



Shedding a bit of light on

# Dr. Milo Wolff's proof

that the electron is a standing wave.

Also herein are some other very important things

that Milo Wolff knew but somehow neglected to publish.

Milo Wolff knew that standing waves on transmitting antennas

are **STATIONARY** and very unlike the electron standing wave that is

## SCALAR & SPINNING

With a neon bulb device you can actually see a standing wave on a transmitting antenna: The neon bulb will actually light up when it passes over the wave position of a **STATIONARY** standing wave.

These standing waves must be eliminated for transmitter efficiency **because they won't dissipate and transmit much energy** like regular radio waves do.

So while we need to eliminate these standing waves, our universe seems to have built itself out of them simply **because they won't dissipate and transmit much energy:** But, as Milo Wolff discovered, each electron leaks just enough energy to keep replenishing the surrounding electrons after their own slight leakage.

Milo and I had discussed all these things, via e-mail, for over a decade. Then one day when I was visiting my son in Colorado, my son knew I wanted to actually meet Milo so my son drove me to the Denver airport and put me on a plane to the John Wayne airport in California so I could actually meet Dr. Milo Wolff. I'm forever grateful to my son for that.

If you read my site then you will see e-mails where Milo Wolff explains the big difference between the electron standing wave and those on the ordinary transmitting antenna which as Milo explains, ". . . simply cannot exist in free space."

Milo didn't publish this and many other important things that he probably could have.

Milo Wolff knew that the power to produce antenna standing waves comes from only one point, the transmitter: The power to produce the electron comes from — **not one point** but from — leakage from all surrounding electrons. This makes it SCALAR for each electron.

You can find Milo stating these things on my site but I don't know of anywhere else. And these facts are important.

Even though Milo Wolff was on the team that got us to the moon, I came away from my visit with him thinking that he felt the less the scientific community actually knew then the safer all of mankind would be.

Milo Wolff is the first person, I know of, to not only mathematically prove the electron is a scalar, spinning, standing wave but he shows us that none of this electron to electron energy transfer can go beyond the Hubble limit and this is extremely important.

Think what this means:

Since we know electron energy exchanges are quantum exchanges and if none can go beyond the Hubble limit then we have some old beliefs that need to be discarded and new facts that tell us exactly what Einstein told us in 1954, *"I consider it quite possible that physics cannot be based on the field concept, i.e., on continuous structures. In that case, nothing remains of my entire castle in the air, gravitation theory included, [and of] the rest of modern physics."*

Milo Wolff is showing you that Einstein was right! Field theory is based on a misconception, because each quantum of energy, *or the force producing it*, is **NOT** falling off inversely proportional to the square of the distance: ***How did we all miss this?***

## INSTEAD THIS IS HAPPENING:

The intensity of each quantum of energy varies with frequency but **does not vary with distance** because each quantum unit of energy, that we receive, at one particular frequency is the EXACT same amount **regardless of the distance** of a distant star.

It's the **NUMBER** of these energy quanta that are falling off inversely with the square of the distance and asking **WHY** this is so, we find what space, time and distance really are.

Yes, measuring millions of these forces, without looking at each individual quantum force, we would think our universe was obeying field theory laws but this is really not so: This is a quantum world and not a field theory world. Both can't possibly exist together! You have to make up your mind which one you believe in.

Using Phase Symmetry you can see that "*impedance matching*" is the very foundation of each quantum of energy! It shows you exactly **why** each quantum force at a specific frequency does not vary in strength with distance: You must know this before you can see how to unify the forces.

Knowing **why** allows us to see exactly what Einstein saw in 1954: There is no value whatsoever in trying to use field theory to unify the forces.

So Albert Einstein was absolutely right in 1954. But at that time the scientific community had better things to do, *using field theory*, than to listen to Einstein anymore.

Lets look at field theory in which we have attractions and repulsions:

These can be plus and minus charges

or

north and south poles

or

gravity and Einstein's repulsive cosmological constant.

However, these fields can't be unified!

But wait!

If you simply forget everything you have learned about field theory and change everything to phase then it can all be easily unified.

LOOK:

Ampere showed us that when an electrical current was put through two parallel wires in the same direction (**in phase**) then those two wires would **attract**.

Ampere also showed us if electrical currents went through

those parallel wires in opposite directions (**out of phase**) then those two wires would **repel**.

If these laws Ampere gave us are seen as **Phase Symmetry** laws then they explain magnetism, AC & DC electric motors and the entire microscopic particle world *including gluons* far, far better than Maxwell's field theory ever could.

**Phase Symmetry** even explains, *believe it or not*, Gravity. And it explains precisely how *Quantum Entanglement* works as well.

**Phase Symmetry**, therefore, not only unifies the forces but *finally* also shows us exactly what space and time really are.

This may seem hard to believe but if you are really interested in science then you should take a good look at **Phase Symmetry** because, when you do, you will also find out exactly what **gluons** really are. And we find a complicated gravitational force composed of several factors: The gravitational attraction that we see as gravitational mass travels at the **square of the speed of light** but there is far more gravitational attraction than this.

