#### Friedrich Balck

# **Innovative Physics Experiments into Perceivable Effects - Insight into Characteristics and Structures of Invisible Matter**

#### Abstract

160 years ago, Baron von Reichenbach conducted experiments with people who were able to perceive light phenomena at magnetic poles. The meticulously detailed experiments and corresponding results cannot be explained as of yet using our current understanding of the physical world. The operating principle of a therapeutic instrument developed by Oskar Korschelt around thirty years later is also based on effects that cannot be understood today. Korschelt uses the term "ether particles". The question of the existence of an ether arose at the end of the nineteenth century. So far, however, the discussion has not led to a consensual outcome.

The new approach to research the problem using radiesthetic methods appears promising. The perceptive abilities of sensitive individuals make systematic experiments possible. The results suggest that there is another form of matter, referred to as "subtle matter".

Various structures can be perceived around stationary and moving bodies. The geometric dimensions and noticeable properties of these structures are dependent upon physical parameters such as mass, volume, velocity and rotational speed. The electrical and magnetic quantities such as the dielectric constant or permeability appear to be very important.

The correlations found between these physical parameters as input quantities and the resulting changes of the observed structures suggest the existence of a previously unknown physical realm. Here, the method of observation with people as sensors and the complex results obtained thereby is well suited to provide statistically relevant data. In the vast number of experiments a human being is still needed as a sensor. However, there are now also electronic devices (IGA-1, SEVA) with which structures of underground running water can be detected. The development of this device is based on extensive Russian research on the subject of torsion fields.

A discussion about the expansion of our world view seems to be absolutely necessary. We need to accept the existence of subtle matter. This would make it possible to explain von Reichenbach's results and more.

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#### 1. Problem statement

### 1.1 Is our world view complete?

When asked how babies perceive their environment, they would, if they could speak, reply ,with the eyes, ears, hands, tongue and teeth".

If you ask adults, they will initially be surprised about this question and answer perhaps after some thought "with the five senses. Science is responsible for the details. " With the help of technical equipment, science has been able to refine the world view using observations that a baby cannot perceive without these aids.

Telescopes and microscopes give insight into the macroscopic and microscopic world. Utilizing electromagnetic waves or radioactive decay, we can change our living conditions through radio or use of nuclear power. We have no human sense that can detect electromagnetic waves or radioactivity. Or perhaps we do not know whether and how we can perceive them. The measurement technology appears to be superior to us in these cases.

However, before we let our curiosity and ambition get carried away and provide science the financial support to expand our world view through the implementation of technology such as the particle accelerator at CERN in Geneva, we should take a moment to pause and reflect.

Do humans not have other skills that have been overlooked or ignored simply because they could not be explained in a technical sense?

If there were, for example, additional senses, then we would be able to see our world with "new eyes". Our current view of the world would then be incomplete and require revision. Textbooks would have to be expanded to accommodate these new aspects. This is a thought that on the one hand piques the curiosity to approximate "reality". On the other hand, it also prompts the guardians of pure science to act.

"The present model is so neat, powerful, and comfortable that many people feel it would be a shame to have to disturb it." / William Tiller 1999 /

We ordinary people have become accustomed to accept as fact what science presents to us as fundamental explanations.

For example, we rely on the concepts of the electric field, magnetic field, gravitational field, and base our experiments and techniques on them without questioning these foundations.

As Christian Oersted observed, the effect of electric current on a magnetic needle in 1820, he discovered that magnetic effects can also occur in places other than around magnets, namely with electricity. Without his observation, there would be no electric motors today. However, the question of what a magnetic field really is has not yet been answered conclusively. "It's just there. You can measure it! "

We believe that the concepts related to this unexplained world of physics allow for the prediction of almost all processes.

That does not appear to be correct. There is uncharted territory that raises justified doubts about the completeness of our world view.

#### 1.2 Unresolved issues

a) Is it possible to propagate light through an empty space?

Does it need an "ether" to do it?

Is a physically-defined vacuum really empty?

For a long time, researchers have attempted to confirm or reject the existence of an "ether" using the time delay of light (Michelson and Morley 1887).

However, the repetition of such experiments in the 21st century with better techniques have not resulted in any evidence to support its existence. This means that either it does not exist or that the experimental arrangement was unsuitable.

- b) In the **field of dowsing**, there are people who can sense things in a way that cannot be explained using our current view of the physical world. Some people seem to respond to radiation or zones that could not previously be measured. The vast majority of scientists keeps quiet on these issues or vehemently denies the observations. However, they should be the ones most open or curious to such phenomena.
- c) Observations in previous literature

In 1850, Baron von Reichenbach published the perceptions of some people who could see magnetic "emanations" at poles. He called it "odic flames". / Reichenbach 1850 /, /Jansen 1907/, / Nahm 2012/

Oskar Korschelt patented a device in 1893 with which he can, as he calls it, collect "ether particles" and then radiate them for therapeutic purposes.

