

## **It is our duty to know**

### **Part 2 + 3.**

Session nr 5 of 7 April 2023 – Original English.

Place : Mezza Verde in Belize

Continuation of session nr 3 of 2023- part 1

## **THE WAVE GENOME**

### **Quantum holography of DNA.**

#### **FUTURE SCIENCE SOLARI REPORT-**

#### **ULRICKE GRANOGGER - august 2018**

[\(1581\) Future Science – The Wave Genome – Quantum Holography of DNA with Ulrike Granögger - YouTube](#)

## **PART 2**

### **FOUNDATIONS FOR QUANTUM**

#### **HOLOGRAPHY IN THE CELL.**

The next and likely most important researchers about the Cosmo physical field nature of life and DNA in Russia were Nikolay Kozyrev and the eminent Vlail Petrovic Kasnacheev, both of whom have contributed such innovative and groundbreaking work that it will require a separate Solari Report. I have had the opportunity to work with the Institute of Cosmic Anthropoecology ISRIKA in Novosibirsk, and was instrumental in publishing Kaznacheev's monograph for the English-speaking world.

***Kasnacheev – New era of conscious physics – Dynamic interaction of consciousness and matter.***

*Scientific evidence in-beeld*  *an research shows*  
 that we may have already entered  
 A new era of Consciousness Physics

---

Thirty years of groundbreaking research experimentally proves the dynamic interaction of Mind and Living matter.

The Academy For Future Science (AFFS, Europe) and the Institute of Cosmic Anthropoecology (ISRICA) are cooperating on fundamental research showing how a new paradigm of Global Consciousness – *the Noosphere* – is emerging in the 21<sup>st</sup> Century.

The detailed studies from Novosibirsk make use of advanced technologies that are based on the far-reaching and controversial ideas of the Russian astrophysicist **N.A. Kozyrev**. Two patented devices, the **Kozyrev Mirror** and the **Cosmobiotron**, allow for new and convincing results in experiments of *remote viewing* and distant information transfer. What we are seeing is quantum entanglement at work and the evolution of a new ontology of consciousness reality.

**REFLECTIONS ON LIFE AND INTELLIGENCE**  
**ON PLANET EARTH**

By **Vlail P. Kaznacheev**  
 and **Alexander V. Trofimov**

General Editor: Dr. J.J. Hurtak  
 Scientific and Textual Editor: Ulrike Granogger

**356 pages, hardcover edition**  
**35.00 EUR**



[www.anthropoecology.com](http://www.anthropoecology.com) Order Now

Kaznacheev discovered the **Cytopathic Mirror Effect**. This is a distant intracellular electromagnetic interaction between 2 tissue cultures one of which was subjected to a detrimental biological or chemical agent, such as a virus or a poison. The 2 cultures were in sealed containers with only an optical window between them. With glass as the optical window between them. The infected culture would die while the other culture remained healthy. But when a quartz crystal window was placed between the cell cultures – and we need to know that quartz crystal glass allows ultraviolet light to pass through – then some 12 hours later the disease also appeared in the healthy culture. The effect could be transmitted even further, to a third culture that never physically came in contact with the poison or virus.

This was very clear indication for electromagnetic communication between living cells.

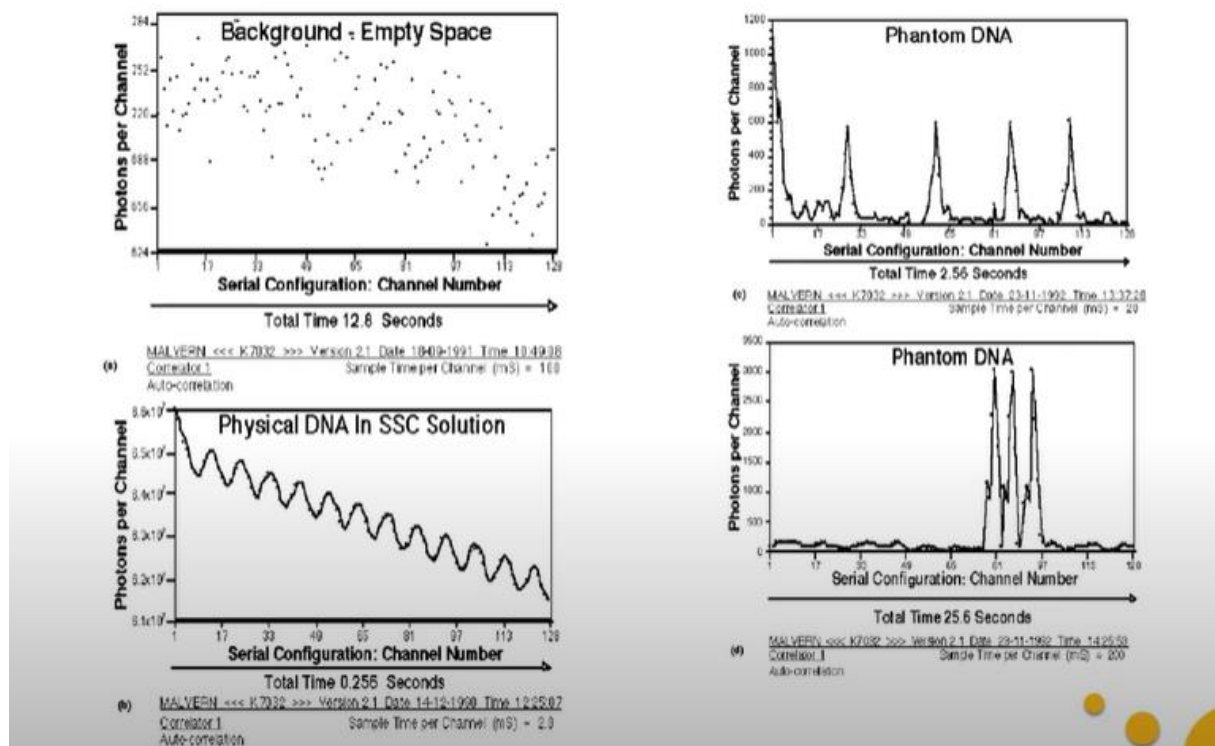
Much of what we are going to talk about today has its origin in Novosibirsk, and also Peter Gariaev's work takes its origin in the school of this esteemed Institute. Let us now turn towards what Gariaev found.

The 1st indication of DNA holography was discovered in experiments in 1985. The findings were only published in English in 1991 and later described in greater detail in 1994 in Peter Gariaev's book **THE WAVE GENOME** in Russian. A now famous article that made its way to the internet was published by Vladimir Poponin in 1995 working with The **HeartMath Institute** (California – studies on heart-brain connections) but using the material of Gariaev.

What was it that they found?

The discovery was made as a side effect of experiments that were looking at the vibration modes of DNA in solution. They were using a dynamic light scattering laser or spectrometer ; this is a device that examines how material scatters light which provides insight into the behavior of material. So the impacting laser light is diffracted showing how the particles of different sizes have unique scattering signature.

