Quantum Information, Tesla Waves and Biofields Prof. Dr. Lucian M. Ionescu Department of Mathematics Illinois State University, Normal, IL

Contents

• Theory: Quantum Information Dynamics

- Unifying Fields and Matter;
- Precursors: Heisenberg, and Chinese Medicine;
- Technology and Alternative Models:
 - Quantum Optics & Non-linear optics;
 - Tesla longitudinal waves & Torsion / Scalar fields.
- New Age "Bio-Technology":
 - Biofields, Morphogenetic fields and Auras,
 - Chakras, chi flow and meridians etc.
- Practice (How to benefit from all this):
 - Harvesting chi (Structural Cavity Effect & Feng-shui, Sacred Geometry & Orgone accumulators, breathing & Chi Gung)
 - Chi generators (Magnetic potentials & toroidal coils, Reiki & healing hands etc.)

Levels of Description

-<u>Mathematics</u> and Computer Science provide a precise language for modeling (mind and automata), for Science, e.g. Physics. This is the Theory; but Technology is the <u>practical</u> interface with "reality" (3D game of life). The meaning of all this, at a higher level belongs to Philosophy and beliefs systems, social scale or individual / group scale.

- I will present some <u>conclusions of my research journey</u> for an individual audience, not aiming to convince the academia (it's not main-stream research). For further explanations, consult my sources and/or ask.

Ancient vs. Modern Science

Greek / Chinese Science

- Atom hypothesis
- Space and Time are discrete (Zenon etc.)
- No technology interface
- Mind and Body as an investigation instrument and measurement apparatus
- Holistic approach (top-down design)

Western Science & Medicine

- H-atom and Quantum Mechanics
- Wave-particle duality, yet still thinking "particle physics" and doing "high energy physics"
- Classification oriented medicine and biology, (dissection / "local medicine"; no cybernetics)
- Bottom-up, constructive science, based on upgrades and patching (knowledge quilting).

Programming the Game of Life: Q+

+

- The logically fundamental duality is "local-global". Classical information (local aspects) emerges from Quantum Information (global aspects) via measurements, e.g. Heisenberg's Matrix Mechanics (quantum computing ahead of its time, since classical computing was not invented!)
- (Details) Back-step: Schrodinger Equation. Leap forward: Feynman Path Integrals; the restricting "leash": background space-time; the result: String Theory: dead AND alive!).

Bits, Qubits and Super-symmetry

- The world is discrete, and the row material is the <u>unit</u> <u>of quantum information</u>: the QuBIT (combination of o AND 1; True AND False; Up & Down; Yin & Yang etc.)
- A <u>measurement basis</u> defines the associated BIT ("The Tao that can be told is not the eternal Tao" ... same idea, in a language of restricted circulation)

Super-Symmetry

- At (non-standard) physics level, photons and electrons are <u>basic</u> aspects, relative to experimental measure-ments, of **quantum information channels** & gates (think / picture and model using Riemann surfaces).
- Technologically different, yet logically isomorphic:
 - Quantum Optics (Optic frequencies SU(2)-waves)
 - Tesla longitudinal waves (Radio frequencies SU(2)waves)

• Aura and biophotons (All spectrum SU(2)-waves) These are all examples of Quantum Computing!

Examples of Quantum Circuits

- <u>Mach-Zehnder Interferometer</u> (MZI). It is a custom geometric version of the double slit experiment, the "Mother" of all quantum phenomena (Feynman);
- Tesla longitudinal waves. Prof. Konstantin Meyl's <u>experimental kit</u> was used to test the similarity in properties with MZI and biofields (aura etc.)
- Biofields. The standing wave between left and right palm is of the same nature (chi flow in Chinese science; Qi in Japanize science: quantum info). Living systems process information in the most general form: qubits and quantum registers.