/ Korschelt 1892, 1893 / /Scheminsky 1919/ /Feerhow 1914/

EK Muller proves the existence of emanations from the body using electrical pathways. The conductivity of filter paper changes when fingers near it.

/ Miller 1932 /

- d) The **wave-particle duality** shows that basic physics is unclear when it comes to light, for example. Clarity, however, should be an important requirement for a theoretical world view of physics.
- e) **Aharanov-Bohm effect.** When a magnetic field is shielded to such a degree that the field can no longer be measured, diffraction experiments with electron beams show an influence on the path of the electrons despite the shielding.
- f) Sophisticated **high-precision weighing experiments** carried out by Klaus Volkamer prove the existence of something that can be weighed but not seen. Obviously, there are invisible masses called **subtle matter**. Their presence is subject to external influences (e.g. solar eclipse, state of consciousness and mental action by healers). / Volkamer 2009 /

## 1.3 Experiments in the 19th century

Two experiments from the 19th century have unfortunately fallen into obscurity. They are not mentioned in physics classes, although you would hardly need any aids for their implementation if one uses people as observers.

K. v. Reichenbach, Physikalisch-physiologische Untersuchungen über die Dynamide des Magnetismus, der Elektrizität, der Wärme, des Lichtes, der Krystallisation, des Chemismus in ihren Beziehungen zur Lebenskraft, Braunschweig (1850)

K. v. Reichenbach, Die odische Lohe und einige Bewegungserscheinungen als neuentdeckte Formen des odischen Prinzips in der Natur. W. Braumüller, (1867), Wien

O. Korschelt, Ein Apparat für therapeutische Zwecke ohne bestimmte oder bewußte Suggestion, 1893, DR-Patent 69340

O. Korschelt, Die Nutzbarmachung der lebendigen Kraft des Aethers in der Heilkunst, der Landwirtschaft und der Technik, Berlin, Verlag von Lothar Volkmar (1892)

E. K. Müller, Objektiver, elektrischer Nachweis der Existenz einer "Emanation" des lebenden menschlichen Körpers und ihre sichtbaren Wirkungen, Kommissionsverlag von Benno Schwabe & Co, Basel (1932)

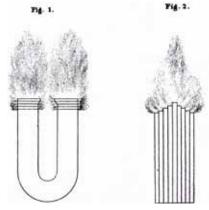
K. Volkamer, Feinstoffliche Erweiterung unseres Weltbildes, Weißensee-Verlag, Berlin, (2009) ISBN 978-3-89998-133-9

Reichenbach, magnet experiments (odic flame) "Magnet

From here we commence to the investigation of magnet blazes, as visible by day as at dusk and firelight. A strong bar magnet placed freely in the parallel radiates blazes from both ends in precisely the way that crystals do. A small compass needle did so as well as steel rods several shoes (0.3 m) long. A "zweischuetziger" (2 feet?) bar magnet with a one inch square cross-section, brought dextrally into the meridian, produces 30 linelong flames (12 lines = 1 inch = 25 mm) at the positive south pole and 12 line-long ones at the negative north pole. A 5 ft (1.5 m) long bar magnets in the same position emitted

23 flame lines from the negative end and 48 from the positive end; Inversely, when lying in the meridian 40 lines emanate from the negative end and 18 from the positive.

When the magnetic bars were heated near the poles with lamps, they produced elongated flames; a dextrally-oriented bipedal rod produced 48 lines at the heated negative end and 16 lines at the cold positive end; a five-shoe (1 shoe = 1 foot) rod emitted at the heated negative end 50, at the cold positive end 18 flame lines; positioned inversely, 54 lines at the heated negative end and 6 lines at the cold positive Fig. 01: Magnets marked with "odic end. Here the negative force of the flame is added to Lohe", according to information provithe negative flame emission everywhere. "/ Reichenbach 1867 / (Fig. 01)



ded by the observers, Reichenbach 1850

Korschelt uses "ether particles" for therapeutic purposes.

