Fitzpatrick's 1966 book showed the **relative motion** laws of **A. Ampère** unified the forces.

Fitz's first book in 1966

Fitz's 1966 book in Word

Fitz's 1966 book in PDF

http://rbduncan.com/WIMPs.html

<u>*WIMPs in Word*</u> May 9, 2019 <u>ALL</u> you need to <u>*WIMPs in PDF*</u> know about **Dark Matter** particles - (WIMPs).

This was the way the site --below-- looked a while back - - Dan Fitz.



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Shedding a bit of light on the

few absolutely TRUE SCIENCE CONCEPTS that will never change.

Don't skip this paper if you are interested in theoretical physics.

Kurt Gödel, mathematician Steven Wolfram, and many others including myself have been arguing — for many decades of their lives — that the fundamental principle of how this universe functions must be found FIRST, <u>before</u> any math is utilized. You cannot place the cart <u>before</u> the horse!

BIG BANG CONCEPT

We *could* start with the concept of the "**BIG BANG**", provided of course, that this "**BIG BANG**" is seen <u>only</u> as the beginning of what we observe as all this spacetime produced by our <u>molecular</u> universe.

If we look at what Dr. Milo Wolff, a NASA scientist — who helped get us to the moon — points out to us in his book *Wave Structure of Matter*, a universe of spherical, standing waves existed eons before our molecular universe, and this **"BIG BANG"**, that built our present molecular universe, which does in turn, give us our present spacetime.

It gives us this spacetime — **believe it or not** — via Einstein's *Cosmological Constant*, and that is the story within the picture of this universe you will see by reading this short paper. Although Milo Wolff's frequency universe all throughout, greatly simplifies our comprehension of the fundamental forces, it does exasperate a modern science problem of how small or large our universe is, because Wolff's standing wave universe, *also apparently*, has no limits of size in either direction.

Here's the NEW picture of this universe you must see, if you are interested in precisely how this universe, of ours, functions.

DR. MILO WOLFF'S SCALAR CONCEPT

Couple the coming **CONCEPTS** with Dr. Milo Wolff's **scalar**, spinning, standing wave concept of matter, and you have a simple *Theory of Everything* — a far simpler concept than anything in present science — handed to you on a silver platter.

The electron is a **scalar** entity if we look at the electron from a low enough frequency spacetime realm. From a far, far higher frequency spacetime realm the electron might look somewhat like our galaxy.

But given enough time to *precess* around as a gyroscope, our galaxy will also appear to be more spherical — in time — in Dr. Milo Wolff's **scalar**, frequency universe. Modern science has totally missed the supreme importance of — the precessing cycle of time — needed to produce a **scalar** resonance.

Our galaxy, to us in our spacetime realm, seems frozen in time: we totally miss all its *precessing*.

Yet this *precessing* — to make one full *precessing* cycle, to appear more like a sphere — gives the *resonance* reason for Wolff's **scalar** *resonance*, or what we see as nature's preferred size, in both micro and macro spacetime realms, and this is certainly the reason the iron molecule is the preferred **scalar** molecular *resonance* after fission or fusion energy: what **scalar** *resonances* have in common is that their *in-phase binding* to the surroundings equals their internal *in-phase binding*.

The Earth is a **scalar** *resonance* in which its *in-phase binding* gravitational force is equal to its *in-phase binding* (to the surrounding stars) inertial force.

Many of my readers know exactly how that works and the exact binding frequency. I've been explaining it for decades.

All forces caused by the spinning electron, travel at the speed of light. The gravitational force, however, travels much faster.

NASA shows us gravity acts at least 20 billion times the speed of light $(2x10^{10c})$ <u>Van Flandern</u>

The only particle that could be spinning at least 20 billion times as fast as the electron has to be a quark.

Strong force containment is nearly correct and it is 99.9999% right. It is the .0001% balance of quarks whose spin frequencies are not contained, that give us both gravity and inertia.

