of other particles and their aggregations.

Ampere's Laws show us the reason for all of this because the quark is far denser

than a neutron or a neutron star, **both** of which are about 10^{14} (*1 with fourteen zeros after it*) times the density of water. A neutron star has about the same density as a neutron or an atomic nucleus and this is about a million times the density of a white dwarf star.

The quark seems to be smaller than 10^{-18} (*decimal point then eighteen zeros then 1*) meter or one-thousandth the size of either the neutron or proton that three quarks build up. You don't have to be a mathematician to see that this puts the quark far into the density area of a black hole.

Quarks are therefore much, much smaller than electrons and this is why one spin up electron can spin-bind with a spin down electron on the opposite side of the same orbital much like similar mass spin up, spin down binary stars do.

<http://instruct1.cit.cornell.edu/courses/astro101/java/binary/binary.htm>

A neutron star is formed when a supernova collapses and the collapsing core ends up having about the same mass as our sun but the entire neutron star is only about 12 miles in diameter.

If the collapsing core is more than three times the mass of our sun — according to most physicists — then it cannot become a neutron star and it must become a black hole instead.

If the quark is only one thousandth as big as either the proton or the neutron (*both of which are approximately as dense as the neutron star*) then it should be many times as dense as the least dense black hole.

Anyway, we know the quark is quite dense and because of this density along with utilizing relativity, a single one of these quarks will not sense these spin frequencies of the other two quarks as being the same as its own unless this quark gets close to the distance of the diameter of a proton away from the other two quarks.

Fantastic you say. No, only common sense because this answer is the only credible answer that can possibly be and still agree with special relativity, general relativity, quantum mechanics and superstring theory.

On the subject of black holes, you should take note that these have a definite **limit**

of density: Using either our "A" Laws or Einstein's cosmological constant, you can see where the total attractive cohesive force of the galaxy's stars (cohesive force holding all the stars together inside a galaxy), must always be exactly equal and opposite to the total repelling force of that galaxy to its neighbor galaxies.

This is a binding-balanced universe.

You simply cannot use your local gauge theory science laws to see how this entire unified global universe works. The illustrating to your subset mind must be done by the mind picture method that I have just shown you.

I feel that if Einstein would have kept the George Berkeley-Ernst Mach idea of inertia that he originally had and had heeded David Hilbert and had worked more in radio, especially on transmitters and antennas then he would have surely gotten it because it's all frequency that is then coupled with William Thomson's original idea that it essentially all boils down to motion: And it does really because it is all frequency and motion as seen from within a subset spin/orbit-frequency level.

There may be no such thing as a certain motion from a global universe point of view so this must be ascertained from a subset spin/orbit-frequency level's point of view, which we here on earth have either rightly or wrongly developed after thousands of years. But if this is all you have then you are forced to use it.

The electron has a certain spin rotational speed and travels a certain route because this world of waves keeps it on a geodesic, which is the path through space-time where the electron has a balanced energy level. So, until we put together the proper frequency scenario and get the future supercomputers, let's see the electron not as being a blurred object with a quasi spin as in the present world of quantum mechanics. Let's look at the electron in this brand new kind of science world where it is a genuine solid spinning standing wave spheroid particle with real honest to goodness spin along with the resultant gyroscopic inertia. We have no other choice but to use the programming that is in our minds although we know our concept of motion and other things are wrong.

At this point, I want to state that eventually the fractional quark charges will be understood when we can better understand the various motions contained in these up and down quarks that build both the proton and neutron.

Scientists forgot all about the electron's spin frequency. All electrons are spinning — or resonating — at the same frequency, maybe not the same exact frequency though. You have seen in chemical bonding and even with magnetism that electrons do not always repel each other as they always should if there was such a thing as charge. Under chemical bonding you saw that it is the attraction that electrons have for one another — when correctly lined up as they overlap — that gives us much of the molecular bonding that we have. (covalent bonds)

If a particle is nothing but a spinning standing wave spheroid entity that remains resonating at a particular frequency, then we can expect all particles to exhibit essentially the same wave qualities. The de Broglie wavelength must actually be considered a smaller piece of the electron. What I have found, that our good scientists still have not yet discovered, is that the electron precesses — or wobbles — at various light frequencies and this is exactly why we have light.

What you essentially have in this universe is a never ending balance situation between all electrons and nuclei where they are throwing off and absorbing energy while each tries to absorb or move or precess a trifle faster or slower or emit just the right amount of energy to remain at the lowest energy level in the latest situation. Since the situation is constantly changing, then so is all this energy transfer balancing act. The number of electrons that end up matching in all respects is what it takes to get balanced or to transfer energy from one to the other.

Quantum theory gives the name "resonances" to these quasi particles that do not remain here long but have the shortest of all known lives.

I agree with quantum mechanics about this highly appropriate name of resonances being given to these ultra short lived particles. You will see that all particles are really nothing but "resonances" but some have a certain ability to remain here longer. You should have seen why they remained here longer if you kept your nose to the grindstone reading this mind-grinding book. I'm awful sorry that I failed to tell you it was going to be this hard in the very beginning of this book but life in general is harder than what you think it is going to be when you first start out on that too.

You will think I'm going off on a tangent now but I'm not.

When I was young, my father impressed upon me the importance of the "tuned circuit" in radio. We didn't have TV in those good old days. I did see an oscilloscope though, way back then, that had a screen the huge size of two inches in diameter.

A "tuned circuit" in radio is generally a capacitance in parallel with a coil. The capacitor stores energy but it takes a certain time for it to charge and this essentially is the secret of the "tuned circuit". A certain size coil and capacitor will resonate at one certain frequency because for one half of the cycle the capacitor will be charging one way and on the next half of the cycle the current will be flowing in the opposite direction. That's about the basics but how it really works is that a parallel "tuned circuit", such as you have in your car engine developing its spark voltage, will short out and destroy all other radio frequencies except the one it is tuned for while a series "tuned circuit" acts exactly opposite. All electronic devices are chock-a-block full of "tuned circuits". The "tuned circuit" enables you to select one single radio or television station. This basic idea is also why, in transferring a quantum of light, an electron picks out only one other single electron to transfer its energy to.

If one electron can pick out another specific electron to deliver its quantum of energy to then both electrons must be "tuned circuits".

How can they be otherwise?

As you will again read later on in this book, the "tuned circuit" produces a certain frequency that continually resonates. These continually resonating frequencies, along with these "tuned circuits" that cause them, are the most important things in radio, television and computers. Now you can see where else that they become of paramount importance.

The most important things about these "tuned circuits" is for energy transfer, they must be impedance matched.

This is important in radio, all throughout this universe and this is important in the area of inertia as well.

You can assemble this jigsaw puzzle if you perceive that this is a universe built entirely of "tuned circuits" and of resonating waves and also of some extremely

important frequency connections.

Chapter 16. a Steady-State Universe

After the "Big Bang" linear speed would be swiftly changed into angular momentum in this brand new kind of science because of the effect caused by the surroundings and any of the "Big Bang's" expansion would have eventually completely stopped. That is exactly what must have happened. Once you accept Ampere's Laws then you must also accept the fact that the "Big Bang's" expansion had to cease after it had used up any expansion energy and turned it into the angular momentum of spinning and orbiting entities.