Mach-Zehnder Interferometer and Mother of All Quantum Phenomena

- Quantum computing model: 2x2 Heisenberg matrix;
- Quantum Information Dynamics model:
 - SU(2)-fermionic loop with two Input/Output bosonic ports (Toroidal electron cloud : "Orbital")
 - Topologically a punctured Riemann surface, but with quaternionic structure (Hodge duality);
- There is NO PHOTON in the loop; the laser's "photon" (if we have to break the supper-symmetric picture, to touch base with textbook quantum physics) excites the toroidal "electron orbital", which emits a pair of photons at the 2nd beam splitter (Output ports).

Quantum optics, with coherent sources of light, can be used to implement Quantum Computing

Classical and Quantum Computing for high school students: ISU Summer Research Academy 2012:

http://cemast2011.webs.com/

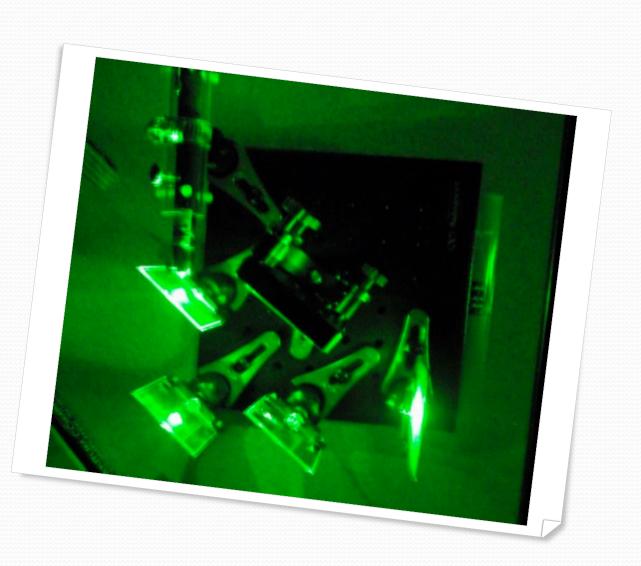


Fig. 1 Mach-Zehnder Interferometer on an optic board, with beam splitters, mirrors and laser source.

Tesla Longitudinal Waves

- Maxwell-Hertz EM is Heaviside's "simplified" version: truncated by eliminating the physics meaning of the vector potential and its quantum phase. The vector potential represents the monodromy of the qubit flow on the network – SU(2)supersymmetric model unifying "electron" and "photon".
- Non-linear optics and torsion/spinor fields are theories generalizing EM, but still formulated in the language of differential equations and differential geometry, assuming a background space-time and continuity (intractable from a computational point of view).
- QID is both "non-linear" due to the dynamics of the network and Hodge structure (e & mu constitutive law), and spinorial due to U(2)-symmetry. It resolves the problem of ambient space-time from String Theory (none!), and unifies bosons and fermions at conceptual level. It is computational simple: <u>flows on graphs</u>.

Tesla Longitudinal Waves ("Scalar waves" / LEM), generated using <u>Meyl's experimental kit</u>.

Experiments performed by high school students demonstrate the special properties of Tesla waves:
1) Standing wave (can be felt connecting with your palms /aura);
2) Forma factor: pi/2 (Hertz / Tesla, transversal vs. longitudinal)

ISU Summer Research Academy 2012: http://cemast2011.webs.com/

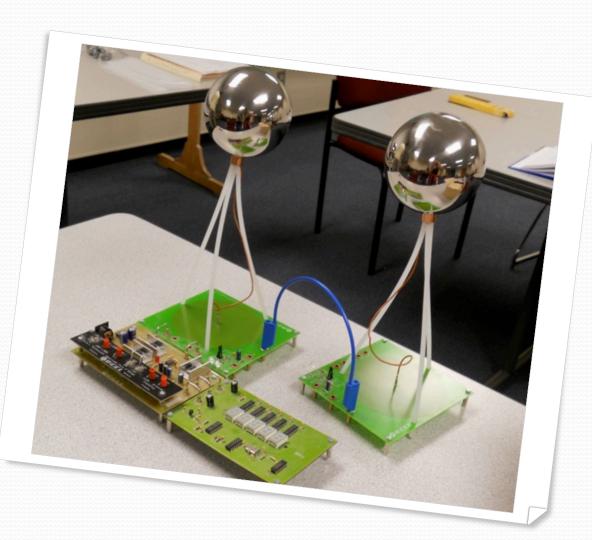
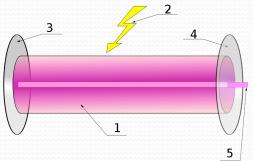