Since that balance here on this Earth remains exactly the same continuously, then this quark spin frequency — when binding in-phase to distant quarks spinning on the same exact spin axis — is the reason that Earth's gravitational attractive force exactly equals the Earth's inertial attractive force to the surrounding stars.

Milo Wolff has shown that, at this **scalar** *resonance* frequency — energy in has to equal energy out.

One of Milo's **scalar** entities is the electron — that is a sphere — and only the *in-phase binding between* spins and/or orbitals, of *interacting* **scalar** electrons, produce energy forces: the electron itself remains unchanged and simply stays the same *spinning, precessing* **scalar** electron.

We'll look at the 1993 *Evidence of Gravity Waves*, but was it gravity waves that were detected?

You'll see it was merely <u>fluctuations</u> of gravity, that were detected.

Both gravity and inertial attractions are at the quark spin frequency, and unfortunately we have nothing yet to detect that high a frequency.

We'll look in depth at this later; now for the *so called* gravity wave.

It's something I copied from my 2013 Britannica DVD: "gravity wave also called gravitational radiation:

the transmission of variations in the gravitational field as waves. According to general relativity, the curvature of space-time is determined by the distribution of masses, while the motion of masses is determined by the curvature. In consequence, variations of the gravitational field should be transmitted from place to place as waves, just as variations of an electromagnetic field travel as waves. If the masses that are the source of a field change with time, they should radiate energy as waves of curvature of the field."

Evidence for gravity waves was obtained by studying the changing orbital period of a neutron star binary, resulting in the 1993 Nobel Prize in Physics.

This is a spin-up, spin-down binary pair whose **closest** sides are in-phase!

There was a greater attractive gravitational force **each time** these in-phase sides got **closer** to each other.

You have a greater magnetic attractive force the closer electron spins are in-phase with each other too.

See the immense importance of phase, now?

This is Ampère's Law!

AMPÈRE'S LAW CONCEPT

It's not only the law for spinning electrons, but for every spinning entity in both the microcosm and macrocosm of this entire universe of ours.

Einstein missed the **simplicity** of **AMPÈRE'S CONCEPT** entirely. This was exactly what he was looking for to unify the forces between all those spins in both microcosm & macrocosm. Phase was about the only thing possible to unify spin frequencies, but Einstein never saw its relevance.

This is <u>also</u> telling you gravity is not a fundamental force, yet all these in-phase attractive forces between all these spinning items in our universe **are** fundamental forces.

You must look at Ampère's Law that *astoundingly* unifies electric and magnetic fields, giving us the *simple* <u>truth</u>— that shows us exactly what causes the fundamental forces.

Kurt Gödel proved the truth must come before the math.

Today, modern science is using highly complex math before it even has the slightest bit of truth.

In the 1820s, André M. Ampère took two batteries and connected each to a long wire, with both wires parallel to each other. When the current went the same direction through both wires, the wires attracted. When Ampère reversed one of the batteries and the current went through the wires in opposite directions, then the wires repelled each other.

The unit of electrical current, the Amp, was named after Ampère for this <u>simple</u> discovery — relating the magnetic field **directly** and <u>SIMPLY</u> to the <u>movement</u> (current) producing it.

This fundamental basic **simplicity** of Ampère's Law using **no** plus or minus charges or north and south poles — is now totally obscured by the more complicated math and rules of the Faraday-Maxwell field theory, **coming half a century after Ampère**, that <u>must</u> use **imaginary** plus and minus charges and north and south poles.

A <u>full</u> page (page 29) on 1-18-1967 in the **New York Times** *Sunday Book Review Section* is about my publication, back in 1966. In that I showed: Ampère's Law was the <u>reality</u>, and *it beat thinking in terms of FIELD Theory's* — *unreliable and imaginary* — *plus and minus charges and/or north and south poles*.<u>1966.html</u> (Fitzpatrick's 1966 book - FREE)

Now in 2018 I'm showing that **scalar relative motion** (phase) applies — *not only to electrons* — but to all these spinning entities in both microcosm and macrocosm.