Using specially arranged wires, that he assembled in several spirals that partially run counter, he produced a "collection" and focused emission of "ether particles". He patented his invention in 1893. With it he was able to demonstrate successful treatment. This is how he presents the effect of the particles in a wire:

"Let us now imagine the wire running back into itself, thus forming a circle. Around this wire the spirally flowing ether current is stronger than when the wire is straight, because in the latter case, the currents leave the wire at both ends, and will be emitted. "/ Korschelt (Fig. 02) 1892 /

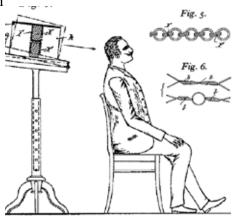


Fig. 02: An apparatus for therapeutic purposes without specific or deliberate suggestion Korschelt 1893

## 2. Partial replication and extension of experiments in the 21st century.

The experiments described below are based on observations and, more specifically, through sight (if possible) or perceiving with the body or body parts, especially the hands. Some people may sense without any aid, while others use a rod or tensor. By "structures", radiesthetically-perceivable subtle structures are meant. The "observer" is a person who is far more sensitive than the average.

## 2.1 Structures around magnets

Replication of von Reichenbach's experiments:

A neodymium magnet 15 mm in diameter and 10 cm in length has a magnetic flux density of about 0.5 Tesla and is several orders of magnitude stronger than the forged iron sheets to Reichenbach's time. The observer A.S. describes his perception: "a "beam" is emitted from both ends; it is stronger at the north pole. There are layers wound around the magnet like threads. Something moves in and around the beam (like a jet of water).

,,

When this "beam" was pointed towards the observer, he was startled and jumped to the side. He dodged, because it was very uncomfortable for him.

Inadvertently, there was a blind test: the author held the neodymium magnet pointing upward in his hand. A.S. was to describe his observations when the magnet is oriented such a way that the "beam" goes through a Fresnel lens (from an overhead projector). When aiming the "beam" through the horizontally-held lens, the observer described different changes in the beam depending on the direction of radiography.

While discussing the observations, the author inadvertently kept the lens tilted at about 45 degrees so that a "beam" was reflected off the plexiglass into his body. A.S. then jumped spontaneously to the side and took flight.

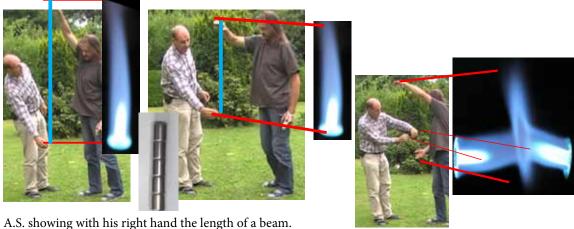
Conclusion: plexiglass reflects the "beam" and A.S. is capable of perceiving this spontaneously without prior notice.

The question of what comes out of a magnet was examined more closely. While being filmed, A.S. shows with his hands how far he can see or feel the magnetic "beam". For this purpose, a stack of ten small cylindrical neodymium magnets was used. After dividing the stack into two halves of five magnets each, the length of the "beam" was about half as long. (Fig. 03)

(was 1.4 m, then 0.7 m).

What happens when two beams collide? According to his observations, a "wheel of fire" is generated when the like poles of two magnets near each other along their axes, namely when the tips of the beams meet. The diameter of this wheel increases as the magnets are brought closer together.

According to the account of A.S., when two magnets converge at an angle the two beams show an effect similar that of two gas flames. The beams merge in the form of an inverted Y.



A.S. showing with his right hand the length of a beam left: Stack with 10 magnets, right: five magnets.

If one put two like poles against each other, a "wheel of fire" like the gas flames is created.

Fig. 03: Perceiveable effects of magnets, radiation, compared with gas burners

Obviously, these experiments beg the fundamental questions:

What happens when two equal but opposite magnetic fields overlap? ((1))

According to a simplistic view, the magnetic fields would cancel each other out. Some experiments, like the one here, demonstrate that structures or effects such as the wheel of fire are evident despite cancellation.

#### 2.2 Structures around mono-cells

Radiation can even be observed around 1.5 volt mono-cells. A screw-shaped beam similar to a corkscrew appears on the (+) side. A "tulip" is observed on the (-) side (diameter and length in the range of five centimeters).

A.S. can see the particles in constant flow inside the tulip and corkscrew.

If the (+) sides of two mono-cells are brought together, then a "wheel of fire" is generated that suddenly collapses when the two pole converge (Fig. 04).