Fig. 2 Two RLC circuits form a fermionic loop at resonance , through which the longitudinal Tesla wave propagates ; Hertzian waves are also emitted as usual.

Overunity: LASER-like origin

- The claim of overunity could not be verified due to lack of an oscilloscope (!)
- Since between the spherical electrodes a standing wave forms, similar to a **resonant cavity of a LASER**, we claim that the free-energy is due to a stimulated emission of the ambient molecules, similar to "light AMPLIFICATION by <u>stimulated emission</u> of Radiation.
 - 1. Gain medium
 - 2. Laser pumping energy
 - 3. High reflector
 - 4. Output coupler
 - 5. Laser beam



• A calorimetric measurement in a controlled environment is worth exploring.

Biofields

- Unity of Nature demands that a connection exists between longitudinal EM Tesla waves and various interaction phenomena of biological origin: Kirilian discharges, auras perceived by sensitive people, morphogenetic fields (Rupert Shaldrake), bio-photons (Gurevich a.a.), chi meridians (Chinese medicine), telepathy, remote viewing etc.
- The unity of description of QID and logic imperatives (<u>Birtkoff and von Newmann: Logic of QM</u>; L.M.I.), lead to a natural conclusion: these <u>are</u> networks of standing waves, or rather (duplex) channels of communication of quantum information, of the same nature as those present in MZI or Tesla experiments.

Kirilian photo of fingers <u>More images</u>

The discharges occur at high voltages, when the whole fermionic channel ("orbital") is dense populated with output ports, emitting photons (intermittent couplings with objects from the environment).

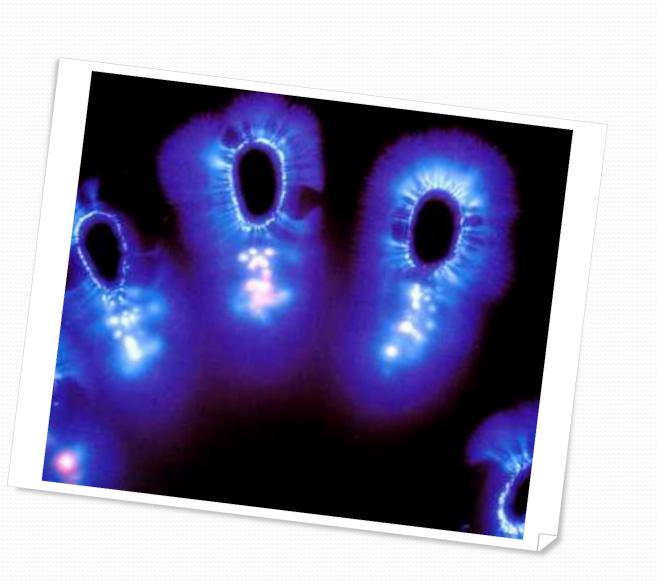


Fig. 3 E=h v implies high energies are needed for optic spectrum emissions.

Auras ...

(Rise your shield for good health!)

- The **aura** of a plant, animals or human, is a highly structured **quantum information network** having the role of protecting and exchanging information with the environment. It is at <u>energetic and informational level</u> what skin is at ("plain") material level (your quantum firewall).
- To maintain a good health we must keep our shields up at all times ... unless we are ready to let guests communicate at deeper levels (exchanging feelings, empathy, "chemistry", telepathy etc.).
- It seems that auras control the growth/development of living systems, as blueprints: <u>morphogenetic fields</u> (installation package mechanism).