## The Wave Genome



The first graph (*empty space*) shows the control measurements before the DNA sample is put into the scattering chamber. Obviously only very few and randomly distributed photons can be detected.

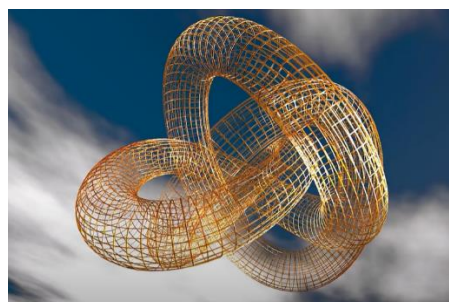
When the physical DNA in a solution (*Physical DNA in SSC solution*) is placed into the scattering chamber the characteristic waveform or photon signature is recorded.

But the important discovery was made when the actual physical sample of DNA was removed from the scattering chamber, and still, for a while, a regular photon image (*phantom DNA above on the right*) was registered in the now empty dark chamber. So with any material present a “phantom” was recorded and if the space in the scattering chamber is not disturbed, this phantom-like memory could be measured for up to a month! Think about this!

That the presence of DNA creates not only its own coherent light-field, but also makes an imprint onto the background of seemingly empty space and does that so clearly that the informational imprint, its state of order, was still retrievable hours and days later.

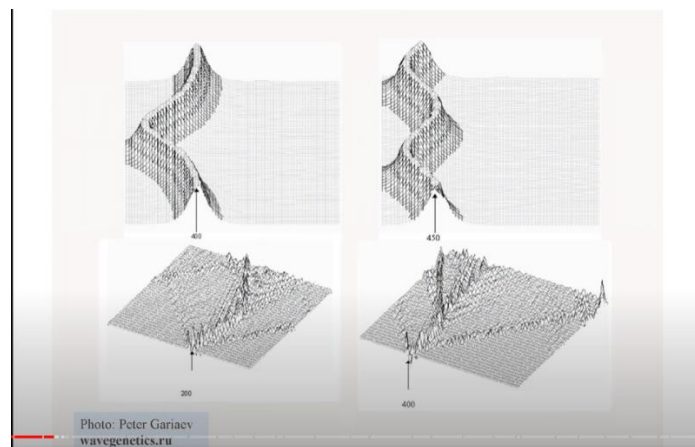
That means that your own presence in the room will always leave its signature its memory. And this is how it can be that a very loving or otherwise coherent person will leave their imprint in a house or situation for a long time.

This could be defined as a form of ‘entanglement’ of the ‘biological’ atoms with the background field

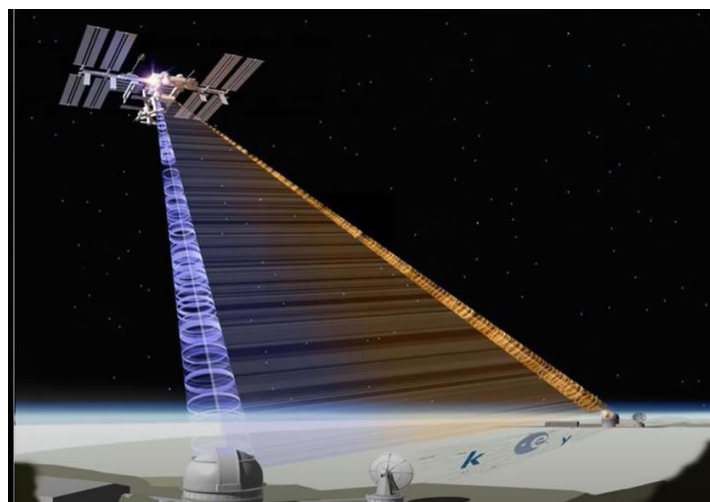


Thus manifesting as a non-local – namely literally “non-there” phenomenon. In terms of physics of course, this requires the existence of some kind of vacuum field, something that was decried for a long time but is now established as the concept of the **ZERO point fluctuations** that quantum field theory embraces. The coherence or order of DNA and as Gariaev believes, the information coded in the ‘spin-states’ of the ordered particles, interact with the zero-point fluctuations and elicit particle fields from the physical vacuum.

It also indicates that the DNA-molecule is transmitted as a single waveform.



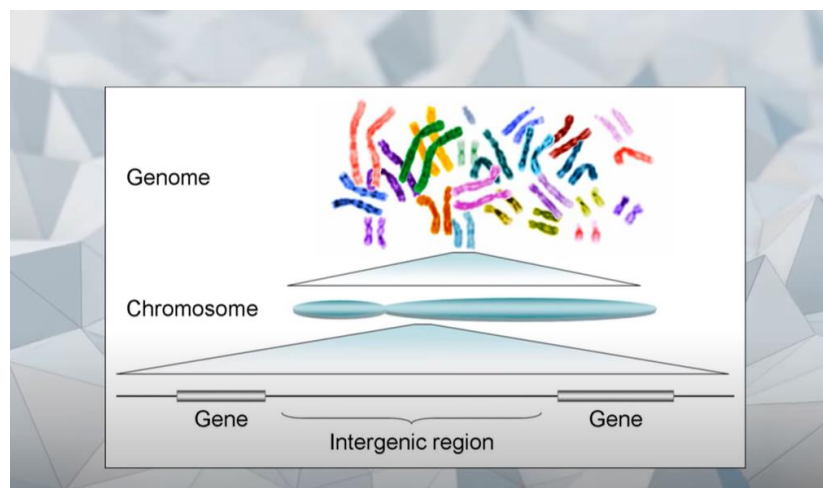
Creating quantum spin interference patterns with the vacuum. An implication is that ultimately DNA could be transferred or transported – let us say **teleported** – immaterially and non-locally as **light or laser modulation**.



That, in principle, a quantum teleportation of biological molecules is feasible was shown already in 2003 by the group of researchers around Anton Zeilinger, famous for quantum teleportation experiments at Vienna University. They created interference patterns of heavy C<sub>60</sub>F<sub>48</sub> Fullerene molecules, and in 2011 of even bigger molecules consisting of up to 430 atoms that demonstrated that even classical objects – molecules – have a type of wave nature.

Before we look at the experiments and the phenomenal results that strongly suggest a wave nature of the biological molecules such as the DNA in particular, let us try to create more of the scientific framework that will allow us to understand and describe what is going on.

Whereas current genetic theory focuses on the 24,000 active coding genes in terms of chemistry,




the **New Model** regards **DNA** as a stable **waveform** of information that is not primarily **acting through** the molecular chemistry and composition but through **oscillations** and **coherent acoustic and electromagnetic fields** that the atoms and molecules create.

There exist a complex interference pattern at the cellular and subcellular level produced on the one hand by the mechanical or elastic vibrations of the atoms and molecules in the **liquid crystal hydrogel** environment which would entail Fröhlich-like **wave patterns or PHONONS** within the tiny

tubes and cavities of the cell organelles, such as the microtubules, the mitochondria, the electric dipole lipid membranes, or in the geometry of the DNA, macromolecule itself.