Ampère's Law essentially **tells** you: entities that are **inphase** attract, and entities that are **out-of-phase** repel each other. This is not only the rule — engineers use — in the electrical world, but it's the rule <u>between</u> all these scalar, spinning entities giving us <u>all</u> the fundamental forces in our entire micro-macro universe.

Thus, we've unified the forces to obtain the **fundamental forces**.

EINSTEIN'S COSMOLOGICAL CONSTANT CONCEPT

Both our space and our time are produced by Einstein's Cosmological Constant repulsive force density caused by all these spinning entities being out-of-phase with each other.

Welcome to Dr. Milo Wolff's frequency universe. Milo and I discussed science for decades. We both were into radio early and saw the rapid changes there. In his 80s, he drove me to John Wayne airport so I could return to Colorado. I do miss Milo Wolff. You are reading what he taught me.

The establishment hasn't caught on to the utter **simplicity of this entire universe** that both Ampère and Dr. Milo Wolff have shown us. Einstein's Cosmological Constant repulsive force density exists in both the microcosm and macrocosm, and even Einstein didn't realize its true value as also being spacetime that we somehow mistakenly divide into the two seemingly different concepts of space and time.

What can be divided is the spacetime interval — into two different spacetime realms — the microcosm and the macrocosm, using Ampère's Law in both.

Einstein's repulsive force space can <u>also</u> be seen in the microcosm by enlarging an innermost molecular electron to the size of a pin head: the electron would then be as far from the nucleus as the fortieth floor in a tall building is from the street below.

Einstein knew this; this is why he tried to unify macrocosm and microcosm forces.

But this microcosm spacetime is different from ours and uses a different spacetime interval.

The establishment understands that we have all this neutron *Binding Energy* in mass. Really it is *quark harmonic binding of electrons*, making them molecular electrons.

Nevertheless, when these numerous quark-electron bindings are severed — via either fission or fusion energy — then these many, severed items fly off, cork screwing through their realm producing vast amounts of out-ofphase forces or space as we see it, ending up with an element or elements closer to iron. The iron molecule seems to be at some **scalar**, harmonic balance point, where one full *precessing cycle* gives the more <u>spherical</u> **scalar** effect: there also seems to be a preferred **scalar** size/mass harmonic *resonance* — and major harmonic spacetime realm — **a bit more than** every twenty billion $(2x10^{10})$ spin frequency orders of magnitude apart.

This gives us — presently, *in Dr. Milo Wolff's frequency universe* — a stable enough universe, in which the probability of a **big bang** correction, *somewhere in the system*, <u>always</u> will exist.

The vast out-of-phase forces — when this stability is disrupted — are what give us every atomic explosion, which ceases after creating the new element/elements, thereby removing all those temporary out-of-phase forces.

This is <u>also</u> what caused the Big Bang and <u>also</u> the present, more balanced universe we have now.

The microcosm — we all know — is a fairly well-balanced realm, where the in-phase forces are balanced well enough against the out-of-phase forces for stability .

Now, here's an energy TRANSFER method that does not affect this in-phase to out-of-phase balance, but in that type of energy creation and transfer method, impedance matching is necessary.

In fact, this necessary impedance matching — where each mass binding had to match an equal mass un-binding — gave us the concept that *"energy could neither be created*

nor destroyed", this was, of course, before the atomic energy era that began with Einstein's proof that $E=mc^2$.

An example of this — impedance matching TRANSFER — is the light that comes to your eyes from a star.

Stars have electrons of various impedances ready to emit light and your eyes have red, green and blue receptors to receive the various colored light — providing among other things — their impedance exactly matches the impedance of those light emitting star electrons. Also, both star electron transmitting light and eye receptor electron must be a spin-up spin-down pair — with their closest sides binding in-phase — and their spin axes parallel or somewhat parallel.