**We know magnetic forces, that travel at the speed of light, are caused by the electron's spin.**

**If you dig into Phase Symmetry you will find other gravitational forces caused by the spin of galaxies, galaxy**

clusters and super clusters and these gravitational forces travel at three different speeds all of which are much lower than the speed of light: And you would never even suspect this if you believe in field theory.

You see, anything built out of these standing waves must, of necessity, be lower frequency standing waves themselves.

Higher frequency standing waves can build lower frequency standing waves because the higher frequencies have more energy than the lower frequencies:

This is why some 13.8 billion years ago a quark only neutron universe had a beta decay BIG BANG giving us the protons and electrons we have with us today.

To see a crystal clear picture of all this, **free**, click this link and read: <http://www.rbduncan.com>

(e-mail to Carl Scheider)

Yes, "Quantum Entanglement" in Wikipedia tells about the spin up-spin down bonding that I've been harping about with Phase Symmetry.

Dr. Milo Wolff is right and this is a scalar, spinning, standing wave universe. All these spinning entities are scalar, standing

waves — the smallest to the largest — all throughout this universe even though we don't see it that way. You must visualize them merely having different spins at different spin/orbit frequencies: And using frequencies you can use phase.

Even though both spins are 180 degrees out of phase, if both spins are in the same EXACT plane then a portion of their **closest sides** are IN PHASE. Therefore this tiny portion IN PHASE locks those two spinning entities together in "Quantum Entanglement" whether these entities are quarks, electrons, stars, galaxies, clusters or super clusters.

This TINY PORTION is the quantum of, electron to electron, energy that comes into your eye from a distant star.

Since ALL these have gyroscopic precession, NO TWO can ever attract each other because once their IN PHASE sides begin to attract then precession precesses them well beyond the attraction points.

**THEREFORE:** Totally FREE quarks, electrons, stars, galaxies, etc. MUST end up not only repelling each other but NEVER will have ANY portions of themselves IN PHASE, as long as they can FULLY precess.

**BUT** once precession, say in an electron is halted, via a



**STRONGER** down quark spinning at a higher but at a harmonically **IN PHASE** frequency, then these two units are Quantum Entangled. The entangled electron, that can no longer **FULLY** precess, now **CAN** attract other **FREE** electrons via their **IN PHASE** sides.

Two binary stars (spin up-spin down) attract each other with their closest sides *harmonically* **IN PHASE**: Similarly, two electrons on the same orbital have their closest sides *directly* **IN PHASE**. Harmonically or directly **IN PHASE** doesn't really matter as long as their closest sides are perfectly *impedance matched*.

Sigma and pi chemical bonding and magnetism are **ALL** instances of electrons attracting other similar electrons via **IN PHASE impedance matched** bonds where **FULL** precession of one of the electrons has been lost.

So Phase Symmetry is the **ONLY** thing that shows you exactly why all this vast preponderance of **EMPTY SPACE** exists both in the microcosm and macrocosm.

Plus it shows you why we have "Quantum Entanglement".

But the scientific community is currently tuned into field theory and will **not** look elsewhere: In the treasured words of Sam Goldwyn, "If you make a movie and they don't want to

come, you can't stop them."

This is a frequency universe all throughout, however, we only see it as solid at ONE of those frequencies. But all these spinning, scalar, standing wave entities from quark to super cluster of galaxies have spin, have inertia and obey the SAME Phase Symmetry laws. They have entirely different space-time intervals though. So space-time in each is different: A main reason we think we need dark energy and dark matter is that the speed of light is NOT a proper measuring stick throughout the macrocosm's different spin frequencies.

The speed of light can only be used as a measuring stick through FREE SPACE: That may look like FREE SPACE throughout the macrocosm but it definitely is not because you are measuring through a material.

The only permanent things in this universe are standing waves: They are the foundation of everything. About 15 billion years ago this universe contained only neutrons. Then about 13.8 billion years ago half of these neutrons went into a beta decay giving us the protons and electrons that are in this universe that we see today: The other half of the neutrons, combined with protons and electrons to form atoms, and thus these neutrons were saved from beta decay.

In less than 14 billion years these standing waves have

produced a virtual miracle of life: But all these things that these standing waves build, such as our miraculous atomic world, are only here for a brief interval of time compared to the lengthy existence of all these standing waves themselves.

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Read about "**PHASE SYMMETRY**" FREE: (these two [links](#) below)

<http://www.amperefitz.com/phase.symmetry.htm>

or

<http://www.amperefitz.com/phase.symmetry.pdf>

Daniel P. Fitzpatrick Jr. Sunday - July, 26, 2015.

There would be no **Phase Symmetry** without Dr. Milo Wolff's Scalar, Spinning, Standing Waves.

## **Biography of Dr. Milo Wolff**

Technotran Press 124 Third St.  
Manhattan Beach, CA 90266  
Phone/fax: 310-379-7855 or 510-841-2626 (Berkeley, Calif.)