To all this I must add what the 1997 Britannica CD says, ". . . while an actual physical expanding universe is, indeed, the popular view, it is not the accepted scientific view."

My science reading began with the beginning of that raging, lengthy, argumentative Gamow-Hoyle debate where Gamow would hurl unkindly epithets toward Fred Hoyle. Hoyle — the steady-state universe's champion — would always respond with derogatory but yet printable remarks about Gamow's "**Big Bang**" which were two words, invented by Fred Hoyle. They were probably initially meant to ridicule and may indeed have done so for a while. But then, at last, they became a veritable picture in themselves and gave to the common man the shortest best phrase expressing the entire idea of the Lemaître-Gamow Expanding universe.

So the steady-state universe's champion, Fred Hoyle, who hated the whole idea of the universe beginning like that, gave us the "Big Bang" name we remember.

That's one for the books.

Now as I sit here at my computer and contemplate those "good old days" when I was young, I will now be the very first arbitrator who settles that great confrontation.

Gamow may have been right about some sort of Big Bang but Fred Hoyle never wavered in his belief of the steady-state universe. Hoyle, who has now finally departed from us, saw it as a quasi steady-state universe. So — more or less like his fellow countryman Arthur Wellesley the 1st, Duke of Wellington who remained up in front of his troops and held his ground all throughout the very worst of that great battle — Fred Hoyle essentially wins this victory: Look at a rock that also has spinning and orbiting electrons inside it and the rock gives you a perfect model of the way our universal new Ampere's Laws work in both the microcosm as well as the macrocosm that — for one spin/orbit-frequency anyway as seen from several lower spin/orbit-frequency levels — is also just as steady-state as the rock.

You must realize that the same as you see that rock as having no motion, the entire universe sees all your motion as meaningless too. You — in your subset world — have developed this concept of motion and it is indeed a valid concept as you look at all these things in your own subset system. But for this universe as a whole, that is looking at it more or less as you observe that rock, the motions that you see are simply — in the universe's longer time period — all canceled out. You now have the answer as to why the speed of light plays such an important role in your scientific world.

Einstein — who first conceived of general relativity during the era of the steady-state universe — made the three following assumptions:

* The universe is homogeneous and isotropic. (*It is more or less spread out evenly over space and time.*)

* This universe would be finite yet have no borders or edges.

And this would be the effective universe in this new theory because it is definitely limited to the point where the "angle of lock on" is too narrow to be effective (the Hubble limit for electrons). There is more universe past this point but it has no effect on our electrons for this finite portion in which we find ourselves.

This would be the reason why Einstein's relativity tensor math works.

* This was a **steady-state** universe that didn't vary with time.

But the problem was, with using these **three** assumptions that Einstein found his general relativity equations — that were first published in 1915 — had no solutions whatsoever. So in 1917 he added his "cosmological constant", which was a repelling force equal but opposite to gravity that kept all the planets, stars and galaxies in this universe apart. In other words he saw that such a steady-state universe must have a certain unknown repulsive force — just the opposite to gravity — that exactly cancels the effect of gravity and keeps everything in the universe firmly in place.

Einstein did hesitate in using this 1917 "cosmological constant" because it implied some slight problems with his 1905 special relativity.

Over ten years later Einstein felt that with his original equations alone (*first two assumptions alone and without the steady-state universe with necessary cosmological constant*) he should have foreseen an expanding universe. Subsequently when Einstein later thought we really had an expanding universe, he called the input of his "**cosmological constant**", his "*biggest blunder*".

When this brand new kind of science is proven correct then everyone will plainly see that Einstein's "*biggest blunder*" was in listening to Lemaître.

So now that we are again back to a somewhat steady-state universe, this new Theory of Everything beautifully removes Einstein's "**cosmological constant**" from that of unknown origin to one whose origin is now as clear as crystal: The

cosmological constant is equal and opposite to gravity because Ampere's 2nd Law is equal and opposite to Ampere's 1st Law. It's as simple as that.

It took the world about 40 years to accept Newton's idea of gravity. I guess it will take another 40 or more years to bring virtually all of us all back again to a steady-state universe. With all this new information, it certainly looks as if we are headed back again to a type of steady-state universe notion.

Therefore, if we are back to a type of steady-state universe concept again then the de Broglie wavelength reveals another hidden road sign.

The de Broglie wavelength of an electron can vary with acceleration. An electron accelerated in a vacuum by a pressure of 1 volt has a de Broglie wavelength of a bit more than the average X-Ray while one accelerated by 40,000 volts would have a de Broglie wavelength of 1/10 that of the average X-Ray. It is blue shifted with acceleration.

Then as we turn to the macrocosm, to us here on earth, there seems to be a red type frequency shift (**shift toward a lower frequency — longer wavelength**) for all frequencies in the macrocosm and a blue shift (**shift toward a higher frequency — shorter wavelength**) for all frequencies in the microcosm. To us — as we look at the microcosm — it will look like a shift to the blue or to a shorter wavelength or higher frequency: For instance our instruments out here will "*sense*" the de Broglie wavelength, in the microcosm, getting shorter as the microcosm objects are accelerated or get more massive. Thus the microcosm seems to be a **reverse** of the macrocosm which is to be expected if space-time is curved and **all** frequencies are red shifted in the macrocosm and blue shifted in the microcosm. You should be glad that this is the method the universe uses to insure stability because this is what keeps energy from excessively leaking out of your particular spot in the universe and stops a catastrophic amount of energy from entering.

The de Broglie wavelength, in the microcosm, "*seems*" exactly in reverse to the red shift in the macrocosm. The de Broglie wavelength gets blue shifted. With things of a higher mass or with more acceleration the de Broglie wavelength gets **shorter**, not longer.

When you "*sense*" that mass or acceleration shifts wavelengths in the

macrocosm to **longer** relative wavelengths and it shifts wavelengths in the microcosm to **shorter** relative wavelengths then what is that telling you?

It is telling you that you are truly seeing how space-time is being built.

You would only see this reversal of the de Broglie wavelength if **all** frequencies were shifted from one space-time area to one of a different **consistency**. You would never see this reversal in an expanding universe. You would only see this reversal if the space-time consistency of you and things of "your size" were far different from both things of the microcosm and in the macrocosm, for instance if **all** frequencies were shifted.

Now that we have dissolved all our science into a mere gauge theory we have no alternative but to say light — to us in our subset spin/orbit-frequency system — **seemingly** gets red shifted in the macrocosm and the de Broglie wavelength also gets **seemingly** blue shifted in the microcosm.

It was Niels Bohr who discovered that as light is being generated in the microcosm it **also** gets **seemingly** blue shifted in the microcosm because the closer the electron drops toward the massive nucleus then the more the emitted light goes toward the ultraviolet, which is the shorter wavelength

However, in the macrocosm, it's just the opposite and everything that caused light or any electromagnetic waves to blue shift in the microcosm **seemingly** causes these to red shift in the macrocosm.

We notice that compared to us inside the microcosm, time seems to be going faster and space seems to be compressing.

We also notice that compared to us inside the macrocosm, time seems to be going slower and space seems to be expanding.

All the signs that people have read to show the universe is expanding are also there in the microcosm as well showing them that the microcosm is being compressed. Niels Bohr even had to add a microcosm compression term to his simple solar system type math so that he could slightly modify centrifugal force when he linked the various orbital drops to the different light emissions.