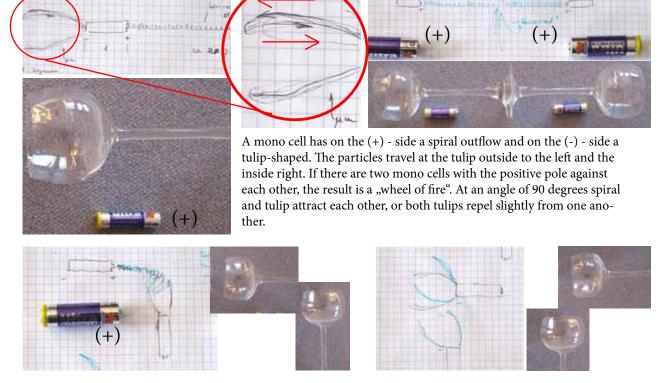


Fig. 04: Electrical fields, tangible and visible effects on charged monocell

- 1) In theoretical physics a magnetic vector potential is introduced as calculating aid. This potential of the superposition of two magnetic fields has apparently an effect, even though the derived total magnetic field disappears.
  - This probably also indicates the Aharonov-Bohm effect: An outward shielded magnetic field B acts on two electron beams, which pass along different paths at the place with the field. Despite the shielding of the field an effect on the electron beams may be recognized on the interference pattern on the observation screen.
  - There are works by Oliver Crane and Christian Monstein, who also dealt with other unexplained effects in magnets. You use the term space quantum flow. / Monstein 1991, 1994 /
- 2) Carrying out the experiment as a student exercise: the position within each group is to be determined for different colors of light, i.e. how far, for example, in each case is the color red from the middle?
- a) The observed positions are marked under the image with a pen,
- b) and their position on a scale is read. Meaningful names: the left of the main beam: negative, the right of it: positive.

  In the graphical plot of the positions against the number of the group a best fit line can be determined, which is symmetrical to the position of the main beam. (continued on next page)
  - If the measurement data scatter around the line strongly, then you have observed obviously less precise, marked or read or the
- C. Monstein, Visualisierung der Raumquantenströmung, Safe News, Heft 3/4 (1991) 23-25
- C. Monstein, Magnetische Induktion ohne Magnetfeld, Safe News, Heft 3/4 (1991) 28-31
- C. Monstein, Eisenpulver auf Wasseroberfläche, Magnetik Nr. 2 (1994) Title und 8 11

# 3. First-hand experiments to investigate subtle structures in dependence on physical parameters.

#### 3.1 Methods for Monitoring

The structure, symmetry, dimensions, angles, changes over time (speed) and the changes in these qualities of subtle three-dimensional objects can be observed.

Since most of these properties are based on measurements of a position in space, these observations can be transcribed into charts to illustrate symmetries, for example, of perceivable patterns graphically.

In some of the following experiments, the size of the objects or their speed is dependent on a simple physical parameter such as electric current, electric charge or speed. Statements about the "physical" behavior can be made by looking at the connection between the parameter and the determined geometrical size. If a linear relationship exists, then outliers are easily recognized and identified as measurement errors.

Such an experiment also makes it possible to perform a blind test provided that an approximately linear dependence exists. A repeat of the experiment would yield similar dimensions, if the constraints on the outcome of the experiment are known and can be kept constant. Statistical statements about the reliability of the results can then be made.

## 3.2 Classical optical diffraction experiment

When white light is shone through a slit in front of an optical lattice, the light is split into its component colors like a rainbow. However there are several groups (diffraction maxima) with these color distributions on both sides of the main beam, in which the width increases while the intensity decreases. Within certain limits, there exists a linear relationship between the number of a group (counted out from the main beam) and the diffraction angle, i.e. the distance on the observation screen. This can be identified as a straight line drawn through a graph where the position is plotted against consecutive numbers. ((2))

#### 3.3. Bodies at rest

#### 3.3.1 Significant structures outside of solids

We are accustomed to and it is obvious to us that when we touch an object with our fingers, we feel the visible shell. However, sensitive people can also perceive structures

outside the visible surface. For a homogeneous body (cube, brick), it may be several layers at a distance of a few centimeters. These are zones with different tactile qualities at each transition (Fig. 05). Appearance and form of the zones is dependent on the electric and magnetic material properties (dielectric constant, magnetic permeability). With hollow bodies, other effects emerge which lead to additional zones.



Fig. 05: Zones of a rose quartz with different qualities, drawing and photo G. Engelsin

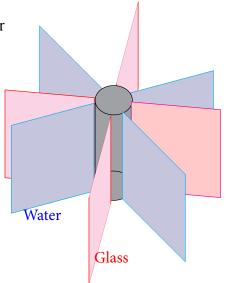
assumption of linearity is wrong. If the line describes the location of the points sufficiently well, then by implication the linearity is confirmed and the procedure of data collection should be successful.