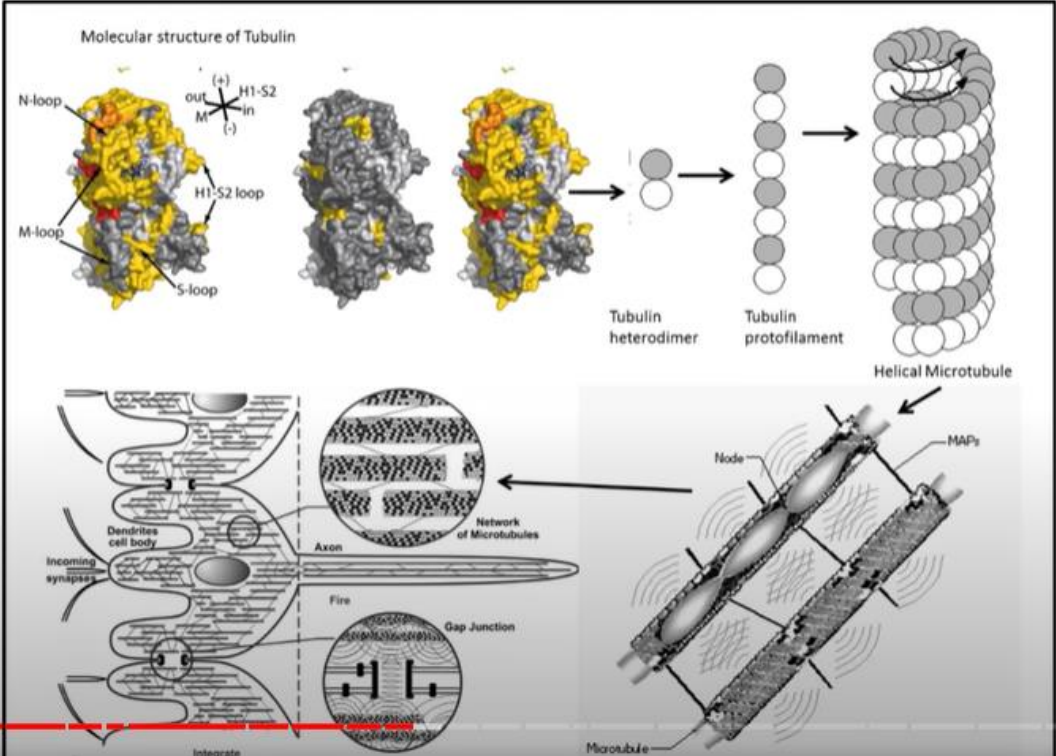


These vibrational interference fields can overlap and produce standing wave patterns of micro-sounds or **acoustic waves inside the cell**.


RESONANCE SCIENCE FOUNDATION
About ▾    Navigate ▾

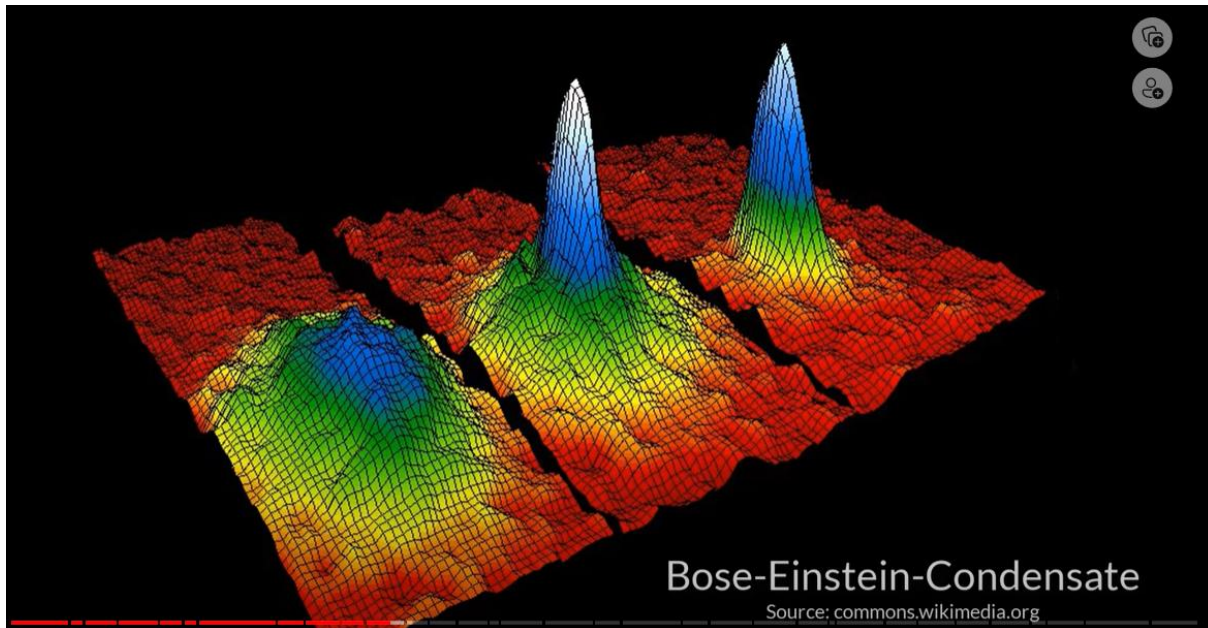
Sciences in Tsukuba, Japan, found how the high frequency oscillation of microtubules – measured at one million cycles per second in this case (one megahertz – 1MHz oscillation of electrical dipole moments of free electrons and conformational switching), cause wave interference that may give rise to the characteristic shape of the electrical oscillations of the brain that are correlated with conscious awareness, specifically a new kind of electroencephalographic signal (EEG) of 40 Hz / 4 Hz nested gestalts (gamma and delta oscillations, respectively), referred to as “beat frequencies”.

Molecular structure of Tubulin



*Conscious awareness – ‘beat frequencies’.*

Fröhlich-type wave patterns or Fröhlich Condensates are almost like Bose-Einstein-Condensates but at high temperatures.



A Bose- Einstein-Condensate involves the overlapping of the DeBroglie wavelengths of particles or the 'matter waves' to such an extent that the whole system can be described by a single wave function.

