

Perspective

Crop Circles & Schumann Consciousness Waves

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Abstract

In article, we discuss the plausibility that crop circles are the result of the interaction of Schumann waves with crops. Previously, we defined the Schumann waves and brain waves as the results of the interaction of Schumann waves with human brain which are parts of Schumann Consciousness field (SCF). The full spacetime between planets and Sun in reality is the SCF. Through spacetime, mathematical graph such as Julia Set is coded in SCF and transported to the surface of the Earth, that is, mathematical graph modulates the SCT.

Keywords: Crop circle, Schumann Wave, consciousness, Julia set, Earth.

1. Historical overview

In 1952, Winfried Otto Schumann, a professor at the Technische Hochschule München, Germany, published several papers postulating the resonances of extremely low frequency (ELF) waves in the Earth-air-ionosphere waveguide excited by lightning discharges. His idea was composed of three topics: (1) the propagation of electromagnetic waves in a spherical cavity; (2) the Earth-air-ionosphere system acting as a waveguide; and (3) excitation by lightning discharges.

During the last four years, a rather extensive literature search had been undertaken to unveil some historical facts related to the physics of the so-called “Schumann resonances.” Although the search led to a vast amount of literature on the topic starting in the middle of the 1960s, references predating Schumann’s publications were rather scarce. Nevertheless, an even more profound search in wave propagation-related journals and books unearthed some interesting pieces of real and pretended precursors to Winfried Schumann.

Although extensive, any literature search can never be entirely exhaustive, and in particular, the one performed for this study was limited mainly with respect to the Russian literature, and therefore, it cannot be ruled out that this synopsis misses some relevant pieces. If this is the case, the author would be deeply grateful to get notice from the reader.

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The scope of this paper is limited to prime sources of the pre-Schumann era (before 1952) and to the main developments in the field during roughly the first decade after Schumann predicted the Earth-ionosphere cavity oscillations. Additionally, this report is not supposed to render earlier reviews on this physical topic obsolete; it should rather complement them.

Any paper on ELF (or VLF) wave propagation, and certainly a historical review, should mention the “monumental” work of James R. Wait who published in sum over 800 papers and eight books on electromagnetics. He was an outstanding theoretician and contributed to all the different aspects of very low frequency (VLF) and ELF wave propagation. A full appreciation of Wait’s work is outside the scope of this paper, and therefore the reader is referred to some recollections of Wait’s colleagues, e.g., the paper by *Smith* (2000, and references therein).

Schumann published only in German, and up to now only scarce information about his life and work has been available in the English scientific/technical literature. Therefore, a short biographical summary will be given in section 2. In sections 3 and 4 the historical development of the problem of propagation of electro- magnetic waves in a cavity between conducting spherical shells and the waveguide concept of the Earth-ionosphere system with examples from the scientific/technical literature will be outlined. A discussion about Schumann’s work regarding the long wavelength oscillations in the Earth- ionosphere cavity will be carried out in section 5, followed by the final sections devoted to the reception of Schumann’s work by his contemporaries and the early observational evidence for the existence of “Schumann resonances.”

2. Overview of Crop Circles

Crop circles - strange patterns that appear mysteriously overnight in farmers' field - provoke puzzlement, delight and intrigue among the press and public alike (Fig.1 and Fig.2). The Crop circles are mostly found in the United Kingdom, but have spread to dozens of countries around the world in past decades. The mystery has inspired countless books, blogs, fan groups, researchers (dubbed "cereologists") and even Hollywood films.

Despite having been studied for decades, the question remains: Who — or what — is making them?

Many people believe that crop circles have been reported for centuries, a claim repeated in many books and websites devoted to the mystery. Their primary piece of evidence is a woodcut from 1678 that appears to show a field of oat stalks laid out in a circle. Some take this to be a first-hand eyewitness account of a crop circle, but a little historical investigation shows otherwise.

The woodcut actually illustrates what in folklore is called a "mowing devil" legend, in which an English farmer told a worker with whom he was feuding that he "would rather pay the Devil himself" to cut his oat field than pay the fee demanded. The source of the harvesting is not unknown or mysterious; it is indeed Satan himself, who — complete with signature horns and a tail — can be seen in the woodcut holding a scythe.



Fig.1. Crop Circle “Julia set”



Fig.2 The fractal model of crop circles (Fatou and Julia calculations)

Some claim that the first crop circles (though they were not called that at the time) appeared near the small town of Tully, Australia. In 1966, a farmer said he saw a flying saucer rise up from a swampy area and fly away; when he went to investigate he saw a roughly circular area of debris and apparently flattened reeds and grass, which he assumed had been made by the alien spacecraft (but which police investigators said was likely caused by a natural phenomenon such as a dust devil or waterspout). Referred in the press as "flying saucer nests," this story is more a UFO report than a crop circle report.