Once the fact is established that the space-time setup in the microcosm is a direct

reversal of that in the macrocosm then this throws a spotlight onto the framework of established science thus eliminating any possibility of a universe that is presently expanding.

Once it is seen that the microcosm space-time setup is a direct reversal of the macrocosm then new opportunities in viewing science also open giving mankind a much greater grasp into the full picture of this enigmatic universe of ours.

If we look at the microcosm where time seems to us to be compressed then we understand why, when we look at a rock, we see it as a solid rock even though we know there are electrons in motion inside it. There is only one reason that we cannot see this motion and this has to be that these "blitzseits" or shortest increments of time in the microcosm must be quite compressed and **shorter** compared to ours here. But if we reverse things and observe the macrocosm then we should expect the macrocosm "blitzseits" to be of a **longer** time duration than ours and here we should be able to perceive the difference in these rates of time and we do: Römer saw it first: He saw that it took about 8 minutes for light to come from the sun to us here on earth.

Why can we see this difference one way when we can't from the other? The answer has to be a microcosm-macrocosm space-time reversal along with a different time duration for these "blitzseits" (*shortest increments of time*) in each distinct level.

One of the first things that comes swiftly unglued is this present thinking that you can claim that the de Broglie wavelength gets shorter with an increase of either mass or acceleration both here and in the microcosm. This is wrong.

The de Broglie wavelength **only** gets shorter with mass and/or acceleration in the **microcosm**. **Don't switch to other subset systems using your old science: Use Ampere's Laws.** You know full well that you cannot take our science rules past that magic level of the Planck's length and into the microcosm. You also cannot take de Broglie's mass-velocity formula for the electron's wavelength out of the microcosm past the magic Planck length level and then place it into our spin/orbit-frequency level here either.

To equate the much greater mass of things in our world here with a much shorter

de Broglie wavelength — as many scientists are now doing — is **pure rubbish**.

In fact, by doing this, they have the **de Broglie mass to wavelength ratio of things out here entirely reversed**.

Ampere's Laws explain not only this relativistic mass increase further inside the microcosm but why we also have the black hole relativistic mass increase inside the middle of the larger galaxies.

Not understanding this is one of the prime factors that have held us back the most.

Following is a list of these principal factors responsible for us remaining in this scientific darkness.



Not seeing the microcosm-macrocosm reversal of the space-time setup and that these are two entirely different subset systems that border our subset system here.



Using Faraday's lines of force that, in effect, prevented us from seeing which way electrons are actually spinning which you must know to see the real reason for magnetism and for everything else.



Failing to see what Gödel's proof and Hilbert's reasoning are clearly pointing out.



Failing to see that charge — and all these forces — are merely variances of speed, spin, alignment and frequency.



Failing to see that our concept of time, distance and motion, where we see

these fictitious units, is similar to our concept of white light where we don't see the separate frequencies but instead see this fictitious white light which actually is the combination of all the light frequencies.



Failing to see the "A" Laws.



Failing to see the reason for Einstein's original "cosmological constant" and that the reason things repel in the galaxy and giant Virgo super-cluster is the same reason electrons repel in the microcosm.

Chapter 17.

Angle of lock on

Why we have the Hubble limit

and

Why the numbers of quanta fall off with the square of the distance

Scientists agree that Einstein's principle of equivalence is correct but as of this writing, few know precisely **why** this is true. This is one of the first publications where people will be able to find out exactly **why** it is so.

Thinking about what we said in the last section, we have to ask ourselves is there one more reason beside c and c^2 as to **why** gravity act like acceleration according to this new theory?

Yes there is:

As something accelerates then you are increasing the forward speed of all the electrons and quarks in the same direction that you are moving the object, aren't you?

This increases all their "bad quarters" and hence their mass doesn't it?

This means that now when they lock with the objects in the universe, to cause inertia, they are locking with more mass. You have a mass increase don't you?

Now let's look at the other side of the coin.

The general theory of relativity shows that when a unit approaches an object of ponderable mass then this unit gains mass.

According to Einstein's Principle of Equivalence this mass increase would be equivalent to that gained by the same unit accelerating instead of being brought close to the ponderable mass.

Now that this has been established what we have to do next is show you how this equivalent mass is given to the unit as it is brought close to the ponderable mass, don't we?

OK, remember me saying before, in the beginning of this, that what fell off with the square of the distance was the number of electron pairs? In other words, the way these electrons lined up to transmit light got harder and harder as distance increased. Sure, because this "**angle of lock on**" keeps diminishing with distance right up to the Hubble limit where it then is not enough to lock on with further electrons.

Something very similar — but opposite — is now happening in the unit that is now close to the ponderable mass.

The closer the unit gets to the ponderable mass then the greater is the amount of inertial "**angle of lock on**" (*the wider angle subtends more binding quanta*).

What is this amount of inertial "**angle of lock on**"?

OK, we said that all these spins (*of quarks mostly*) locked on other far away quarks to cause inertia just as electrons locked on to other far away electrons to

cause light transfer.

In inertia, these quarks must line up, the same way, in exact same planes. With light, these electrons must also line up in exact planes. The next question is how exact is exact? Even though we don't precisely know this, we do know that since this same type line up of planes always falls off with distance then we must assume that surroundings more than two light years away will have an "angle of lock on" (*narrower angle*) of far less than a closer ponderable mass.

"Angle of lock on" is one of the things that falls off with distance. At the Hubble limit, this "angle of lock on" gets so small that "lock on" is no more and it ceases altogether with electrons.

The spinning and orbiting things in the unit have the same strength of "lock ons" to far away things in the universe that they have to the ponderable close object. Not only that but they must attempt to lock with something. When they lock with things far away these are fast momentary "lock ons" because the "angle of lock on" is very narrow. This is not so when they are forced to lock on with things inside a nearby ponderable mass.

The quark has asymptotic freedom so it can possibly lock for a wider angle than the electron and this "angle of lock on" with close objects is even wider. Close things lock for a **wider angle**. You could also say close things lock for a **longer time**. What does that mean for these "bad quarters" of the electrons and particularly the quarks inside the unit?

It can only mean while they hold this wider "angle of lock on" they are also both **increasing** this "bad quarter" longer thus **extending the time** that these **masses** stay "locked".

Therefore — *from the eye electron's view* — this is definitely changing the wave shape plus this also must be tending to lower the wobble frequency of the transmitting electron.

Your eyes are not going to be able to "lock on" with these because the increased mass in these "bad quarters" will be for a **longer time** period than the "bad quarter" periods in your eye. Not only that but now the wobble frequency of the electrons in the star will be a bit slower than the wobble frequency of most of the

electrons in your eye.

The two can't match if the frequency of only one changes and gets too low. They can't match if the wave shapes of only one changes either.

Remember all binding is momentary but repetitious: Since we know all binding quanta of the same elements are the **same strength** and we also know that these are all momentary locks.