## **Biographical Data**

Date of birth: August 8, 1923 Place of birth: Glen Ridge, New Jersey Nationality : USA

### *Education*

Upsala College, BS (Biophysics),  
1948 University of Pennsylvania, MS (Physics/EE),

1953 University of Pennsylvania, PhD (Physics),  
1958 Major Academic Discipline(s) Physics, EE, Astronomy, CE, Economics. Area(s) of specialization Optics, particle structure, quantum theory, electromagnetism, light scattering, education, economics

## ***Positions Held***

Professor of Physics/EE, University of Indonesia (Bandung Institute of Technology), 1958-1962.  
USAID Grant to the U of Kentucky.  
Foundation Professor of Physics, University of Singapore (Nanyang Institute of Technology), 1970-72.  
Fulbright Grant Support. Professor of Physics, University of Sri-Lanka, 1966-1968. Established the Science Faculty. Asia Foundation support.  
Physicist, Massachusetts Institute of Technology: 1963-1969.  
Apollo mooncraft navigation system. Measurement of atmospheric chemistry by space-borne Computer-aided Tomography (CAT); principal investigator for airglow height measurement; design of space-viewed horizon sensors; satellite measurements of Earth's gravity.  
Member, Technical Staff, Aerospace Corporation, Los Angeles. 1972-1975.  
Planning earth-survey satellites. Principal investigator for NASA grant to analyze satellite gravity data.  
United Nations, Chief, Science and Technology, Economic Committee for Africa. 1975-77.  
Member of NSF Review Team to Pakistan for Science Policy (Sept-Oct), 1974.  
Visiting Astronomer, Observatoire de Paris. Planetary Polarization (Nov-Dec), 1979.  
Visiting Professor, Nanjing Institute of Technology, China. Space Navigation and Computers (Sept-Oct), 1982.

## ***Honors (awards, fellowships, prizes, honorary degrees.)***

Honorary Doctorate of Science, University of Sri-Lanka, 1992 (for pioneer work in establishing the Science Faculty at Kelaniya) Commendation from NASA for research work at Massachusetts Institute of Technology on the Earth's atmosphere and the Moon's surface for navigation of the Apollo spacecraft to the Moon.  
Honorary Science Society, Sigma Xi (1952) Various tuition scholarships, NSF Honorable Mention (1951)  
Biography in Who's Who in American Science & Engineering  
Member, National Academy of Science, Methane Energy Panel (1974)

## ***Major Work***

Wolff has found the structure of the electron consisting of two spherical quantum waves, one moving radially outward and another moving radially inward. The center of the waves is the nominal location of the electron 'particle'. These waves extend to infinity, like charge force. All 'particle' waves mix and contribute to each other, thus all matter of the universe is interrelated by this intimate connection between the fundamental 'particles' and the universe. The natural laws are a direct consequence of this Wave Structure of Matter (WSM), thus WSM underlies all of science.

Three Principles underlie the WSM

Principle I. Wave Equation Determines the behavior of Quantum Waves in Space.

Principle II. mass-energy density Principle. Generalization of Mach's Principle - determines the density of the quantum wave medium.

Principle III. Minimum Amplitude Principle (MAP). The sum of Wave Amplitudes seeks a Minimum at each point

## ***Publications***

'Exploring the Physics of the Unknown Universe' (Technotran Press, CA) A reader-friendly investigation of the natural laws with applications to particles and cosmology. 2nd edition (1994). See at [www.amazon.com](http://www.amazon.com)

'Exploring the Universe and the Origin of its Laws,' Temple University Frontier Perspectives, 6, No 2, pp. 44-56 (1997). This provides the philosophy of why Wave Structure of Matter must be true.

'The Eight-Fold Way of the Universe,' Apeiron 4, no. 4. Oct (1997).

'Relativistic Mass Increase and Doppler Shift without Special Relativity,' Galilean Electrodynamics, 8, No. 4, (1997).

'Origin of the Spin of the Electron' Amer. Phys. Soc.

This work provided the last unknown of the electron - its spin. It showed how all matter of the universe is inter-connected by their wave structures.

'Microphysics, Fundamental Laws and Cosmology.' Invited paper at Proc. 1st Int'l Sakharov Conf. Phys., Moscow, May 21-31, 1991, L. Keldysh & V. Fainberg, editors, pp.1131-1150, Nova Sci. Publ.,NY (1992).

'Fundamental Laws, Microphysics and Cosmology,' Physics Essays, 6, pp 181-203. This is the first in-depth description of the Wave Structure of Matter (1993).

'Beyond the Point Particle - A Wave Structure for the Electron,' Galilean Electrodynamics, 6, No. 5, pp. 83-91 (1995).

Two selected papers in volume on Polarization in six-volume set were published by International Society for Optical Engineering, Bruce Billings, Editor, 1990. Theory and Application of the Polarization Albedo Rules, Icarus, 44, pp. 780-792 (1980).

Polarization of Light from Rough Planetary Surfaces, Applied Optics, 14, pp. 1395-1405 (1975)

Experiments to Test Theoretical Models of the Polarization of Light, Geake, Geake and Zellner, Mon. Not. Roy. Astron. Soc., 210, pp. 89-112 (1984). These experiments showed the Wolff model to be correct.

Precision Limb Profiles for Navigation and Research, J. Spacecraft, pp. 978-983 (1967).