Have your aura checked periodically ...

Biofield (old term, "tribute" to space and continuity)
Aura: external biofield

• The permanence is achieved as a **standing wave**, selfresonance (closed 3D-cycles within the network)

• The modes of vibration are 3D-analogs of plane vibrations studied by **cymatics**.



Fig. 4 Aura of ... let's call her Aura =) Biophotons at the border of visible spectrum (Let's ask Prof. Konstantin Korotkov : <u>Inner Life of Plants</u>)

Aura Detection ...

- Sensitive individuals can see, or sense, auras of humans, animals or plants (not a big difference at the level of quantum information processing).
- YOU (and me) need **training**! Your dog/cat, probably not, explain their good sense of how you feel or what your intensions are ... Be mindful that your anger , happiness or satisfaction, gets displayed (literally) on your 3D screen ... so, think twice about your involuntary broadcasts =)
- Nowadays, detection has become an "easy", scientific process, using aura cameras:
 - Dr. Korotkov's Lab of Biofield Research <u>korotkov.org</u>
 - Detection devices and <u>electrophoton</u> (!) <u>GDVPlanet.com</u>
 - <u>Aura Imaging</u> etc.

Aura camera and/or Kirilian photography?

EPC/GDV Mini lab





Fig. 5 Prof. Dr. Konstantin Korotkov

... and Healing

- Some of the chakras are portals (I/O-ports) of connection to the world: hands, eyes feet etc.
- Chi Gung is training in the art of sensing, building and sending chi.
- Various people have various innate capabilities in this direction, but learning can compensate for this.
- There are various forms of healing by giving one's life force, or just channeling it, to another subject in order to replenish this essential ingredient: Reiki etc.
- There are claims that Tesla lights can do that (I personally zapped a mimosa pudica in this way ⊕; so, be careful; asking a Chi Master would help)

<u>Reiki</u> and Hands-On-Healing

Palms , eyes and soles (feet) are important portals (I/Oports, chakras) for sending and receiving chi (life energy, quantum information, magnetic charges)

Palms can form a standing wave , called "chi ball", sensed as a slinky producing tingling sensations





Fig. 6 Palm chi balls are standing waves of the same type (longitudinal) as Tesla waves; and they feel similarly (tingling and cold or warm, depending, it seams, on individual and gender : Yin or Yang!?)

Back to Basics: What is Space?

- Space, time, matter and information: just different aspects of the Living Matrix. Einstein unified conceptually spacetime AND matter (General Relativity); Heisenberg's Matrix Mechanics & Quantum Computing; Shannon and Information; Turing, von Newman, Feynman etc. yet an upgrade <u>was</u> long overdue: <u>Digital World Theory</u> and Quantum Information Dynamics (L.M.I.).
- Main point: chi is EM vector potential circulation; it is quantized, and the unit (fluxon) is the magnetic "charge" (re-evaluate Wheeler and Misner 's whormhole / topological origin of electric and magnetic charges).

Have Your Own Healing Coil

- It now all make sense: electric current and magnetic currents (A-flow, since B=curl A shows just the axis of flow ... trust Faraday!) are beneficial;
- A source/sink of chi flow can be made using a toroidal coil. To achieve a vortex flow rather then a laminar flow, one must tilt the B-axis: **Rodin coil**.
- Warning: since a sink of chi can deplete of chi, use caution when experimenting with toroidal coils. Ask a Chi Master to evaluate your coil =)
- Learn how to make a Rodin coil or ask John Fiala for a good price on one =)

Geometry of Qubits, Sacred Geometry, Feng Shui etc.

- Qubits are elements of SU(2), topologically a 3D-sphere. The modes of vibration of qubits and of quantum channels (transmision of longitudinal waves), should be correlated with the knowledge labeled as "Sacred Geometry".
- A subject of research is to compare it with the so called Cavity Structural Effect of Grebenikov (resonant open cavities affording naturally occuring Tesla standing waves; e.g. FenShui etc.), and, Kozyrev interpretation of time in the framework of torsion fields.
- The mathematical-physics: Hermitiean correspondence between Quantum Computing/QID and Special Relativity / QED: "2+2*=3+1" etc. (see authors articles).