As in the 1678 mowing devil legend, the case for it being linked to crop circles is especially weak when we consider that the impression or formation was not made in a crop of any kind but instead in ordinary grass. A round impression in a lawn or grassy area is not necessarily mysterious (as anyone with a kiddie pool in the back yard knows). Indeed, mysterious circles have appeared in grass throughout the world that are sometimes attributed to fairies but instead caused by disease.

In fact, the first real crop circles didn't appear until the 1970s, when simple circles began appearing in the English countryside. The number and complexity of the circles increased dramatically, reaching a peak in the 1980s and 1990s when increasingly elaborate circles were produced, including those illustrating complex mathematical equations.

In July 1996, one of the world's most complex and spectacular crop circles appeared in England, across a highway from the mysterious and world-famous Stonehenge monument in the Wiltshire countryside. It was astonishing fractal pattern called a Julia Set, and while some simple or rough circles might be explained away as the result of a strange weather phenomenon, this one unmistakably demonstrated intelligence. The only question was whether that intelligence was terrestrial or extra-terrestrial.

Making the design all the more mysterious, it was claimed that the circle appeared in less than an hour and during the daytime — which, if true, would be virtually impossible for hoaxers to accomplish. The circle became one of the most famous and important crop circles in history.

It was later revealed that the circle had in fact been made in about three hours (by three hoaxers) very early that morning. It simply hadn't been noticed until the following afternoon when spotted from an airplane overhead.

Unlike other mysterious phenomenon such as psychic powers, ghosts, or Bigfoot, there is no doubt that crop circles are "real." The evidence that they exist is clear and overwhelming. The real question is instead what creates them — and there are ways to investigate that question.

We can look at both internal and external evidence to evaluate crop circles. Internal information includes the content and meaning of the designs (is there anything that indicates that any information contained in the "messages" is of extraterrestrial origin?), and external information,

including the physical construction of the crop designs themselves (is there anything that indicates that the designs were created by anything other than humans?)

Crop circle enthusiasts have come up with many theories about what create the patterns, ranging from the plausible to the absurd. One explanation in vogue in the early 1980s was that the mysterious circle patterns were accidentally produced by the especially vigorous sexual activity of horny hedgehogs. Some people have suggested that the circles are somehow created by localized and precise wind patterns, or by scientifically undetectable Earth energy fields and meridians called ley lines.

Others, such as molecular biologist Horace Drew, suggest that the answer lies instead in time travel or alien life. He theorizes that the patterns could be made by human time travelers from the distant future to help them navigate our planet. Drew, working on the assumption that the designs are intended as messages, believes he has decoded crop circle symbols and that they contain messages such as "Believe," "There is good out there," "Beware the bearers of false gifts and their broken promises," and "We oppose deception" (all, presumably, in English).

However, these odd, pseudo-biblical messages undermine the credibility of the crop circles, or at least the meaning read into them. Of all the information that an extraterrestrial intelligence might choose to convey to humanity — ranging from how to contact them to engineering secrets of faster-than-light travel — these aliens chose to impart intentionally cryptic messages about false gifts, broken promises

The crops circles or rather Field crops are in my opinion the result of Schumann field interaction with crops. In this paper we search the equation which can describe that interaction

3. The model

In paper (Kozlowski, 2017), we showed that for particles with $m \ll M$ (*Planck Mass*) equation

$$\nabla^2 \Psi - \frac{1}{c^2} \frac{\partial^2 \Psi}{\partial t^2} = 0 \quad (1)$$

describes the pilot wave equation. It is interesting to observe that the pilot wave equation is independent of mass of the particles.

Let us look for the solution of the Eq. (1), , in the form (for 1D)

$$\Psi = \Psi(x - ct) \quad (2)$$

where Ψ is for example Julia set encoded in Schumann wave

For finite Planck mass we obtain (Kozłowski, 2017)

$$\Psi(x-ct) = \exp\left(\frac{2\mu ic}{\hbar}(x-ct)\right) \quad (3)$$

where the reduced μ mass equals

$$\mu = \frac{m_i M_p}{m + M_p} \quad (4)$$

For $m \ll M_p$, i.e., for all elementary particles one obtains

$$\mu = m_i \quad (5)$$

and formula (2) describes the wave function for free Schrödinger particles

$$\Psi(x-ct) = \exp\left(\frac{2mic}{\hbar}(x-ct)\right) \quad (6)$$

For $m \gg M_p$, $\mu = M_p$

$$\Psi(x-ct) = \exp\left(\frac{2M_p ic}{\hbar}(x-ct)\right) \quad (7)$$

From formula (6) we conclude that $\Psi(x-ct)$ is independent of m of particle, m .