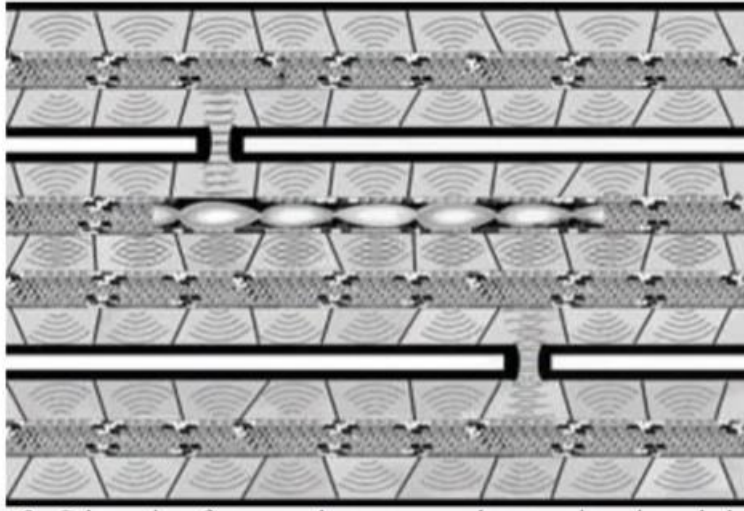
German physicist Herbert Fröhlich predicted in 1968 that biological proteins and membranes could enter such a state when excited through metabolic pumping, that is energy uptake, which would result in coherent excitation frequencies that act like macroscopic quantum states.

We read from an article by Mae-Wan Ho :

*"the excited molecules and membranes will vibrate at various characteristic frequencies. This eventually builds up into collective modes or coherent excitations of both electromechanical oscillations, phonons or sound waves in solid medium, and electromagnetic radiations, photons.*

*The possibility arises that organisms may actually use electromagnetic radiation to communicate between cells or between different organisms. "*



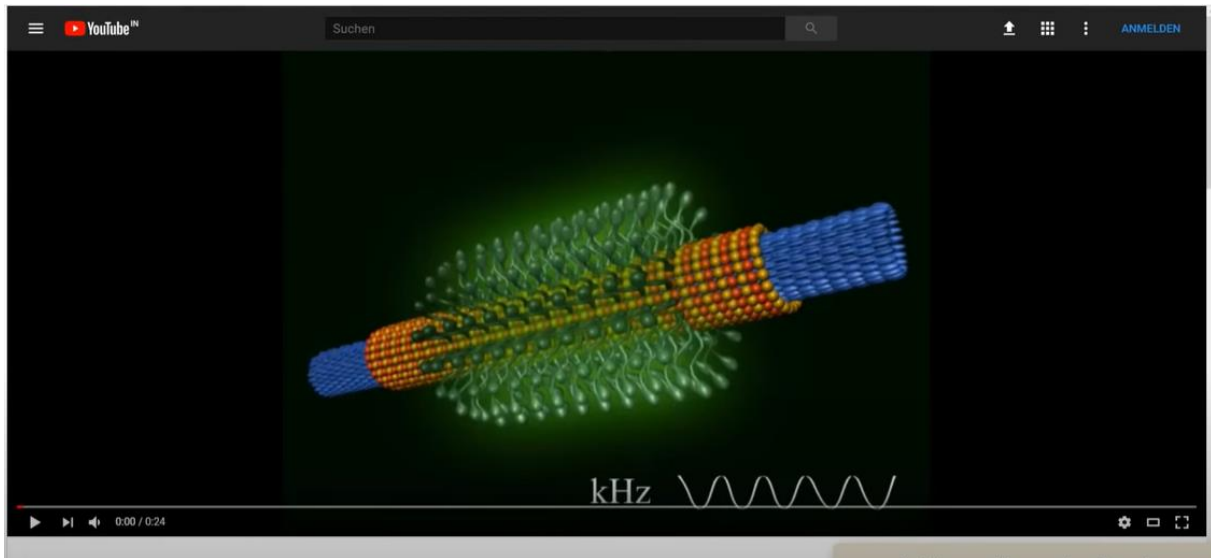


### Fröhlich oscillations in microtubules

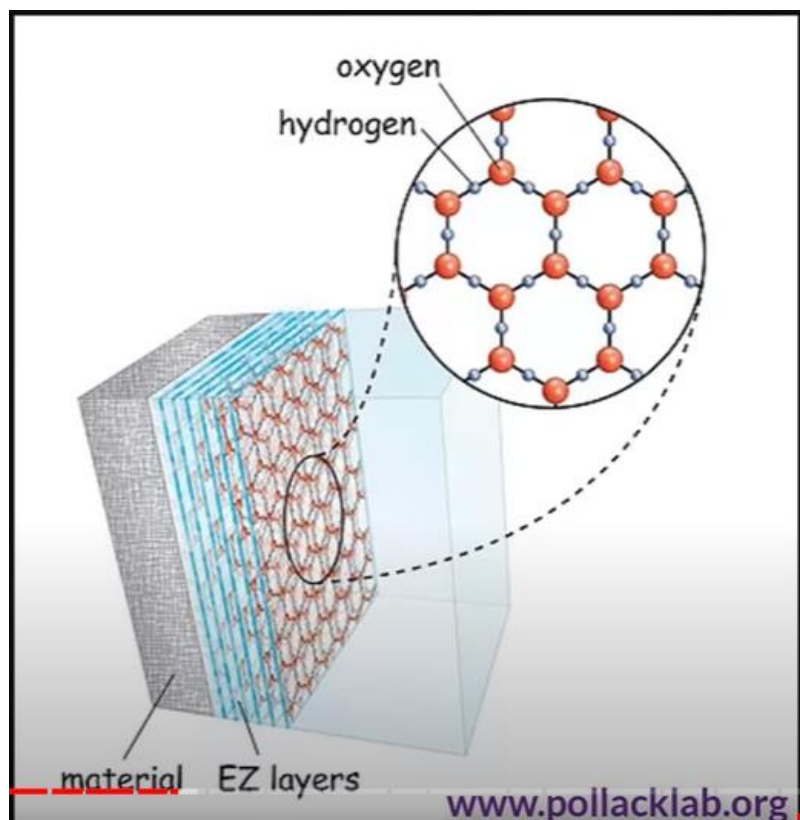
These Fröhlich oscillations inside the microtubules, as well as in possibly other structures and molecules of biological importance are also part of the theory by Stuart Hameroff for a basis of consciousness . And it was recently supported by The New Jersey Institute of Technology and Yeshiva University in Israel, showing that microtubules seem to have particular frequencies stored at their edges. The researchers were looking at the topological phonon edges of microtubules which are quanta of sound energy or vibration at the very edge of the surface of a material.

This plays a role in superconductivity and is related to a special class of subatomic particle – the so-called Majorana Fermions. Majorana, by the way, are part of the theory to explain Dark Matter and may be related to neutrinos. It is not yet clear if neutrinos are actually Majorana particles but it is showing us that there may be a component of superconductivity involved along the edges of the cytoskeleton.