Also, this my friends — with those other things — is the answer to Olbers' Paradox.

Here's how light from a distant star acts somewhat like alternating current but at a much, much, much higher frequency.

If you look at energy transfer this way, then you will see the relationship between binding with the surroundings (stars) and internal binding; the production of a **quantum** of **energy** is gained <u>after</u> an **in-phase** binding **first** with the surroundings (a star) and then that same electron <u>switches</u> a bond FROM the surroundings (star) to an internal **in-phase** bond in your eye: an example is green light from a star, at 5,000 Angstroms in wavelength (color mid-range), where electrons in our eye cones are cycling bonds between electrons on that star, and <u>us</u>, at the rate of 600 trillion times a second (600 THz).

Only **ONE** of those cycling infinitesimally short period bonds is a quantum of **green** light.

It takes only about eight or nine of these quanta cycling bonds before you can sense the slightest bit of green light.

This is the way it really works, but if you want to believe in photons go right ahead. However, I do believe that much of quantum theory — along with photons — is going down the drain once an all frequency universe is accepted. We know enough about frequency behavior now to replace much of quantum theory with the frequency aspect of what's really going on, as I've just shown you with starlight and **in-phase** binding.

EINSTEIN'S SP&CETIME CONCEPT

Some features of quantum theory will remain because spacetime is not continuous — like field theory — as Einstein warned us. Spacetime comes in chunks and has holes.

Even though the electron on a distant star giving you light, is separated from the one receiving that light in your eye

— there is **no spacetime** whatsoever between their closest sides binding in-phase.

There is no spacetime — between those sides — because spacetime itself is only created by the closest sides of entities spinning out-of-phase.

Our thinking of a continuous spacetime has to entirely change to pieces of spacetime.

Bohr and Einstein were both original thinkers, nevertheless, neither got to the bottom of what caused these attractive and repulsive forces in this universe.

Now we know!

All attractive forces are caused by things that are inphase.

All repulsive forces — along with spacetime — are caused by things that are spinning out-of-phase with each other.

This is the <u>correct</u> building block <u>model</u> of how this universe is built.

Mathematician Stephen Wolfram proved — in his *A New Kind of Science* — that all the math in the world isn't going to show how this universe works until you have the <u>correct</u> building block <u>model</u>.

And how true that has been!

Scientists use the word spacetime for a reason: space changes with a change in speed or mass, and so does

time. We know when we look through the Hubble telescope through space, then we are also looking back through time. Space changes and time changes but the **spacetime interval** never changes: look it up!

Most enlightened scientists realize that spacetime is a single entity, therefore we use that word. Einstein, more than anyone else, gave us this realization of spacetime.

Our ancestors, however, didn't know about Einstein or spacetime and have given us two *different* building blocks of SPACE and TIME for our present science.

This is an exceptionally simple universe — once you understand what is really going on.

But we don't see it for the same reason that we see SPACE and TIME as two *different* things — when they are only ONE thing — as Einstein proved, the **spacetime interval**.

Why we discern both space and time is an enigma, but it has to do with the fact that as we look out into space, we forget about all these spin frequencies (time creators) producing it.

This may, in fact, be the very beginning of solving that enigma.

*** BELOW IMPORTANT ***

It's a universe of Dr. Milo Wolff's **scalar**, spinning, standing wave entities all throughout microcosm and macrocosm, whose spins **all obey** Ampère's simple phase law: **scalar** entities (solids) are created <u>between</u> attractive force, **in-phase** concentric binding of spin frequencies or harmonics thereof.

And then we have the opposite of SCALAR.

Spacetime (Einstein's Cosmological Constant type repulsive force or space) which is produced <u>between</u> **out-of-phase** spin frequencies.

*** ABOVE IMPORTANT ***

Einstein has to be given credit for being the first to see that all this space also had a repulsive force density to it. However, he missed the spacetime aspect of it all.