#### 3.3.2 Hollow bodies

A water-filled cylindrical glass has, in addition to other pillow-shaped zones similar to those of rose quartz, eight outwardly facing surfaces which are regularly arranged (every 45 degrees) around the glass. Four of the surfaces stem from the glass and four from the water. When a cube of sugar is dropped into the water glass, 16 zones result (Fig. 06).

s.a. / Gebbensleben 2010 /

The areas around the cylindrical object rotate slowly around the rotational axis at a few degrees per minute. These perceivable zones belong to the body - they stick to it, but change their structure when the body is moved or rotated.



AFig. 06: For a filled water glass, there are four zones of glass and water

## 3.3.3 Superimposition of zones

When the zones of several bodies overlap, other patterns can result.

In Scotland, Vincent Reddish found such patterns when he recorded measurements from a configuration

of two copper pipes almost daily and documented a periodic seasonal change.  $\!\!/$  Reddish 1998  $\!/$ 

A collaboration with scientists in New Zealand (Scotland is just opposite on the globe) demonstrated that the same periodic changes occur there too, but exactly inverse to those in Scotland in their temporal behavior. / Dodd 2002 /

## 3.3.4 Multiple hollow bodies made from different materials

When two hollow bodies made of different materials are brought together (also non-

conductor and conductor) (for example, two nested tubes of brass and iron with very different diameters), an observer can see currents and eddies moving between the two objects. A perceptible person however can sense different qualities passing in, around and next to this arrangement (Fig. 07).

In the case of conducting bodies, the structures can be influenced by applying a very small voltage (<1 V) to the setup.

Even the short-circuiting with a wire changes the structure.



Fig. 07: Two hollow bodies made of different materials: brass and iron. Right a small wire connects the two bodies together electrically.

R. Gebbensleben, Der sechste Sinn und seine Phänomene, Physikalische und neurophysikalische Grundlagen der Wahrnehmung von Hyperschall - Ein Forschungsbericht, Books on Demand, Norderstedt (2010) ISBN 978-3-8423-0086-6 C. Reddish Dowsing physics: interferometry, Transactions of the Royal Society of Edinburgh-Earth Sciences Vol 89, 1-9, (1998) R.J. Dodd, J.W. Harrish, C.M. Humphries and V.C. Reddish, Towards a physics of dowsing: inverse effects in northern and southern hemispheres, Transactions of the Royal Society of Edinburgh-Earth Sciences Vol 93, 95-99, (2002)

## 3.4 Linear moving bodies

#### 3.4.1 Classical visible observations

When a floating body moves across a surface of water, it creates waves and thus leaves a visible trace. In aerial photographs of ships the course of the vessel and possibly its speed can be determined. The disturbances in the water generally spread in a V-shape (Fig. 08).

Since the propagation velocity of the waves depends on the wavelength and the depth

of water, complicated structures are created. In the opposite case, V-shaped structures are formed when there is an obstacle in running water (Fig. 09). The periodic excitation of the walls of a vessel creates standing waves of large and small amplitudes occurring depending on the location (Fig. 10).



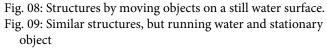


Fig. 10: Standing waves in a singing bowl by periodic motion of the vessel walls.



#### 3.4.2 Radiaesthetic observations

## 3.4.2.1 Radiation 3.4.2.1.1 Water

When a stream of water flows freely through or out of a hose, perceptible people can sense structures several meters away. A vertically-falling stream has circular and radial zones (Fig. 11).

Around flowing water, there are goblet-shaped objects or structures resembling sausage links held together by the skin when coming out of the sausage stuffer (chain of sausage links). Similar structures are also apparent in underground running water, for example, in a geologic column ("water vein"). As with the aerial image of the ship, the direction of the water flow can be determined through the shape of the structures. The flow direction can be established by perceiving the different sensation when quickly going back and forth along the water hose.



Fig. 11: A vertically down flowing water jet is investigated.

## 3.4.2.1.2 Crossing water

When two water lines intersect askew ("water crossing"), more complicated structures arise. If a water hose is configured in figure eight, a system of cup-shaped cones with two alternating different perceivable qualities results perpendicular to the plane of the figure eight (Fig. 12).

By positioning the figure eight vertically, cross-sections can be examined at greater distances and further details of the cone structures can be highlighted and measured (Fig. 13).

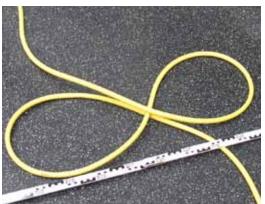


Fig. 12: Water hose in the shape of a figure eight. About the crossover point 3D structures with tuliped funnels show upward.