But now think of this: The quark does not wobble like the electron as it moves closer toward the center of the nucleus and the quark has asymptotic freedom which **does allow both quarks** to get pulled out further and thus quarks **keep** this longer "lock on" with quarks that are near massive stars or near ponderable objects. **Here, there is no wobbling nor energy transfer and both quarks increase in mass the same amount.**

You are essentially moving all these "bad quarters" of these quarks closer toward the speed of light **longer** or you can also say you are **increasing the time** of the mass of all these "bad quarters" by giving them a closer and therefore **wider** "angle of lock on" because you are also giving them a **longer** "angle of lock on" aren't you?

So for gravity you have the following reasoning.

The amount of mass increase in these "bad quarters" (*of the quarks*) when the ponderable object is close, is equivalent to the mass increase you also get by accelerating something and giving the quarks added speed that also increases a similar "bad quarter" in these quarks that give us almost all of our inertia.

Therefore Einstein's Principle of Equivalence is just that because the "bad quarter" mass increases inside the atoms in the unit are **equivalent in amount** whether they are caused by a close ponderable object or by acceleration.

This is another one of the reasons this brand new kind of science shows **why** Einstein was correct with his principle of equivalence.

"Angle of lock on" is one of the answers to Olbers' Paradox and this loss of light to us from all the stars around us because of this general relativity curved concentrated space concept around these stars. You can use both curved space

and the concept of "angle of lock on" that this brand new kind of science supplies to you. The concentrated charge right around the electron is best seen using "angle of lock on" rather than solely using Einstein's curved space. With a changing "angle of lock on" the strongest repelling would be concentrated near each electron when they both are the closest.

As previously stated, this angle of lock on for the electron (light) extends from here to the Hubble limit but we do not yet know how far this limit for quark lock on extends but we know there definitely is some limit.

This "angle of lock on" concept does not, in the least, diminish relativity but it does give you one more instrument for relativity that you can have installed on your instrument panel.

Remember impedance matching! The electrons in your eyes simply can never match the lower frequency nor the longer time mass wave shape of the majority of these electrons close to the stars.

You can see it as curved space **and/or wider "angle of lock ons"**: Use whichever concept you want to use just as the pilots flying these jet airliners use whichever of the four different type speed indicators are more appropriate for that particular portion of their flight. (airspeed, mach, TAS [*True airspeed*], groundspeed)

What you must always remember is that even though your mind has been developed in a subset system and it is a subset mind, it is good at switching concepts and it works best in one such subset system at a time, so you are going to have to be constantly switching concepts all the time. There is no getting away from this. **If airline pilots can do it then so can you.**

Wider "angle of lock on" can be seen as responsible for the charge concentration close around each electron: Those "de Bs", mentioned earlier, also use impedance matching and this — with two free objects such as two free electrons — will show up as more repelling force concentrated close to the electrons.

But quarks and electrons will work differently.

Each spin/orbit-frequency level will have its own distinct symmetry because it has a distinct different frequency set of surroundings and because we have

angular lock on.

*

Chapter 18.

Light and Planck's Constant

The transfer of light is Ampere's 1st Law, "tuned circuit", "lock on" **pull** of one electron for another electron, that we sense, is a distance away. So, as far as this is concerned, it is similar to the transfer in a transformer.

This is a universe that attempts to stay in balance. It's never able to do it finally but it is constantly trying. Energy will always flow from an area of high concentration to an area of low concentration but the method of transfer is what limits the amount of energy that is precisely transferred. You will see exactly why energy is delivered in quanta.

If your eye — when looking at a far away star — receives one quantum of light from that star then that one quantum was also released from the star and came to your eye with no energy loss whatsoever no matter how far the distance.

One fine day in Copenhagen, Niels Bohr proved that when an electron, on that distant star, dropped to a certain level then an electron in your eye went up that same amount giving your eye the one quantum of energy the electron on the star lost. No energy whatsoever was lost in that vast distance. This is the truth and this is what today's scientists believe. Why don't they believe that binding energy will also lose no binding energy with distance? They are exactly the same things but at different frequencies.

Only you saw a vast distance to that far away star. Both of those electrons did not: They only "*see*" their "angle of lock on" falling off, giving them fewer other electrons that are lined up properly. They also sub-harmonically "*see*" quarks inside the nucleus. Those two electrons "*see*" none of this time nor all that distance that you see. The electron in your eye and the one on that star might even

"see" both of their binding sides closer than their own furthest sides. To them, all that time and distance that you see between the two of them simply doesn't exist: To them it's time at their frequency and distance at their frequency that counts.

People working in radio and quantum mechanics understand the importance of this frequency aspect as to certain sections of our universe but very few realize how important this frequency aspect is to this entire universe.

Your mind has given you a good 15th century "approximation" of how it is all working but I'm afraid this will have to be vastly improved by future super-computers.

For instance, you hit a nail with a hammer and your 15th century "approximation" of how it is all working tells you that hammer **touched** that nail. However, we know electrons encircle all the atoms and no electrons from either hammer or nail atoms touched each other. They came close to each other but they never touched. So nothing touched, in the microcosm, when you hit the nail with the hammer.

What makes sense to you is this 15th century particle world that you see around you. You simply don't see, and wouldn't understand, what's really happening in the resonance world of those other spacetime realms.

The global universe is a **frequency** universe and it understands frequencies but your subset world is a particle world. Unfortunately your subset mind works best in this subset particle world but this is **not** the true global world.

This is why I'm constantly saying throughout this journal that we must use what we have because in each subset frequency spin/orbit realm these resonances that we see from here as resonances are really seen as entities spinning and orbiting by these entities themselves in their own realm.

We were stuck, by nature, with a wrong concept but it turns out that it is really a beautiful concept if we want to get an approximate view of how this entire universe is working.

More on the reason that light falls off with the square of the distance is shown by the following:

When you burn your hand on a hot stove, you may think it is easy to transfer energy but it is not. It is a good thing it is not too because if it was quite a bit easier then you would not even be here.

Before that far away star could transfer its one quantum of energy to your eye, it had to have its orbital plane lined up exactly in the same relative plane as the orbital of the electron in your eye. This theory shows us there is even more: The relative mass of both those electrons must be the same. Since a change of speed will change relative mass then this means that both orbitals have to "sense" a certain equality of being at the same relative speed which is not at all simple. Furthermore each electron has to "sense" that the other is orbiting exactly in a certain relative phase dance with it — like two sigma bound electrons on the opposite side of the orbital with their closest portions going in the same directions and being of the same mass — and remember as we said in the beginning, in the same relative orbital plane with it too before that quantum of energy can be transferred. Few electrons will be exactly lined up like this: In other words, the numbers of these bound pairs will fall off with the square of the distance. This is why you have energy falling off with the square of the distance.

*The **number** of electrons that are lined up properly and are available to transmit immediately is what falls off with the square of the distance. In fact, general relativity shows you where it falls off even faster than this.*

Remember, there are only 4 terms you can use with these "A" Laws:

- * **Frequency**
- * Motion (phase)
- * **Orientation** (alignment)
- * Inertial qualities similarity (impedance)

In this theory, one should use the term inertial qualities instead of the term mass if

it is going to refer to other spin/orbit-frequency levels besides ours here on earth.

More terms must be added to this list to begin Ampere's Law mathematical solutions but presently all you need to see the big picture are these four terms you have here.

Now we will go into this transfer in detail.

Color comes from distinct waves each of which is produced as the electron wobbles inside and then outside of its slowly shrinking geodesic but these are still all tiny discrete bits and these are all incremental fractional units of h . This is because all these wobbling cycles, precessing cycles and spiraling cycles of these electrons are also fractionals of the electron's momentum.