In fact, I did myself until recently. People will see that by reading some of my earlier papers.

You must now think in terms of spacetime and rid your mind of our modern science principles of space and time being two distinct fundamental entities.

Spacetime is being produced via **out-of-phase** frequencies and Wolff's SCALAR entities are being produced via all the attractive force, **in-phase** frequencies.

Milo Wolff has shown us that this is a <u>frequency</u> universe all throughout!

And in this frequency universe there is a propensity for the in-phase forces to equal the out-of-phase forces, but they never can balance out because of such things as the added attractiveness of harmonic binding: the down quark spinning at an exact higher harmonic than those harmonically captured molecular electrons.

Frequency plays a much bigger role now than in modern science, which we unfortunately must put a bit out of our minds now to understand what fundamentally is really at the bottom of things in this universe.

When you state **momentum** then you <u>must</u> give the <u>frequency</u> of that momentum.

Deductive reasoning tells us that different spin frequencies are thus producing different spacetime intervals!

Therefore, this is indeed a frequency universe all throughout wherein the spacetime interval — *although invariant in one spacetime realm* — varies from realm to realm. **Einstein might have recognized this if he had accepted these** *different* **spacetime realms the way Wheeler and Feynman saw them.** Einstein believed in invariance of the spacetime interval so intensely that he was disposed in the 1920s to actually change his theory's name from relativity to his '*invariant*' theory because he felt that this was what general relativity was more about. It was these *different* **spacetime realms that Einstein didn't see**

even though his own general relativity clearly points it out.

Einstein was so close to solving the puzzle. He gave us spacetime. He gave us his Cosmological Constant that he knew were in both microcosm and macrocosm, but he missed the next two steps: recognizing what Wheeler and Fehnman did, and then seeing that this was due to a multitude of out-of-phase waves.

Since the spacetime interval does indeed vary from realm to realm, Wheeler and Feynman were correct to warn us about our measuring in other — *spin/orbit* — spacetime realms and Niels Bohr was correct arguing with Einstein that Heisenberg's uncertainty exists outside the microcosm as well.

Wheeler and Feynman did warn us about this measurement uncertainty when they told us we could never measure accurately outside of our own *spin/orbit* spacetime realm but somehow our university — *military industrial complex* — experts were asleep at the switch on this one or maybe this was simply another of those things they wished to conceal from us, hoping to catch Snowden <u>E.</u> <u>Snowden-Wikipedia</u> before he revealed it to us.

Future computers will someday give us a perfect match showing us how the standing wave world of *Schrödinger's Equation — or the Dirac Equation if things are traveling too fast —* matches perfectly with Newton's laws (corrected by general relativity). Here is a quote from the Britannica 1997 CD telling about Einstein's tensor math which "led him to an essentially unique tensor equation for the law of gravitation, in which gravitation emerged **not as a force** but as a manifestation of the curvature of **spacetime**."

As you see in the above *Britannica* quote, force is a manifestation of space. Also there is **no** such thing as **force** in the tensor math of General Relativity. What you actually get — greatly simplifying things — is <u>more spacetime</u>, than *average*, where repulsive force exists between two objects. In addition, there is <u>less spacetime</u>, than *average*, existing between two gravitational objects that have an attractive force between them.

Saul Perlmutter has shown, as in **GR**, that if repulsive force is <u>more spacetime</u> than *average* then we get Einstein's *cosmological constant* (exact opposite repulsive force of gravity) and gravity **seems to be** a bi-polar force like all the other invisible forces.

This bi-polar aspect also exists in <u>all</u> the fundamental forces <u>fundamental invisible forces</u> giving us our **mistaken notion** of having <u>N</u>orth or <u>S</u>outh poles for magnetism and + or — for charge. **Mistaken notion**? Yes!