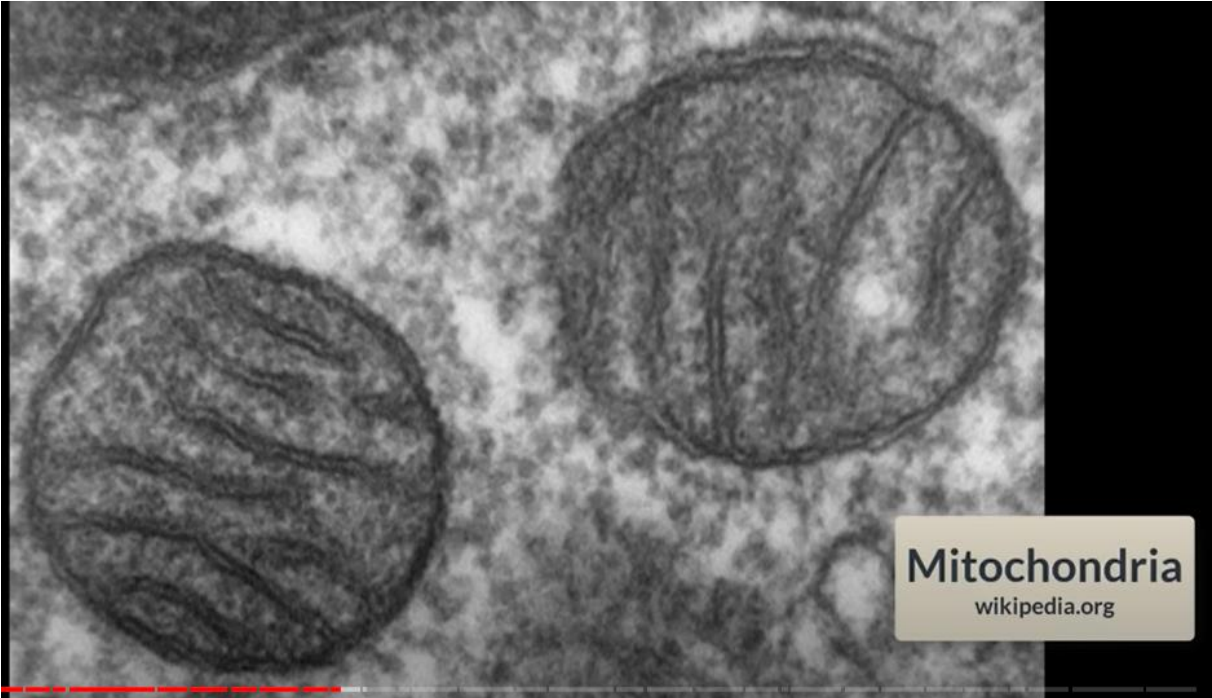
Here you can see 3 different frequency bands that are found along the edges of the microtubules.



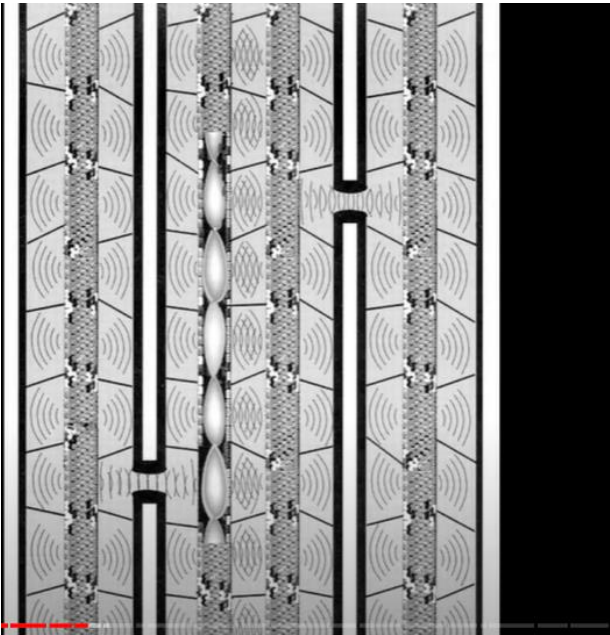
It is at these edges that one can find the **4<sup>th</sup> phase of water** (*beyond solid, liquid, vapor*), or the "Exclusion Zone" of Gerald Pollack's research that shows that the cytoplasm is composed of a particular type of intracellular water – structured water – a **liquid crystal type of water** in the cell that facilitates energy and information transfer.



That a layer of ordered water is created around the microtubules was first reported by L.A. Amos in 1979. A strong electric field is also formed around mitochondria which are aligned around microtubules.



So the acoustic Fröhlich condensates vibrate and structure the Waterous environment inside the cell. The **ordered water** in the region of the electric field along the membrane **forms a gel-like structure** which allows for a **high excitation of intracellular vibrations**.



This gel-region shows higher pH-values and comprises several layers of water molecules so that it can take on macroscopic dimensions.

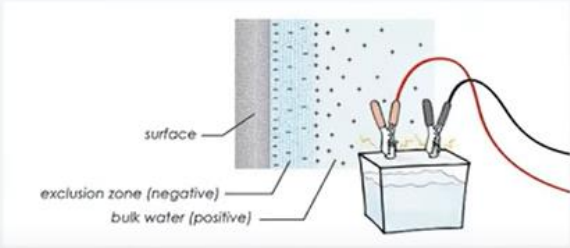
Decrease or loss of membrane potential along the hedges changes the water ordering around the microtubules and mitochondria and is indication for a decrease in the energy pumping.

**Pollack Laboratory**  
Uncovering nature's deeply held secrets

erry research lab publications news

It appears that various salts are excluded from EZ water. Hence, efforts are underway to exploit the technologies above to desalinate water.

3 Energy from Water and Light



Separation of charge allows for the drawing of electrical energy from the water-based battery.

We found that the solute-exclusion zone is charged, while the zone beyond is oppositely charged. This separation constitutes a battery, from which current can be drawn. The battery is re-charged by incident radiant energy. Hence, the process resembles the first step of photosynthesis in that incident light yields charge-separation and useful energy. It is effectively a photoelectric effect, except that the medium is ordered water.

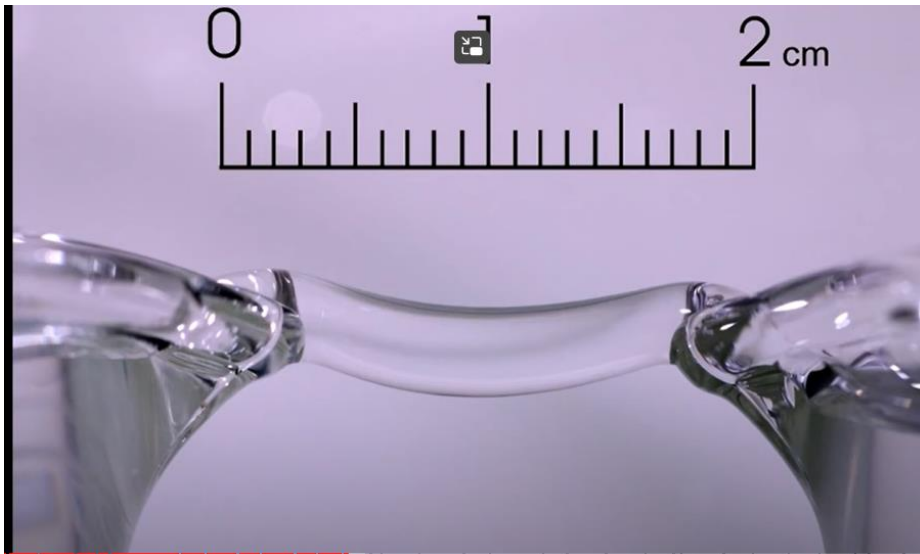
Top of Page  
EZ Water  
Water-Based Technologies  
Water and Health  
Water and Cell Biology  
Information in Water  
Biological Motion  
Origin of Life

[www.pollacklab.org](http://www.pollacklab.org)

Now it is interesting to note that Otto Wartburg (*book: The prime cause and prevention of cancer*) pointed out that dysfunctional mitochondria will switch to produce energy from fermentation rather than oxidation or proton transfer to the inside of the mitochondria. ATP production by fermentation takes place outside of the mitochondria in the cytoplasm where the cellular water is no longer structured and pH is acidic.