Not only are electrons moving on these orbitals but because of their fast spin they are like the earth and like many Americans: They are fat around the middle. Similar to the earth, the electron is an oblate spheroid and thus exactly like the earth, it is subject to wobbling. We will "sense" this electron's wobbling frequency to increase — a change of color toward blue — as it drops closer to the massive nucleus.

Very much like the two electrons in sigma bonding that are orbiting two distinct nuclei, an electron in a high energy area binds with an electron in a low energy area using their closest sides with both their orbitals in the same plane and each in step with a certain phase in both orbital and wobbling. Their "bad quarters" on their closest sides **are** in phase and going in the **same** directions and in this sense are much like two vertical antennas.

This wobbling then becomes even more intense and *seemingly* faster as the high energy electron drops to a lower orbital giving the low energy electron, it has tuned in with, an exact mirror image of its more intense wobbling and orbital increase for its own orbital drop. In other words not only is the quantum of energy exchanged as a mirror image but also each distinct wobble — light wave — is exchanged as a mirror copy of the emitting electron.

Bohr showed that an electron would not radiate unless it falls to a lower orbital inside of its original orbital geodesic.

This brand new kind of science shows you that Bohr was right because **energy is a temporary binding interruption while the close to macrocosm binding is being changed.**

As they change geodesics — one going up and the other going down — remember both their "bad quarters" are cycling and pulling them more, then less, then more, then less: This even helps **maintain** their wobbling.

Each distinct wobble is one wave of light because this energy emitting electron is now excessively wobbling both inside then outside its slowly collapsing orbital geodesic and the electron must not only radiate whenever it drops below its defining orbital geodesic line but it must also reciprocate and receive energy when it jumps above its orbital geodesic line.

Both transmitting and receiving electrons have set up a **rhythm** where both are participating in this wobble **rhythm** of exchange. You could say energy is actually passing back and forth as each wobbles inside and outside its respective orbital geodesic. As this is happening the orbital of the emitting electron is collapsing and the orbital of the receiving electron is building up. Each electron is now a tuned circuit oscillator.

You must remember that since the earth spins around once in about a day and its wobble cycle is 26,000 years (precession of the equinox) then we can expect the electron's wobble to be a much, much longer time period than its spin as well. From this we have to assume that the frequency of our light waves are at a much, much lower frequency than the electron spin frequency.

Not only is light energy transmitted this way but, in fact, all radio frequency energy is transmitted similarly by two electrons that are in the same plane and "*see*" each other much like two vertical antennas: You must take into consideration the "bad quarter" to see both light and this vertical antenna approach.

As far as this new theory goes, the quantum of energy that is being sent out is not quite as simple as this neatly packaged photon particle described by Einstein. Instead, in this new concept, all photons are a distinct radio frequency alternating current signal of a certain quantum of energy that is being transferred from electron to electron as if there was no space whatsoever between them. If they are

lined up properly, they don't even "*see*" any space between themselves. Energy transfers are most certainly not permanent standing wave spheroid type particles. Neither the photon nor any boson is a particle in this theory.

A particle must always be a permanent spinning scalar standing wave spheroid in this brand new kind of science and the photon is not, so in this new theory Einstein's photon package is a vector and not a scalar entity. Energy transfer is not a scalar but a vector resonance in this new approach.

Permanent particles, orbits and spins are all scalar waves while Einstein's photon results from a vector force spin-binding and therefore it is not a real scalar particle.

Remember that energy is only a temporary binding interruption while the close to surroundings (*also macrocosm*) binding is being changed.

Before this, absolutely no one had closely examined all spin-up and spin-down electron pairs that are everywhere. Why didn't they? Why haven't scientists asked why we had so many of them?

The two electrons in sigma bonding and the electrons transferring a quantum of light all are similar spin-up and spin-down electron pairs that constantly stay in the same plane but in some phase step with each other during both precession and orbiting. They attract each other and lock using their closest opposite sides that are the same mass and are moving in the same direction at the same frequency. These are important namely because they can utilize this "**bad quarter**" **impedance** matching or **mass** matching.

It does not matter in the least if they are rotating around the same nucleus or not: It's the spin-up, spin-down, both in the same plane and both in some phase dance that matters.

Four things: frequency, impedance, phase and alignment all have to be correct when an orbiting electron transfers energy to another orbiting electron just the same as it does in a radio circuit. Impedance in the electron to electron transfer meaning that both "*see*" each other as the same relative mass on their closest sides: Of this we are certain.

Everything in this universe is tied in a similar way to everything else through the

attraction, or if you want to put it "the space diminishing process", that comes because of Ampere's 1st Law.

In a spin shift it's also a binding shift between things close and the surroundings, but this is hard to see. In the orbital shift it is easy to see when the surroundings lose a quantity of binding because the orbital decreases but in the spin shift it is not easy to see which way the shift is unless you note if it is a release of energy or if that quantity of energy is absorbed. Sometimes energy will be emitted with a shift to spin up but other times energy will be emitted with a shift to spin down. Energy will be absorbed both ways as well.

Chapter 19.

Einstein's gravity wave prediction & more

Einstein did make the prediction that gravity would be found to be a wave and therefore it could be polarized.

The problem with the gravity wave is determining its frequency. Our brand new kind of science shows us that gravity has a band spread longer than we can now measure. Gravity extends from the quark spin frequency down to the spin frequencies of the super clusters of galaxies. This is even far, far longer than even the cycle of the rotation of our galaxy. Things seen in our solar system or even our galaxy would "*see*" us as in motion so a more perfect place of rest must come from several lower levels or the Virgo super-cluster. You must then realize the wavelength of some modulated portion of the gravity wave must be at least the time the larger Virgo super-cluster takes to rotate around once.

There is good and sufficient evidence to support some modulated portion of the gravity wave being based even several more spin/orbit-frequency lower levels than even this Virgo super-cluster: Since we can't even see these lower levels then

we'll have to stop here. I think even stopping here gets the point across though.

This also points out to you that you simply will never make rhyme nor reason about gravity from the way science is presently dealing with gravity.

Since our galaxy rotates around once in about 2.5×10^8 (**2.5 with eight zeros after it**) years then the time the Virgo super-cluster rotates around once has to be even much, much, much, more than that!

How on earth are you ever going to measure a wave such as that?

How are you going to ever polarize it?

Not only do I not see any possibility of doing it in our day and age but I don't see any future equipment coming on line that might be able to do it in the near future either.

Possibly the faster quark spin frequencies might be polarized but I see nothing in the wind for that either.

If humans remain here long enough then it most probably will be done someday perhaps.

I simply doubt that it ever will for many generations though so I am not going to second guess Einstein on this one.

He made the prediction. Since you have just about finished reading this exposition of mine by now then I'll let you decide if anyone will ever polarize the gravity wave or indeed ever be able to even measure its frequency. One thing I'm absolutely sure of: It will never be done in my lifetime.

Now let's look at the way you see and sense things:

Since you know — seen from your subset system — there is no place at rest in this universe and everything is moving then your time is a rate of change you see imposed upon you.