Rodin Coil and Qubits (Super-briefly / Food-for-thought =)

- The main ideas which is worth learning and putting together belong to interdisciplinary research: Math/Phys/ CS & practical experience s (e.g. J. Naudin etc. – list too big!).
- The qubit SU(2) is the Hopf circle fibration. The envelop of circles of a given size is a torus.





Hopf TORUS fibration (qubits / SU(2)) Rodin (toroidal) coil ("Greg's vortex" etc.)

Physics Reduces to Number Theory

- Yes, (integer) numbers are "real", we can get rid of fundamental constants (long story): "Remarks on Physics as Number Theory", by L.M. Ionescu (see also my NPA conference talk).
- Their basic constituents, the primes are build of Fermat primes, which in physics correspond to the 6 quarks;
- The fine structure constant α≈1/137 corresponds to Riemann zeta function value (partition function of Riemann gas/ Primon model)

Vortex Based Mathematics leads to ... Elliptic Curves (full circle!)

- The original Rodin coil is based on Z9 congruence arithmetic, with its multiplicative subgroup generated by 2: {1,2,4,5,7, 8}=Z9* with φ(9)=6, a nice p-group with a fine ternary toroidal structure Z3 X Z3 (p-adic extension, not a direct product), which will lead to nice connections between 3D, i.e. quarks as "time" directions of change, and elliptic curves, which are topologically tori (Riemann surfaces of genus 1), after reduction modulo 3.
- Main point: discrete vortex physics (chi/ qubit/ magnetic flow) meets Multiplicative Number Theory at its best – Elliptic Curves and Modular Forms (SL₂(Z), Mobius transformations, Fuchsian groups etc.)

What is Magnetic "Field" and How Does It Look?

- Howard Johnson ... vortices
- Konstantin Meyl ... vortices
- Greg Volk ... vortices
- Chakras ... vortices
- R. M. Kiehn & Falaco solitons ... vortices
- L.M.I.: qubits as a Hopf fibration ... vortices

... hm ... maybe it's vortex like? =) Yin and Yang with various "form-factors", controlled by Fermat primes!

So What!?

- Don't wait to have to heal thyself. Stay alive, full of life energy (think "information").
- We're in worse shape then Schrodinger's cat: most of our organs etc. are half dead after 50, depleted of chi.
- So, things to include in your favorite diet:
 - Breath outdoors (Taoist and Buhdist breathing);
 - Love plants and animals (Connect with sources of chi; oh, don't forget your domestic partner!;-)
 - Pray for all and all should pray for you (Good thoughts help, heal etc. Check Masaru Emoto/ Water memory etc.)
 - Stay away from stressing situations (Don't fight FDA, NSF etc. – not easy, I know! "If you can't say something nice ...")

Almost forgot ... MUSIC as MEDICINE (Homework: Google that!)

 Not just effects of vibration are good, after Lackovsky, Abrams etc. useful and amazing healers; but music is in a deeper, (classical logic) incomprehensible way the food for the soul and harmony (now that makes sense ⁽³⁾)

... and dance on music is even better!

- THE END -



(Click me :)

My To Do List

- Material diet: veggies, fruits, proteins, hormone balance;
- Ethereal diet: breathing (Tao/Buhda), sunbathe (pure orgone; sun gazing is dangerous), circulate chi (empathy, "chemistry" and making love);
- Technological supplements (cautious about non-natural sources!): chi generators, coils and Tesla lights;
- Staying healthy: check your aura periodically, make sure you feel good (Ray Charles!?); learn and apply Feng Shui principles; learn about orgone accumulators ... learn period [©]
- Listen to music and dance everyday (twice on Sundays); sing as much as you talk on the phone (not in public, right? Karaoke is ok even online :)

... and You've gota try Ice Dancing!