It is very likely that this reversed form of ATP production and cytoplasmic acidity is the cause for cancer. Importantly, however, it has been shown that the water ordering can also be achieved by an electric field of external source. Researchers at the Institute of Physical and Theoretical Chemistry in Graz, Austria, report on a floating water bridge between two glass-beakers that was created by applying a High-Voltage direct current

electric field. The water can climb out of the container and walk across the air to the other beaker.



The length of the floating water-bridge was up to 3cm. Inside the water-bridge Elmar Fuchs and Jacob Woisetschläger observed high frequency oscillations of different velocity than the surface waves. Thus the bridge acts as a waveguide.

The cellular water and cytoprotein structures and membranes take on properties that are now studied in areas such as

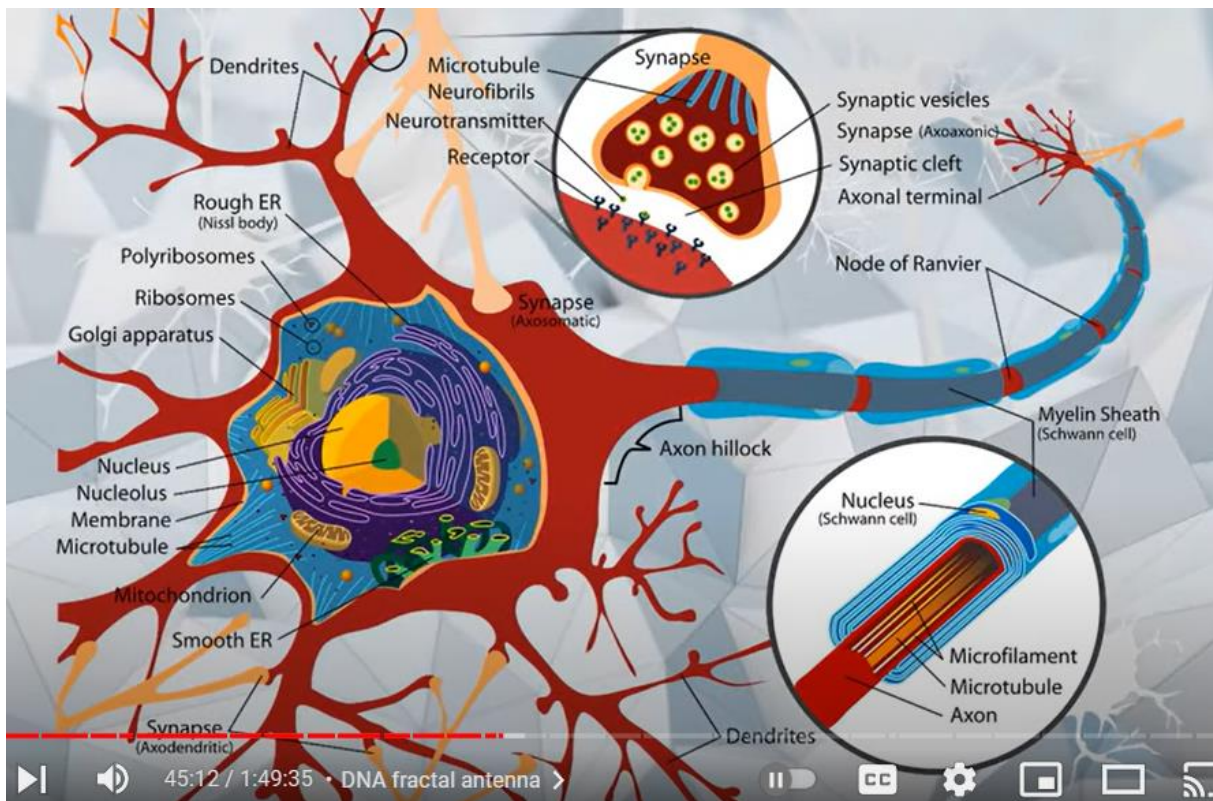
- Mechano biology
- Meta-materials, that is materials with unusual electromagnetic properties.

Researchers at The Georgia Institute of Technology, for example, have demonstrated that hydrogel nanoparticles or gel materials, such as you find in the cells, can be used to form photonic crystals which can be tuned for telecommunication through the crystalline lattice. If it is possible to guide the photon through the crystalline lattice it can be used as a photonic computer.