You remain here because your particles have all struck a balance between their macrocosm binding and their close binding. On the macrocosm extreme you have

the Virgo super-cluster and on the other extreme you have the electron that is your only connection with your eyes which in turn do all your measuring for you: Your eyes are your RADAR. The electron is the only RADAR particle you really have.

Since you can't measure to everything in this universe with a measuring tape, you are forced to use the electron to do this measuring for you. You also have a sense of a place at rest even though are moving on a geodesic.

Time is the rate of change that you sense. But the speed of light seems to be essentially the rate that your space is being built and balanced.

Space and time are things only your brain can devise for you. This is a frequency world. You are, theoretically, only here for one "blitzzeit" at a time. Your brain is here, however, for longer than that providing all your components stay right in step with all the right frequencies and your brain keeps functioning.

Your brain is the thing that has put you into this subset world of the electron-quark spin/orbit-frequency level.

In this new universe, you are constantly changing. In addition. Doesn't it feel as if you are only here for a fraction of a second or so at a time? This is your mind giving you this sense of time that we all have.

Such is the main theme of this little notion that I have laid out before you. This feeling we all have of only existing a second or so at a time might be showing us that this indeed is the world of "blitzseits" and momentary connections that this whole brand new idea calls for.

While you feel you are only here for one of these "blitzseits" at a time, you also feel you are at rest in this universe don't you?

OK, so now we know all motion gets totally balanced out as seen by lower spin/orbit-frequency levels.

You feel "at rest" from this galaxy level because in this level, you along with the earth, are still in motion. But in the next lowest level — the Virgo super-cluster level — you and the earth and the sun and whatever are making repetitious motions that from the super-galaxy's point of view all entirely cancel out: This is

the same as you looking at the rock where all particle motion, in the rock, are repetitious and completely cancel out.

As we look from here into the microcosm we see repetitious motion that seems to be frozen solid and we see ever faster frequencies the further in we look. As we look out at the macrocosm, we see motion and the further we look the wavelengths get so long we can't possibly even measure them. This is a microcosm-macrocosm frequency reversal where frequencies act the reverse in the microcosm as they do in the macrocosm. This is a wave universe and because each of these momentary "blitzzeit" bindings is the same strength then more of them, per unit of time — higher frequency — will create a higher voltage and thus you can actually see the main reason for Planck's constant.

As long as all these things stay their respective distances and wavelengths apart then they all survive and remain here.

As long as all your parts stay merrily in tune with everything then you happily stay here as well. You can see where life originated can't you? You are a child of this universe of standing waves that reproduce themselves aren't you?

You no longer stay this solid, long lasting thing that you have always seen yourself as. Now you become nothing more than one of those continuing momentary, flashing pictures on a movie screen with millions of past pictures on one side of the real you and millions of future pictures on the other side of the true you.

All these frames of yours are changing at one certain fixed frequency with the micro world changing at a faster frequency and the macroworld changing at a slower frequency than yours. This is what gives you the micro-macro reversal of the red shift in the macrocosm and the blue shift in the microcosm.

You will therefore also see other things rotating and revolving whereas they will see themselves at rest provided they — like you — are traveling on geodesics.

Things that were of supreme importance before now lose some of their old clout and the four things that seem to predominate above all others in this new view of things, as we move closer to this world of waves, are **frequency, motion, orientation** and **inertial qualities** as seen from a particular **subset**

spin/orbit-frequency level.

Space is equivalent to time. Since our mind cannot cope with the space-time interval that mathematicians love, does it separate it into two things that it can understand, namely space and time? The way it does this may be relatively simple. You know you are not the same person you were in the first grade in school. What you don't seem to realize is that you also are not the same person you were a second ago or even a microsecond ago. Your mind is a continuous system though and it **makes you think** that you are the same person that is existing over all these separate frame periods of time.

This is one more reason that our particle world can not give us the entire picture. And this is another red warning light from Kurt Gödel.

You are living in a world of waves that the mind simply doesn't "*see*". Your mind has been developed slowly over millions of years for survival. Human's minds had to be able to impress humans that larger things could eat them while they could easily kill and eat smaller things themselves. Therefore, this idea of large and small had to be firmly imprinted on your mind for your survival. The human mind has been designed especially for this subset particle world and it has undeniable problems with an all wave universe. It simply wasn't designed to contemplate an all wave universe.

For that we will need the super-computers promised us by Stephen Wolfram.

Although we may have finally gotten a grand unified theory, this isn't the end. This is the very beginning of a brand new world and we still haven't even scratched the surface of this universe yet.

You will be able to picture this universe that you are in by mostly using these four terms of **frequency**, **motion**, **orientation** and **inertial qualities** because that's all that you will need to see the big picture. For the math we will need more terms but this is all you need right now and anything more would only add to your present confusion as you take your first look at this new universe as it really is. I have shown you a model of a universe with every particle-level using **frequency**, **motion**, **orientation** and **inertial qualities**. If you set up a model universe this way, then it will work out exactly like the universe that we find ourselves in.

Once you see all this turns out to be correct then you must worry about the long term survival of human life because this informs you that all the world's scientists who were being paid to investigate all of this, simply weren't. So then you must ask, "Will they also once more fumble the ball and bring on an early end to the existence of humans?"

Chapter 20.

The Big Bang & more

Proof of a Big Bang is the CMBR (Cosmic Microwave Background Radiation.

This is true and even though it has been printed up by the university presses you can actually believe it.

It's the rest of how the Big Bang came about, that the university presses print, that you can't believe.

Georges Lemaître gave his expanding universe to the world in the 1920s. George Gamow improved it in the 1940s. The CMBR was discovered in 1965. This CMBR radiation is 2.74 degrees Kelvin in temperature. CMBR frequencies are in the microwave and infrared area and this was even predicted by Gamow and his group back in 1948.

The COBE satellite information seems to prove this CMBR radiation beyond a shadow of a doubt too. Therefore, we know something like a Big Bang happened.

The Georges Lemaître-George Gamow Big Bang belongs only in movie theatres along with Jurassic Park. It doesn't deserve any more comment than that.

Here's what really happened:

For hundreds of billions of years, this universe was here but it was an all neutron universe with no electrons or protons. We probably even had neutron stars similar to the neutron stars here today but back then with no electrons they would have been dark along with everything else. There probably also were galaxies and superclusters similar to what we see today but they may all have been different sizes from those we see today.

We know now that the fine structure constant is not a constant but is slowly changing.

This is a universe of ultra high frequencies building high frequencies that build lower frequencies that build even lower frequencies that build even lower frequencies ad infinitum perhaps. There is no way something set up like this can be perfectly stable. Too much energy leakage between any one of these frequency spin/orbit levels to another frequency spin/orbit level will eventually upset **all** lower frequency spin/orbit levels. The gradual change in the fine structure constant is, therefore, only an indicator of this excess energy leakage. Gradual energy leakage, between frequency spin/orbit levels, even higher than the quark, in this frequency setup is causing the fine structure to gradually change.

The fine structure slowly changed considerably during this many hundred billion year period when the neutron was a stable particle. Then in time, as leakage went on and the fine structure changed enough, the neutron became unstable and the entire universe went into a beta decay.

This was the Big Bang. The very first atoms made were hydrogen. This fact, the universities got right.