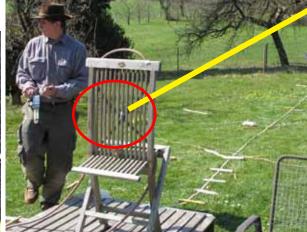


Fig. 13: The Eight is attached to the chair. The structures show to the right. The found contours of the 2D sectional areas are laid out on the grass.

## 3.4.2.1.3 Gas discharge tube

Since the 1870s, there have been experiments with gas discharge tubes (William Crookes 1832-1919). Two electrodes with a difference in direct current of several hundred volts are positioned in a slightly evacuated glass tube. The burning gas discharge that results shows that there are charged particles and radiation, allowing the study of their properties: light, positive and negative particles, which can be diffracted by a magnet. In 2011, there was a surprise while sensing on both sides of the tubes outside of the glass when conics zones with opening angle of about 30 degrees were perceived. The two cones differed in sensed impression (Fig. 14).

Was this effect not observed over 100 years ago or was it just over "looked"?

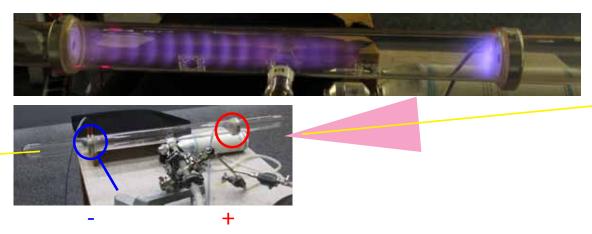


Fig. 14: Gas discharge tube. On the right side (cathode) something can be perceived with the palm outside the Duran glass tube slightly to about 1.5 meters.

(Comment of a student: "slight warming"). Discharge voltage 630 volts, current 0.3 mA, X-rays or ultraviolet light is therefore excluded.

## 3.4.2.1.4 Oscillograph

Similar to a tube television, an oscilloscope functions by accelerating an electron beam from the cathode to the anode with a few thousand volts and then decelerating it when it strikes the fluorescent screen. When the two deflectors are blocked, the beam is fixed in the middle and shines as a bright spot. The brightness can be regulated through the electron current at the cathode (Fig. 15).

Observers can detect perceivable structures for many meters in the direction of the beam behind the fluorescent screen. Narrow bands, which upon closer examination resemble leaf-like structures, are generated periodically every few meters perpendicular to the beam direction. The spacing and the size of the "leaves" diminishes as the beam current is reduced.

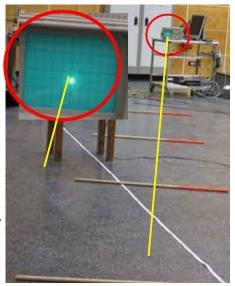


Fig. 15: Oscilloscope. The electron beam is fixed at one point. Along the beam axis, there are periodic structures.

#### 3.4.2.1.5 Laser

In a helium-neon laser, He and Ne atoms shine inside the laser tube during a gas discharge. A continuous current flows in the ionized gas. To an outside observer, there are structures positioned spatially around the beam at regular intervals in the longitudinal direction of the tube (Fig. 16).

Similar structures can also be found around a semiconductor laser (laser pointer).

With LED illumination, there are also effects which may be generated by unknown radiation.

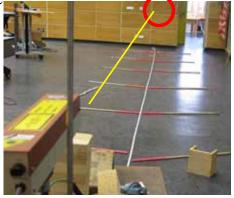


Fig. 16: The beam of a HeNe laser lights on the wall in the background. Along the beam are periodic structures to be detected.

#### 3.4.2.1.6 Toroid

Various toroids (e.g. the spiral spring from a pen bent into a circle) with different numbers of turns were charged with a few nano-amps of direct current ((3)). This results in periodic structures along the toroidal axis (Fig. 17, Fig 18).

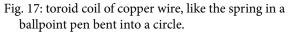


Fig. 18: The axis is horizontally to the rear wall. It can be perceived periodic structures.

<sup>3)</sup> Experience has shown that it is necessary to adjust an extremely small current. Only then the structures are so distinct that the observer is able to perceive them individually. When a flock of birds is flying, e.g. if very many birds are together, one notices indeed the darkening of the sky, but not the individual birds.