The people who have read <u>http://www.rbduncan.com/</u> and <u>http://www.Ampèrefitz.com</u> know that you cannot even begin to understand this universe until you know exactly what spacetime is. It is ONE thing, not the two things of space and time that we presently THINK it is.

Our minds seem to be equating the main scalar frequency of the electron as a clock that mainly determines what we call time. We sense the spin frequency mainly determining force and space. (*We see the <u>spin</u> of the electron causing the magnetic <u>force</u>.) Also, by reading, what you see in the above links, you will see what force the spin of the quark causes to even distant quarks. Also read: <u>1/18/2006 The Vector Scalar relationship between force, space and time.</u>*

By reading what is in the above links you will also know what we see is an *average* time and an *average* space. Both time and space are really made up of numerous **quanta** bits, the same as energy. This concept of an *average* time and space, made up of numerous **quanta** bits of time and space — *a great many billions of separate, different out of phase relationships between every single thing in this universe* — is extremely important to the correct understanding of both time and space. I'll explain this further as we proceed.

Each electron repels its nearest neighbor by a certain amount of force, the same as each star repels its nearest neighbor by a certain amount of force. Let's call these quanta too because they come in chunks like energy quanta. It is these individual repulsive force chunks (quanta) added up and averaged that give us our illusion of space. And it's the same with time as well.

View these electrons as Niels Bohr did, as spinning spheres, even though we know they are a complicated **Schrödinger** type resonance.

Think of two energy exchanging electrons, with opposite spins, as two *gears meshing*. But these two *entire* electrons are **never** involved in **spacetime** light transfers.

In fact, only **very minute portions** (a quantum) of the <u>closest sides</u> of the emitting and receiving electrons one is spin up and the other spin down — are involved. And if these <u>closest sides</u> (a quantum) "see" themselves as close in impedance (both at the same velocity) which means moving the <u>same direction</u> at the <u>same</u> <u>frequency</u> then they will also "see" themselves in the same space and time (on the same <u>Minkowski</u> light cone). Thus, they will be able to transfer this <u>spacetime</u> *quantum* of light energy from one electron to the other.

In other words, even though those two electrons are not themselves in the same space or the same time, **an ultra tiny sliver** (a quantum) **of their closest sides are**.

From the Britannica 2009 DVD "Minkowski, Herman: His idea of combining the three dimensions of physical space with that of time into a four-dimensional "Minkowski space"-**spacetime**-laid the mathematical foundations for Albert Einstein's special theory of relativity."

Sigma chemical bonding is a proven fact. It must always be seen as a **spacetime** *binding* <u>force</u> between a **spin up** and a **spin down** electron whose *very minute portions* of their <u>closest sides</u> are going in the same direction. Light energy is also exchanged, exactly the same way, as a **spacetime** *binding* <u>force</u>: It's nothing more than a long distance sigma bond that ends up transferring a quantum of light energy. This **spacetime** transfer is between a **spin up** and a **spin down** electron where *very minute portions* of their <u>closest sides</u> are always going in the same direction (*like* gears meshing). You might say these *minute portions* see themselves in the same space and time through a wormhole. But the reason they can do this is that space is not this vast empty space we visualize. It's built up of trillions of quantum chunks and if none of them get directly in the way, then these two *minute portions* can actually be in the same space and time together as a Bose-Einstein condensate, <u>or</u> in other words, an impedance matched bond.

One additional thing is <u>very</u> important and this is that energy only diminishes with the square of the distance when multiple numbers of electrons are involved. Why? Because it is these numbers involved, in the transfer, that fall off with the square of the distance. Between only two electrons, this quantum of sigma binding energy — a Cooper pair or sigma bond — remains at the same strength out to the Hubble limit of distance. Now you see <u>why</u> a quantum of light energy does not diminish in intensity with distance: This is another wellestablished quantum theory principle. In fact, this is the keystone of quantum mechanics.