When half the neutrons were converted into electrons and protons via the beta decay then all the other neutrons were safely inside various nuclei (*hydrogen nuclei to start with*) where they were safe just as they are safe today. If we remove one today, from the nucleus, it only lasts outside the nucleus about 15 minutes.

Sure there was expansion but that stopped long, long ago.

In this new theory, people will have to feed enormous amounts of information

into future super-computers to see what could have really gone on during such a beta decay event. Even so, any expansion would have been over as soon as all the piano keys were finally in tune with all the rest of the piano keys. In this new theory, the exact particle frequencies are the determining factors in the stability of the entire universe: When that eventually happened then the universe was finally in a steady-state of balance.

Even the 15 minutes, that the average neutron lasts, gives us a good idea of the amount that the fine structure constant is changing with time. Remember, the neutron was indeed stable just before the big Bang. The fine structure constant must have changed just enough since the Big Bang so that it takes an average of 15 minutes now for the neutron to beta decay outside the nucleus. This points to a slow energy leakage in some ultra, ultra high frequency spin/orbit system at an even a higher level than the quark. We know beta decay took much longer than this 15 minutes when our present neutron-electron-proton universe, with atoms, was formed. With the fine structure slowly continuing to change then this 15 minutes average time will continue to slowly decrease.

I'm afraid this universe did not appear all at once like all the university presses are telling you. An all neutron universe has been here a far, far longer time than is currently being printed by all these university presses. We don't know when this neutron structured universe arrived. But if you insist in believing in fairy tales then by all means read what the university presses are printing about how the Big Bang came and built this universe up from pure energy.

Think about that for a moment.

Think about what they are telling you.

It doesn't even make sense.

They are telling you this:

"This entire universe was built up all at once by nothing but pure energy."

This is impossible.

Show me one case where the surroundings do not enter into energy transmission.

You can't.

Energy is a binding balance change where binding is temporarily changed. Go to my website <http://www.amperefitz.com> for this in detail.

And for this you need surroundings.

So it's surroundings, surroundings, surroundings.

And it's spins, spins, spins. It's surroundings and either spin or orbital binding.

Won't they ever learn?

This is what made even Maxwell a believer in surroundings causing inertia. He himself said that if the surrounding magnets were necessary in a generator then the surroundings must be playing the same part in inertia.

Energy is a disturbance of the binding balance that is present in both the microcosm and the macrocosm.

That's all energy is.

Energy is merely a disturbance of an existing balanced system.

You can't have energy without the system being there first.

There is no such thing as pure energy by itself.

What these university presses are printing doesn't make any sense whatsoever.

They are even giving you the times in seconds and microseconds and nanoseconds when this entire universe was as big as a grapefruit and then as big as a basketball and so on and so forth. You as taxpayers are paying a good part of their salary to work out all this mathematical nothingness.

A tall tale like that is pure fiction. There is absolutely no evidence to back it up

and what's more there is the evidence of the number of electrons and protons matching the number of neutrons to indicate a beta decay Big Bang. And the evidence of no decrease in gyro inertia to indicate a steady-state universe here now and the 99.9999% empty space in both microcosm and macrocosm and all the spins of everything to indicate they are the same in every way except frequency and symmetry. To top it all off you have a microcosm compression opposite to the presumed macrocosm expansion. Therefore, the evidence is here to show what I'm telling you is right and what the universities are telling you is wrong. It is so wrong, in fact, that if too many in one country believe it, and the rest of what these universities are presently telling them, then that country will end up in serious trouble. The total picture that these universities are putting out about the Big Bang is nothing but bunk. It's another one that needs to be added to Mackay's "Extraordinary Popular Delusions and the Madness of Crowds".

It's surroundings, surroundings, surroundings plus spins, spins and spins that are vitally important in everything. It's surroundings and either spin or orbital binding.

In addition, very few in these universities seem to realize even surroundings are important.

Berkeley did. Mach did. Maxwell did. Einstein at first seemed to but then got carried away by his own math plus Lemaître's popular speeches. Did Einstein's first wife, who played a big part in relativity, have a better concept of it all than Albert Einstein himself? He gave her every penny of his Nobel Prize money. The fact that Einstein turned his back on Mach's principal has me seriously wondering now whether it was Albert or his first wife who played the key role in relativity. The evidence, now coming out, shows she played a considerable part in every paper he submitted.

Keep your eye on surroundings, spins and balancing.

Our present science should be taking surroundings into consideration and it isn't.

You are **not** coming up with controlled atomic fusion power by having science such as we have now.

Stephen Wolfram is right. We need "A New Kind of Science" where future

super-computers give us all the answers.

Stephen Wolfram doesn't mention frequency math will be used by these computers. I do. However, he did hit the nail right on the head. I'll give him credit for that.

I've seen and talked to a few important people in my lifetime.

I've talked to John Paul Riddle one of the Founders of Embry Riddle School of Aviation.

I saw him walking, one day, with Arthur Vining Davis on the ramp of Riddle Airlines where I was working at the time.

I've seen and talked to Frank T. Baker, the founder of National Airlines, as I worked on his personal Lockheed twin engine airplane at National's first hanger in Miami. They used to stop all the traffic on Le Jeune Road (NW42nd Ave) so National's airliners could cross that road to get on to the runways at Miami Airport.

I've argued with Floyd Hall, Eastern Airline's president and talked to Astronaut Frank Borman, who was president next. In fact it was Borman who talked to me first. He asked me what I was doing there.

I have Eddie Rickenbacker's book with his own handwriting in it saying from Eddie Rickenbacker to Daniel Fitzpatrick. I do believe that Eddie was the only one who consistently made money for Eastern. It paid a stock dividend every year he was in charge then the dividends quit when Rickenbacker quit. Eddie had common sense. He knew how to run Eastern. It's been said that he came into a room while people were arguing what color they were going to cover the seats in the airplanes. He is reportedly supposed to have said to them, "I'll tell you what we are going to cover the seats with. We're going to cover the seats with people's asses." Eddie was put on the very next plane out of Cuba after making a bad remark about Franklin Delano Roosevelt when Roosevelt's death was announced. The Cuban dictator, at that time, liked Roosevelt.

I've met many other famous people coming through Miami airport as well. And you know what? They make mistakes the same as you and I do. In fact, they are

no better, in many ways, than you and I are. They had a gimmick that got them there. Sometimes it was hard work that got them there.

But just because people are famous or just because they have a degree, that doesn't make them right. In addition, the majority aren't right all the time either — just as the majority in the universities aren't right this time.

I'm laying the facts out for you. Look at them and then do your own thinking.

If you want to unify the invisible forces, which Faraday first tried to do and then Einstein and many since, then this method that I've spelled out in this book will give the best picture of that to you. That is my firm belief anyway. It's done it for me. There are definite frequency spin/orbit parameters any present math must remain within. The fact that any present math is constricted to these parameters will make any present math useless in this quest.

You can, fortunately, see this unification picture with no math whatsoever. It's as plain as the nose on your face. It's all the university noise that one has to deal with that prevents even people with good sense from seeing this.

Not only is that my opinion, but there is no doubt you can see this unification picture.

Another of my opinions is that if you could buy all those people in the university system for what they were worth and sell them for what they thought they were worth then you would be rich indeed.

Learning well, is hands on experience coupled with the knowledge you obtain from what others have recorded. Many in the university system are cut off from the hands on experience part of learning.