In the case $m < M_p$ from formulae (6) and (7) one obtains

$$\mu = m \left(1 - \frac{m}{M_p}\right) \quad (8)$$

$$\Psi(x-ct) = \exp\left(\frac{2imc}{\hbar}(x-ct)\right) \exp\left(-i \frac{m}{M_p} \left(\frac{2mc}{\hbar}x - \frac{2mc^2}{\hbar}t\right)\right)$$

In formula (8) we put

$$k = \frac{2m_i c}{\hbar} \quad (9)$$

$$\omega = \frac{2m_i c^2}{\hbar}$$

and obtain

$$\Psi(x-ct) = e^{i(kx-\omega t)} e^{-i \frac{m}{M_p}(kx-\omega t)} \quad (10)$$

As can be concluded from formula (10) the second term depends on the gravity

$$\exp\left[-i \frac{m_i}{M_p} (kx - \omega t)\right] = \exp\left[-i \left(\frac{m_i^2 G}{\hbar c}\right)^{1/2} (kx - \omega t)\right] \quad (11)$$

where G is the Newton gravity constant.

It is interesting to observe that the new constant, α_G ,

$$\alpha_G = \frac{m_i^2 G}{\hbar c} \quad (12)$$

is the gravitational constant. For $m_i = m_N$ nucleon mass

$$\alpha_G = 5.9042 \cdot 10^{-39}$$

The equation (10) describes the resulting “picture” of initial Schumann wave (Julia set)

4. Conclusions

In this article, the solution of the QM equation with memory term (gravity dependent) was obtained. It is shown that for $m < M_p$, where M_p is the mass of Planck particle=neuron mass the wave function Ψ contains the component dependent on the structure constant for gravity

$$\alpha_G = \frac{m_i^2 G}{\hbar c} .$$

We argue that the Field crops are the results of interactions of Schumann waves with crops. Assuming the linearity of the wave equation formulated in our earlier papers we argue that the Field crops are the formulae encoded in Schumann waves. Due to the weakness of Schumann field the picture of formulae can be obtained only in crop (photographic plate) for Schumann photons.

Received October 27, 2019; Accepted December 11, 2019

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Appendix

Winfried Otto Schumann (1888–1974)

Winfried Otto Schumann was born on 20 May 1888 in Tübingen, Germany, the son of the physical chemist Ernst Otto Schumann (1852 – 1898) [Poggendorff, 1904]. Because of his father’s several job-related relocations, he grew up in different places in German-speaking countries, among them Berndorf, southeast of Vienna (Austria), and Karolinental, near Prague (now Karlín, part of Praha, the capital of the Czech Republic).

From 1905 to 1909, he studied electrical engineering at the Technische Hochschule Karlsruhe (now named Universität Karlsruhe, the first German polytechnic, nowadays equivalent to a technical university) and worked subsequently as assistant to the founder of its Institute of Electrical Engineering, Engelbert Arnold (1856 – 1911) [Poggendorff, 1956; Killy, 1995]. During this time, Schumann prepared his doctoral thesis “On the torques of the damper winding of a multiphase synchronous machine at small pendulum oscillations in parallel operation” under Arnold’s guidance (until his death in November 1911) and earned his doctorate degree “Dr.-Ing.” after his viva voce in 1912.

After his final examination he started to work in industry as head of the High-Voltage Laboratory for the company Brown, Boveri & Cie at Baden, Switzerland, until 1914. During the First World War he served as a radio operator, and beginning in 1919 he worked as research assistant of the Robert-Bosch-Stiftung (Robert Bosch Foundation) in the Institute of Electrical Engineering at the Technische Hochschule Stuttgart (now Universität Stuttgart). There he also qualified for university teaching (“Habilitation”) in 1920 with a thesis on “Electrical breakdown stress of gases.” In the same year he was appointed Associate Professor (“Außerordentlicher Universitätsprofessor”) of Technical Physics at the University in Jena, Germany.

In 1924, he was appointed full professor (“Ordentlicher Universitätsprofessor”) for theoretical electrical engineering at the newly founded Electro-Physical Laboratory at the Technische Hochschule München (since 1970 named Technische Universität München), Germany. This laboratory was later upgraded and renamed Institute of Electrophysics. From September 1947 to October 1948 Schumann was on leave and worked at Wright Airfield (later renamed Wright-Patterson Air Force Base), Dayton, Ohio, for the United States Air Force (see Figure 1). In 1961 he was given the status of professor emeritus, but he remained active in research until his death on 24 September 1974.