## PART 3

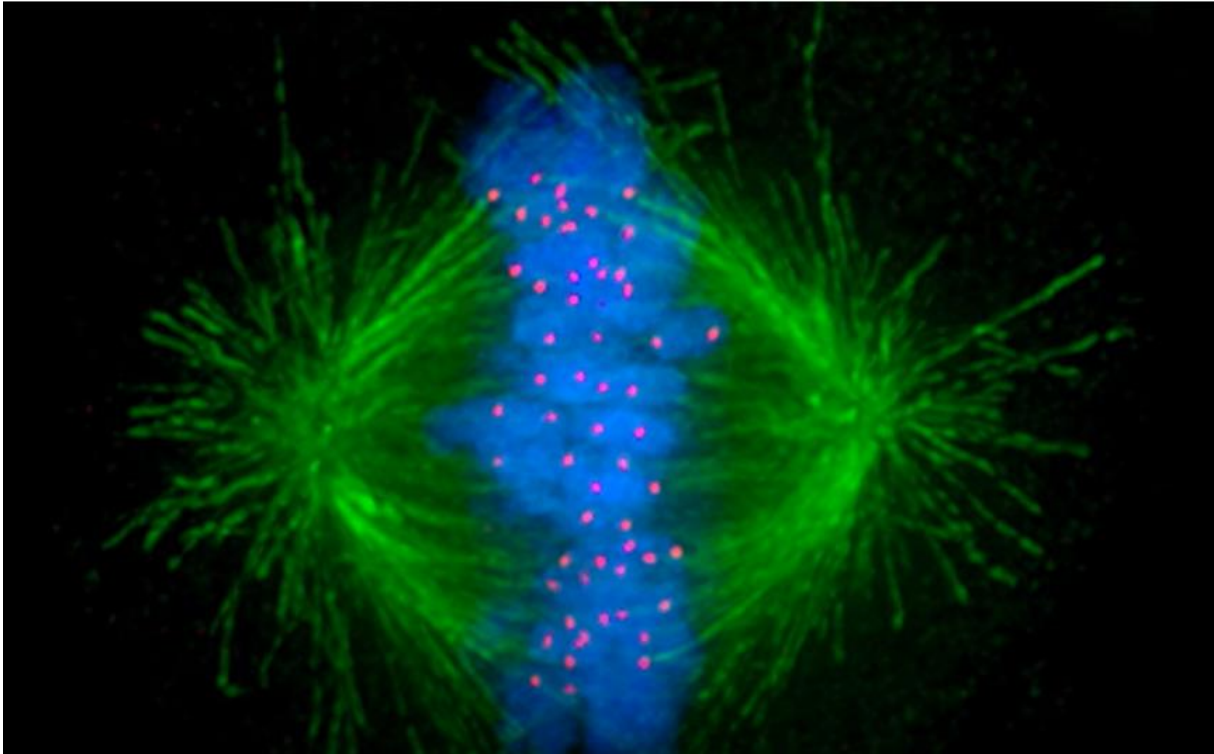
### RESEARCH AND EXPERIMENTS

I know this is a lot of technical information but please don't switch off, rather pose and think about this for a moment. Try to understand and visualize what is going on in your own cells. There are highly ordered negentropic processes in each of our cells right now, that have the ability to establish long-range communication links across membranes through water bridges and stable waveforms. This is not the chemical action potential of neuron signaling but a much faster coherent wave train that employs quantum-mechanical characteristics.



All the cells are in coherent communication with each other based on the liquid crystal vibration patterns in the cellular architecture and it is upon this vibrating lattice that the holographic image-like bio-information rides. I consider it more than an analogy that we were created "In the Image" of a Divine Master Blueprint.

Remember that together with the Fröhlich Condensate of phonons, or micro-acoustic vibrations, there is also the coherent cellular biophoton field according to Fritz Popp that generates laser interference patterns which are the basis for the manifestation of quantum holographic processes in the highly ordered milieu of the interior cell.



You kind of have two layers of constructive interference patterns, one acoustic, the other electromagnetic, that seem to generate complex holographic images and wave structures that can be maintained for a long time. This can be regarded as a new type of "video system" encoding DNA in several layers that remain intact across various domains. The DNA here acts both as an antenna or receiver as well as a sender of genetic images with the image itself not being stored as a molecular chemical text, but as an interference pattern, a quantum hologram of acoustical and electromagnetic waves.

Gariaev considers the DNA as a soliton, an ultra-stable wave train traveling along the travelling along the complete molecular lattice. The molecule as a whole becomes a harmonic quantum oscillator and as such

will be seen to have resonance coupling abilities with all scales of the universe.

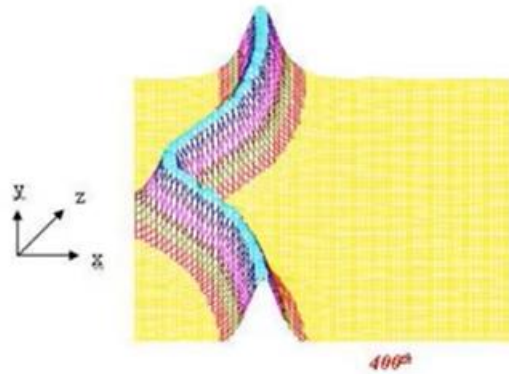
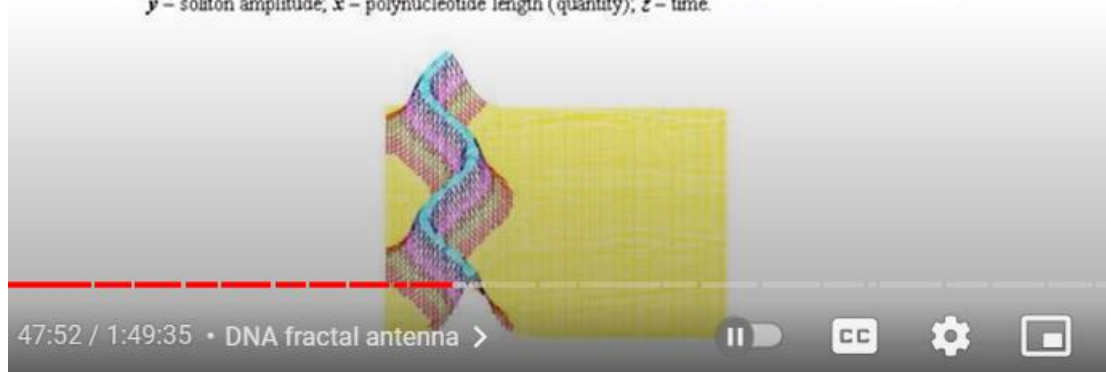


Fig 1

Effects of nucleotide DNA sequences on dynamics of conforming perturbation of soliton's wave. Nucleotide sequence – bird sacoma virus (first 600 pairs) Epicenter of the perturbation – 400<sup>th</sup> nucleotide.  $y$  – soliton amplitude,  $x$  – polynucleotide length (quantity);  $z$  – time.



The observation that the genetic information is not actually stored inside the DNA but may be simply 'read' by the laser properties of the coherent particle behavior of the biopolymers from a library that is stored somewhere else. This is corroborated by a unique discovery of two scientists of Ciba Geigy, now Novartis, in Basel Switzerland. Guido Ebner and Heinz Schürch placed seeds of germ cells of different species into an electrostatic field, a DC voltage field much like we have it naturally in our atmosphere in a Thunderstorm or as it occurs between membrane dipoles in the cell. Only, they created fields of an intensity of up to 10,000 Volts. The seeds remained in the electric field for about 3 days or sometimes longer and then were allowed to sprout and grow.





The resulting plant or organism displayed a striking phenomenon : modern-day maize seeds, for example, will develop up to 5 ears in one place, where normally only one cob develops.