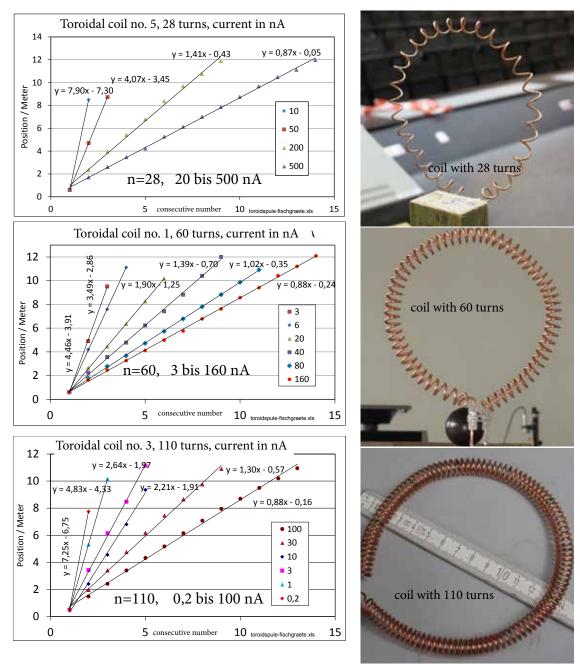


Fig 19a. 19b; 19c: Position of structures against consecutive num- Fig 20a. 20b; 20c: the three coils with ber n for the coil 28; 60 and 110 turns at different currents. The slope of the regression line in each case shows the periodicity of the structures. The length of the period depends on the electric current.

28; 60 and 110 turns

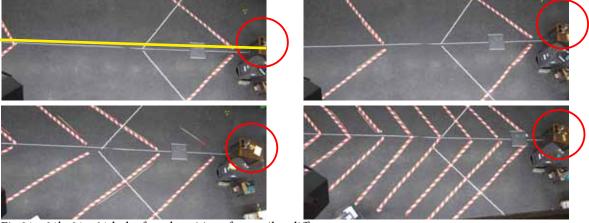


Fig 21a. 21b; 21c; 21d: the found positions for a coil at different currents.

With flowing current, the structures on the one side of the coil have large ranges. To an observer the effect is uncomfortable there, on the other side, however, innocuous. A two-dimensional cross section along the toroidal axis reveals a herringbone-like pattern (Fig. 21). If the polarity of the direct current is reversed, then the "beam" transfers to the other side. When two identical toroids are placed several meters apart but with currents running in opposite directions, a "wheel of fire" results. The noticeable effect can be described as "extremely unpleasant", the connection in series on the other hand as "harmless". For subsequent experiments, the toroidal axis was set up horizontally. A set of curves results from sensing different currents at the position of the "herringbones" marked on the floor. We recorded three such sets of curves for coils with the winding numbers 33, 60 and 110 (Figure 19, Figure 20). The result shows:

- The positions are periodically arranged
- The periodicity is dependent on the current strength
- The product of the number of turns n and the current I is indicative of the periodic pattern.

Plotting the number of observed structures per area against the current, a linear relationship results for all three sets of curves ((4)) (Fig. 22).

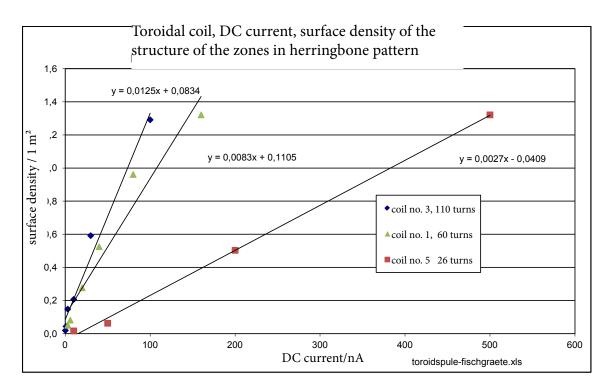


Fig. 22: The from the pictures 19a to 19c detected surface density of the structures (the square of the number of structures per unit length) as a function of the current. There is a linear dependence. The slopes of the three curves (0.0027; 0.0083; 0.0125) behave approximately like the ratio of the numbers of turns of the coil (28; 60; 110). The period of the structures thus depends on the product of current and number of turns.

## 3.4.2.2 Electricity

A few nano-amps of direct current flow through a 1 mm enameled copper wire. The wire hangs straight down about one meter.

A sensitive and perceptible observer (A.S.) finds regular structures located a few centimeters from the wire, moving at a rate of a few centimeters per second along it (Fig. 23a).

<sup>4)</sup> This relationship would correspond to the in physics known relationship that the magnetic flux density is proportional to the current.

They have a shape similar to that of a mushroom cap. In the direction of movement they are dented and at the back bulged (Fig. 23b and Figure 23c). The structures move in the direction of electric current, i.e. from positive to negative. When the current is reversed, the structures run in the opposite direction.

A video camera was used to record the experiments. Implementation of this technique makes it possible to subsequently identify the speed and distance of the observer's hands with which he followed the structures.

The diagrams with the data show

- The hands of the observer move with constant speed and at a constant distance (Fig. 24).
- The speed increases with the current, possibly linearly (Fig. 25).
- The technical direction of electric current dictates the direction of movement of the structures (Fig. 26).

