Quoting Glen Rein Ph.d. fom the book *Quantum Biology*

EXPERIMENTAL GENERATION OF NON-HERTZIAN FIELDS

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Several devices have been built that have been predicted to generate nonHertzian fields, although it is likely that they also generate quantum potentials and conventional EM fields. Most of these devices generate non-Hertzian fields by causing the opposing interaction of two EM fields 180 degrees apart in order to cancel their EM vectors (McClain, 1979). This has been achieved using unconventional coil geometries, eg. mobius strips (Seiki, 1990) and caduceus windings (Smith, 1964).

The first application of such self-canceling coils was accomplished by Tesla at the turn of the century. Tesl&s magnifying transmitter used two coils where oscillations were phased to create opposing magnetic fields (Sector, 1916). He demonstrated that such a coil could transmit energy, which he referred to as non-Hertzian, over long distances without losses (Tesla, 1904). Today these coils are used in psychotronics devices primarily to broadcast frequency information.

Non-inductive toroid resistors are commonly used in RF and MW electronics circuits to eliminate inductance from resistor elements and to minimize magnetic field loses by containing the B and H fields within the toroid (Electronics Ill, 1969). They have also been used by NASA in high speed computer circuitry used in space craft (Electronics Ill, 1969).

The unique properties of the toroid geometry have been studied by several investigators. Jennison, for example, has characterized the properties of radiation trapped in phase-locked cavities similar to a toroid (Jennison, 1978). Application of an external EM field to such a system accelerates it so its velocity increases in a non-linear "staircase" manner. Even more unusual is the observation that the velocity continues to increase even after the stimulus has been removed. This relativistic effect was mathe matically accounted for by the presence of two orthogonal standing waves. The interaction of these fields was further shown to be dependent on the toroid configuration and on the distribution of the fields trapped in the cavity. Similar field dynamics may be occurring with toroid resistors which also trap magnetic fields.

Toroid resistors can also act as antennae. Since magnetic fluxes are contained within them, the magnetic field outside the torus is zero. The presence of quantum potential fields in the absence of magnetic fields has been predicted (Aharonov, 1959) and demonstrated (Chambers, 1960). These experiments fed direct current into a toroid coil and generated static quantum potential fields.Researchers today use alternating currents which generate time-varying quantum fields.

A mobius resistor/coil/antennae is a topological modification of a toroid resistor which is folded back on itself, thereby allowing current to flow in opposite directions. Thus in addition to containing the magnetic fields, the mobius resistor will cancel them. This same principle is used in bifilar coils common in electrical engineering.

Mobius resistors have similar field properties as a toroid since the toroid configuration is contained within the mobius winding. In contrast to a torus, however, the unique topology of the mobius resistor bucks and cancels magnetic fields contained within the coil. Since the magnetic field vectors along a mobius coil reverse at the twist, half the vectors are oriented upward and half are oriented downward. Therefore, considering the whole system, the vectors sum to zero (Seiki, 1990). It has been proposed that bucking of the EM fields in the mobius confirguation causes curvature of local space/time thereby acting as a gateway for bringing a higher dimensional energy into our 3D world(Johnson, 1992). The term non-Hertzian will be used here to refer to this novel type of energy.

The presence of such a non-Hertzian field has been predicted by Seike who used the quantum field theory to characterize the field dynamics in mobius antennae (Seiki, 1990). This type of analysis is referred to as Topological Electronics. Using the magnetic flux associated with a mobius and the electrical potential across a resistor, Seike has solved Maxwell's equations and obtained a solution which describes the imaginary component of the electrostatic scalar potential and the imaginary component of the cor responding magnetic field. The ohmic loss of resistance is calculated to be a negative value indicating that the imaginary current absorbs (rather than emits) heat and is associated with the presence of negative energy. This conclusion is consistent with the negative energy associated with an electron derived from the Dirac equation (Dirac, 1928). Using special relativity theory, Seike further derives a description of the resultant imaginary electric field emitted by a mobius resistor and the real magnetic field contained within it. The equations predict the interchange of energy between these two fields will generate an imaginary magnetic field.

Non-Hertzian fields generated from a toroid antennae would be expected to contain the same spectral frequency information as the input current driving the toroid coil. The non-Hertzian fields associated with a mobius antennae, on the other hand, will have a unique and complex set of harmonics based on constructive and destructive interference of certain frequencies when the magnetic fields are canceled.

An entirely different method for generating non-Hertzian fields, which doesn't involve self-cancelling coils, is used in non-linear optics by using fourwave mixing and phase conjugation. In four-wave mixing experiments, an EM field is introduced into a vector canceled space, thereby generating a non-Hertzian wave with a greater amplitude than that of the EM field that triggered the reaction (Abrams, 1978). This approach, therefore, is capable of generating high-powered non-Hertzian waves. In phase conjugati on experiments, an EM field is reflected off of a non-linear mirror (Pepper, 1982). This generates a non-Hertzian field that is referred to as a phase conjugate replica of the original EM vector. The replica travels backward in time and retraces the path taken by the EM vector. This technique was first used by Raymond Rife in the 1930's when he built the highpowered Rife microscope. The microscope utilized the convergence property of phase-conjugate waves, thereby mini mizing distortion normally associated w ith conventional EM fields which diverge as they move away from their source.

Another method for generating non-Hertzian waves, which is conunonly used in non-linear plasma physics, is to abruptly pulse a plasma (Wells, 1970). Plasmas are complex macroscopic structures composed of several types of EM fields and non-Hertzian fields including light, circularly polarized Alfven waves, and ion acoustic waves. Plasma theory has described well the complex non-linear interaction among these plasma waves and their non-linear propagation via a selffocusing mechanism. Vortex ring structures as sociated with plasmas have been observed experimentally (Bostick, 1957). The non-Hertzian emissions from plasma tubes are the basis of Priore's cancer- curing machine and Rife's beam ray tube. Finally, some radionic devices may generate non-Hertzians fields by using psychotronic generators.

Non-Hertzian waves can not be measured using conventional EM detectors, which detect only translational or vibrational movements of electrons. The possibility of a new kind of energy intrigued Einstein, who used the term subtle energy to describe the energy remaining in the absence of all known forces, that is, energy that could not be measured. Nonetheless, the generation of non Hertzian fields by the

devices described above seems to result in the manifestation of anomalous behaviors in the measurement of temperature, inertia, or mass (Aspden, 1950). Such anomalies were first observed by Tesla as ball lightning during the experiments with his magnifying coil (Tesla, 1934). More recently, anomalous behaviors have been observed in association with some of the modem free-energy devices (Aspden, 1950)."