Now, here's what Niels Bohr taught us:

From the Britannica 2009 DVD "Spectral lines are produced by transitions of electrons within atoms or ions. As the electrons move closer to or farther from the nucleus of an atom (or of an ion), energy in the form of light (or other radiation) is emitted or absorbed."

For instance:

If a **quantum** of **violet** light is given up by a star to your eye then on that star, in a certain time period, an electron

that was originally far from its nucleus, dropped to one of the closest orbitals of its nucleus. While in that <u>same</u> time period (*standard model explanation*) an electron in your eye emitted a **quantum** of **violet** light to your senses.

If a **quantum** of **red** light is given up by a star to your eye then on that star, in that <u>same</u> time period, an electron dropped about <u>half</u> the distance (of the violet quantum) to its nucleus. While in that <u>same</u> time period an electron in your eye emitted a **quantum** of **red** light (of about half the violet quantum of energy) to your brain.

From the Britannica 2009 DVD "quantum: the magnitude of all the quanta emitted or absorbed is the same in both energy and momentum. These particle-like packets of light are called **photons**, a term also applicable to **quanta** of other forms of electromagnetic energy such as X rays and gamma rays."

Photons are classed as **boson quantum** exchange particles. Remember, in these **quantum** exchanges, the <u>same</u> magnitude of energy emitted is also absorbed.

From the Britannica 2009 DVD "quantum mechanics: The probability of a transition between one atomic stationary state and some other state can be calculated with the aid of the time-dependent Schrödinger equation. For example, an atom may change spontaneously from one state to another state with less energy, emitting the difference in energy as a **photon** with a frequency given by the Bohr relation."

Let's look at how a **photon** supposedly works in the *standard model*:

If batter **blue** hits the ball twice as much as batter **red** in the same time period then batter **blue** will expend twice the energy as batter **red**.

It's the same with light: as **violet** light being almost twice the frequency of **red** light has almost twice the energy in each **quantum** of light.

But the time period with all of these **quantum** exchanges seems to be associated with Planck's constant (*h*). So if the batter hits the ball twice as much, this gives twice the energy. Since there are almost twice the swings back and forth with **violet** light as there are with **red**, in that <u>same</u> <u>time period</u>, then a **quantum** of **violet** light comes out with almost twice the energy of a **quantum** of **red** light.

However, all of this is well known to **quantum** theory physicists.

Now we come to something not as well known to all:

You must realize that the sigma type close bondings — of your electrons here — also occur with distant electrons as far off as the Hubble limit; not only that but these far distant bondings are at the <u>same strength</u> as close bondings. They must be the same strength because the quantum of light emitted from the star was the same strength as your eye received; this is an agreed upon, quantum theory fact.

Where this *in phase* spin attraction happens the *standard model* gives us a **boson**, which we now see is really only a binding between distant electrons or distant quarks.

Since this *standard model* photon has no mass then it has to be considered nothing more than a simple binding shift or binding exchange between that star and your eye. A simple binding shift would better account for the recoil effect noted in Feynman diagrams. And a binding shift causing other binding shifts, or emanating from other binding shifts, would better account for the various bubble chamber tracks.

The *in phase* type **spin** attraction of two Cooper pair *electrons* has a Fermi-Dirac quantum entanglement element similar to the *photon* type Bose-Einstein condensate element to it because space has disappeared (condensed) between the *in phase portions* of the two *in phase* bound electrons.

We have, as part of the standard model, **Q**uantum **E**lectro**D**ynamics:

QED uses what is called the *square of the amplitude*. These are *spin up - spin down* electron pairs (*like gears meshing*) (*in the same spin plane*) where *a very minute sliver portion* of their <u>closest sides</u> of both the emitting and receiving electrons involved will make a quantum energy transfer because *these ultra tiny portions* (*a quantum*) will sense that they are both moving *in phase* in the same direction at the same speed. What the *square of the amplitude* tells us is that <u>phase is critical</u>.

When you have plenty of time, you can better understand this *square of the amplitude* quantum of energy transfer, if you listen to the **Feynman** lectures.