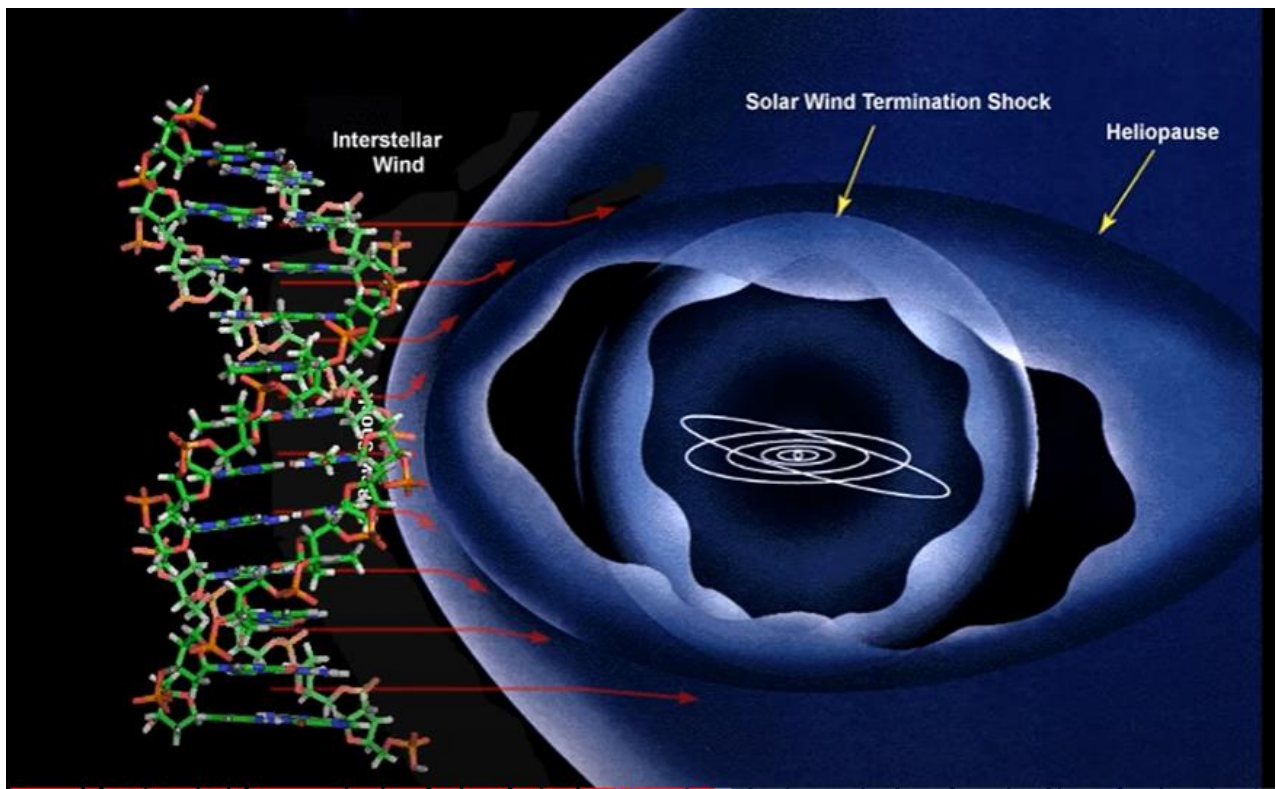
This is how maize grew in much earlier evolutionary times.

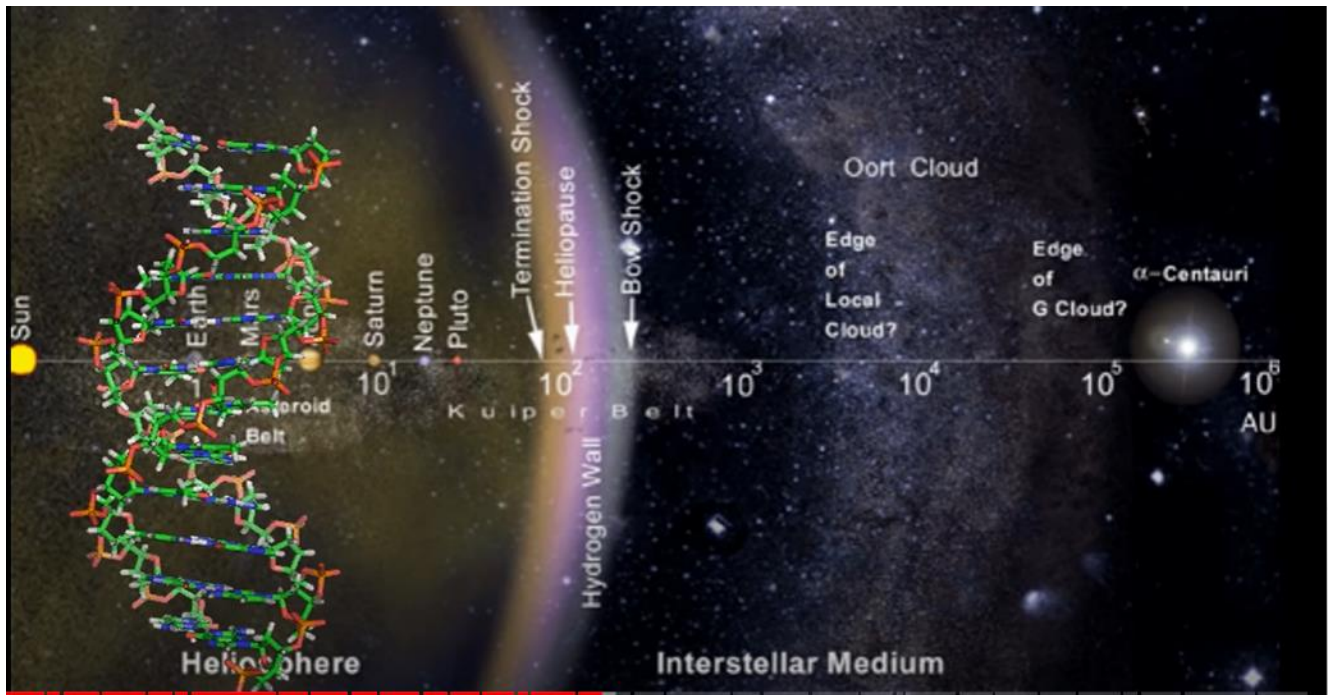
Genetic characteristics that had been lost through cultivation or cross-breeding were brought back and were continued into the following generation of the same plant. The same happened to modern day wood fern whose spores were treated in the electrostatic field. It reversed its evolutionary history and grew into a different phenotype of a fern that grew millions of years ago but no longer today. Chemically and genetically

the wood fern was still the same but its shape and appearance had jumped back in time.



How is that possible unless the genetic information is stored somewhere else, possibly in the helio-geo-magnetic field, or will at least require a coupling with this background field to access the current version of a plant.





The eggs of modern rainbow trout were treated in the same field and surprised the researchers again. The fish born from the treated spawn reversed back in time for 150 years to manifest a phenotype of trout that since has become extinct. It has a larger underjaw, different coloring, is much larger in size, and displays a much less domesticated behavior than modern farm trout. It also does not need all the antibiotics that farm fish need to survive.

The current paradigm of the genetics cannot explain the phenomenon.

Is evolutionary history recorded in and perhaps even controlled from a surrounding field?

Could we access different stages of development by fine-tuning the electric-field treatment?

And if the genetic image exists as a resonance in some kind of vacuum field can it be updated and changed by waveforms alone?

Could in principle a holographic genetic image be inserted into a magnetic field of another planet? And trigger life somewhere else?



Ebner and Schürch both died unexpectedly in 2001 and the research that was even presented on Swiss and German TV in the 1990, is no longer talked about. After patenting the discovery and method Ciba Geigy discontinued the research. Of course we must consider that the same company also produces fertilizers for maize growing and the pharmaceuticals for trout farming.

**MEZZA VERDE GROUP.**

<http://www.mezzaverde.com>