<http://www.amperefitz.com>

Chapter 21.

The very end

In the beginning of this I said I lucked out and was able to write this first. This is true. I started in radio at an early age and even knew how every circuit worked in those first television sets, with seven inch screens, that came out in 1946.

I learned to fly at Bart's airfield near Budd Lake, New Jersey and got my private pilot license before I finished high school. I paid Howard Bartholomew for those lessons with money I made working at a soda fountain in Hopatcong, New Jersey.

Some people of Hopatcong made money in the summer at Lake Hopatcong and then catered to tourists who flocked to Miami, Florida in the winter. Their stories made me want to see Miami.

So I bought a 1937 Chevrolet, with only 20,000 miles on it, from a little old lady for \$300 and drove to Miami in September of 1950 to see the Miami Air Show.

I loved Miami and saw no reason to leave. Miami was country way back then. Miami was a small city that extended no further west than NW 27th avenue. Now look at it. The Miami Airport has been good to me over the years. The very latest advances in science were right there at my fingertips. I soaked up all the science knowledge I could. I worked with people in these large organizations and saw where the mistakes were most likely to be made. This knowledge really helped me. Pan American World Airways helped me with my education whereby I could not only write this book but also put together the principles contained in it.

Yes, I lucked out being in the right place at the right time.

My best luck though, was in having all the various airplanes that I went up in, in various parts of the world, land in one piece.

I had "the luck of the Irish" with me for 73 years.

I thought I had to tell you this.

And with this book I followed the general's advice. He said, "Get there firstus with the mostus".

It's hard for humans to see how a quantum of light can come from a distant star many light years away and arrive at our eye, full strength, and this can be seen as a part of balancing in this universe. Nevertheless it is.

As you saw Einstein's man on the super-fast train example showing that two distinct events were seen by the man traveling, but these were simultaneous to the man standing still. One man saw a space of time between the two events and the other saw them as happening at the same instant.

This teaches us that even though we see about 8 minutes elapse before light gets to us from the sun and far longer for light to get to us from the stars that Dr. Milo Wolff's findings give us a key to this balancing.

Milo found that each electron is being built from its surroundings at the speed of light. This would also be the fastest speed they could balance. Einstein's man on the train example tells us that while we may see all this time between when the light is given off and received that these electrons may very well not "see" it.

Light, like all other energy, ends up as part of the binding balance scenario.

Therefore, I hope I've left you with the emphasis on surroundings, spins and balancing, which our present science deems not to emphasize.

I know this is ending and some are going to say he hasn't told me what the weak force is yet. Yes, this is true. But you can almost see what it is if you remember that surroundings play a big part in this brand new kind of science. The weak force is involved with beta decay. This happens when a neutron is pulled out of the protective surroundings of electron encirclement that all atomic nuclei have. In about 15 minutes the neutron — that lost the protective surroundings of the nucleus and electron encirclement — now does what its sister and brother neutrons did during the "Big Bang" and it turns itself into a proton and electron. It comes apart. This is called beta decay. The weak force is only involved in beta decay. The weak force is the loss of strength of the nuclear strong force where a down quark in the neutron changes to an up quark, turning the neutron into a proton and in addition producing an electron. So the weak force has links to this strong force that changed and also to the magnetic force of the original electron encirclement that kept everything originally intact.

The unification of the weak force and magnetism therefore is showing you that the weak force and the electron encirclement, that was removed, is the same. And this, by the way, is the same as the force, at a higher frequency than the quarks, that slowly leaked away with time.

The weak force is the difference in force, in the way the original neutron was balanced and the way the new proton is balanced afterwards. It's the force involved in the new balancing.

It's probably about like the planet Pluto.

Pluto went off the list of planets and the weak force may eventually go off the list of fundamental forces someday also.

So, in my opinion, the weak force is not a true fundamental force because it only comes about when the surroundings of a neutron are changed. It was put there, like Pluto, before folks understood the big picture. Now understanding that when surroundings change the binding balance must change, may weaken the need to see the weak force as a fundamental force.

But that's only another of my opinions which I have made certain everyone suffered through while reading this book.

Hope you forgive me.

As previously stated, in every frequency spin orbit/system there seems to be a certain range of sizes of things.

All the stars have a certain range of sizes. Some are big and some are small but there is definitely this certain range of sizes. Galaxies have a range of sizes as well.

Even the elements have a certain range of sizes.

It's the electron frequency spin/orbit system that only has one size particle instead of a range of different sized particles. This is most probably because the spin frequencies of the electron and quark are so close. Symmetry seems to be largely determined by how close these harmonic linking frequencies are to each other. It's a good thing the range was restricted to only one size particle in the electron's

realm. If it had been a much wider range, as we see elsewhere, then we wouldn't be here.

We see conservation of spin with the electron. The rule in a binding balanced universe would plainly be conservation of angular momentum where there are wide ranges of entities and this would show up in the narrow range of the electron as conservation of spin.

Even though the spin frequency of the quark is the square of the spin frequency of the electron this does not mean the scalar frequencies of both are the same relationship. These probably also have some important harmonic relationship but that will have to wait for others to discover.

As previously stated, a very slight energy leakage in some ultra high frequency spin/orbit system, even higher than the quark, will show up as a slow change of the fine structure. This is what produced a beta decay "Big Bang" in the old all neutron universe giving us our very first atoms and this present universe.

The fine structure is almost a constant but not quite and most probably will never be a constant but will probably keep right on slowly changing unless the energy leak causing it gets fixed, which is doubtful.

So all in all it doesn't really matter if our sun becomes a giant star with the flames scorching the earth.

It doesn't really matter if later on the stars change everything into iron and all burn out.

Because in the final chapter the leakage, causing the fine structure to change, will probably change enough to undo all these atoms and molecules and build something entirely different many hundreds of billions of years from now completely erasing all records of not only man but of this entire universe altogether out of the picture.

It will be another "Big Bang".

Yes, it was an accident or rather an incident of probability that we came and via another of the same events, all you see around you will be gone as well.

Yes, it will all be gone and that is sad. Nevertheless, the same system also gave us life and without it we couldn't have had life. And that is the important fact I wish to leave with you.

Our universe had a birth and will die just like we will. We are children of this particular universe that has also given us life while it lived.

Therefore, what it comes down to is that it is really all probability and Einstein loses the argument that Niels Bohr wins.

My part in all of this was the fact that I looked at everything I possibly could and read all I could and went through reams of information on Google — God bless them — and managed to make sense of it all before any of those in the universities did.

I've certainly littered the landscape with a lot of dead horses while getting these invisible forces unified but that's what it took. I'm sorry if I've killed off some of your favorite animals in the process.

But these invisible forces had to be unified for us to have any logic in our science.

So bury all those favorite horses and climb into a motorcar and we're off on the yellow brick road to the land of Oz where you'll find far better weapons systems awaiting you.

I have this strange feeling that the reason we are smarter than the monkeys is that through the ages mankind has been killing off mankind at a prolific rate and this survival of the smarter kept the smarter ones reproducing and made us as smart as we are today.

I have another strange feeling that we may be at the point now where that intense human feeling to kill off all those other bad ones might not continue to work anymore to make us any smarter.

Thanks for reading this.