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

Minkowski almost had it. He told us that both the star's electron and your eye electron had to be on the <u>same</u> light cone before you could receive light from a star. It's really that a — *tiny ultra thin sliver* —portion of both electrons must be in phase, therefore — *instead of being on the same light cone* — being in the same spacetime set up. Even Einstein said he owed a debt to Minkowski who not only corrected a flaw in Einstein's math but helped Einstein enormously. Minkowski taught Einstein quite a bit about spacetime and the spacetime interval. It's a shame Minkowski died so early at 44.



If you copy this page with its <u>links</u> to your computer then you will have some other pages (<u>links</u> - *both htm and* **Adobe pdf**) to read because I've only barely scratched the surface of things in this short paper.

Fitzpatrick's website is at http://www.amperefitz.com

Another older website carrying Fitzpatrick's works FREE is: <u>http://www.rbduncan.com</u>

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or

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While all the links on this page are OK and presently working, unfortunately only about two thirds (2/3) of the links I gave, years ago, as proof (click & see: http://www.amperefitz.com/presskit.html) for statements in this latest book, published in the year MMVI, are now still working BUT your search engine will probably take you to a similar area where you should be able to read similar proof material.

& super popular now:

<u>QED — Feynman's Strange Theory of Light and Matter</u> "Feynman's Strange Theory of Light and Matter"

http://amperefitz.com/einsteins.cos.c.htm Einstein's Cosmological Constant.

<u>http://www.amperefitz.com/two.magnets.htm</u> Two magnets will show you more than thousands of books.

http://amperefitz.com/exexshorttoe.html Extra short Theory of Everything.

<u>http://www.amperefitz.com/45years.htm</u> 45 Years of Putting this Jigsaw Puzzle together — of unifying Gravity with all the other forces.

Mach's principle

The NEXT 12 FREE publications in Adobe *pdf <u>links</u>* below give you more <u>important</u> actual science about what is really going on in our universe.

QUICK version of Ampere's Laws.

http://amperefitz.com/qamp.pdf

Two magnets will show you more than thousands of books.

http://amperefitz.com/two-magnets.pdf

Sigma bond strengths in the microcosm

http://www.amperefitz.com/bond.strengths.pdf

"An important Quark message no one is heeding!"

http://amperefitz.com/quarkmspin.pdf

45 Years of Putting this Jigsaw Puzzle together — of unifying Gravity with all the other forces."

http://www.amperefitz.com/45years.pdf

"Ampere's Long Wire Law is a fact!"

http://amperefitz.com/question.pdf

"Affenstall Science Christmas Message"

http://amperefitz.com/affenstall.pdf

"Dan Fitzpatrick comments on Theoretical Physicist Mendel Sachs' Beliefs."

http://amperefitz.com/answers.to.mendel.pdf

"Why we have general relativity or why mass increases with speed."

http://amperefitz.com/why.general.relativity.pdf

"Fitz answers some Scalar Wave questions."

http://amperefitz.com/26nov2006.pdf

"And Hubble warned us this was NOT an expanding universe."

http://amperefitz.com/lj2004.pdf

"Ampere really gave us this Relative Motion Law in 1825 for things he knew were moving in the wire (electrons)."

http://amperefitz.com/relMlaw.pdf

For the LATEST Click: <u>http://www.amperefitz.com</u>

or <u>http://www.rbduncan.com</u> which was really the very first web page showing us what was actually going on in our universe.

And of course - click this following link: http://www.rbduncan.com/toprule1.htm

AND 4 Decades of Fitz's papers:

<u>4 Decades of writings of Daniel P. Fitzpatrick Jr.</u>

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- 1. Right click *link* to page.
- 2. Click send target as.

3. Click - save.

Daniel P. Fitzpatrick Jr.

January 28, 2019

If any of your work seems to correlate to my findings then please write to me at:

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Send me your e-mail.