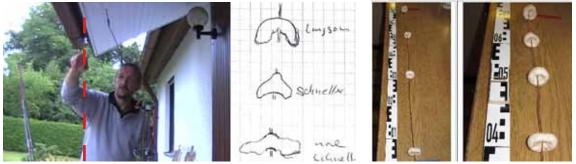


Fig. 23a: A copper wire hangs down vertically. The observer A.S. indicates with his hands position and velocity of objects he can see.

Fig. 23b: A.S. has outlined his observations for different speeds.

Fig. 23c: Reenactment of his information with mushrooms, left small right large current.

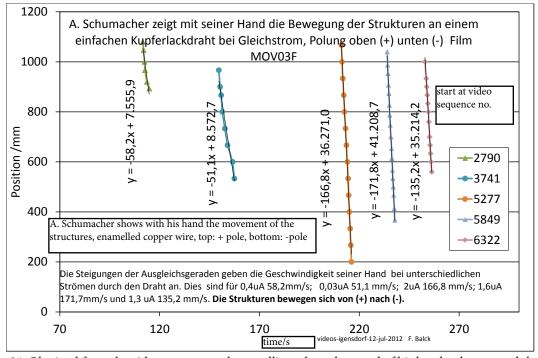


Fig. 24: Obtained from the video sequences: the trendlines show the speed of his hand as he pursued the objects. Position/mm versus time/s. Measurements for five different DC-currents are shown.

The structures move form (+) to (-).

A few weeks later the trials were repeated by two other observers (G.E. and F.B.). Both perceived the structures with their hands but unlike the first observer could not "see" them clearly. However, after some training, one observer (F.B.) was able to perceive hints of structures with nodes and antinodes in front of a pale gray backdrop. Similar

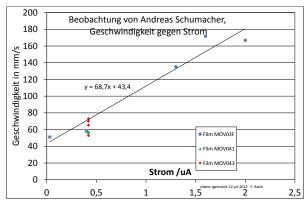


Fig. 25: Velocity in mm/s as a function of the current in uA. The five blue data points from the fit line come from Fig. 24. The greater the power, the faster move the structures.

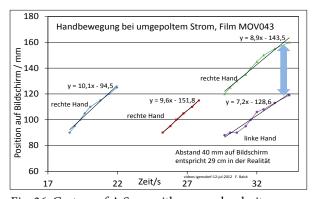


Fig. 26: Gesture of A.S. up with reversed polarity current. Video pixel position /mm versus time /s. The arrow indicates the synchronization of both hands in the pursuit of two objects.

numbers resulted at the same speeds and distances. They confirmed the observations of A.S.

The experiments were repeated with two other wires, one copper without enamel and one iron.

#### Results:

- The detected structures were not dented, but strung together something like "sausages". Obviously, the enamel has an influence on the formation of the structures. The spherical objects appear to be slowed and inverted.
- For the iron wire you need a current approximately a factor of 100 smaller than that for a copper wire to generate objects with comparable dimensions.

Compared to copper, iron has over a hundred times the permeability. In physics it is known that the magnetic flux density of a copper coil increases by this factor when an iron core is added.

#### 3.4.2.3 Transverse and longitudinal mechanical vibrations

The inspiration for these experiments with springs was an observation in the vicinity of a research laboratory where components were tested for durability. The components are strained to the point of fatigue using resonance. When passing by the building, ringshaped zones could be sensed as far as 50 meters away. What was the cause? A re-creation of the arrangement in the laboratory showed the following: If a coil spring

is excited to its harmonic frequencies (9, 18, 27 Hz) through mechanical vibrations, then large structures running transversely to the lon-

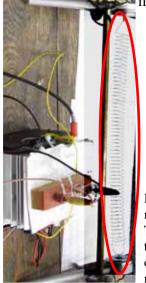


Fig. 27a; 27b; 27c: Coil spring in resonance. It swings in the arrow direction.

Transvers to it, there are significant zones, their arrangement is dependent on the oscillation frequency.

right: Chain with torsion pendulum.

gitudinal direction outside of the spring arise (Fig. 27a). The pattern is dependent upon the vibration mode of the spring and the frequency. Obviously, the number of nodes and antinodes influences the intricacy of the structure for the resonance in the spring (Fig. 27b)

From the perspective of classical physics, the observer should only perceive longitudinal oscillations for acoustic waves. This can only be observed along the spring axis. In the experimental setup above, he stands transverse to it. So he seems to be sensitive to transverse vibrations. These would not be airborne sounds, because the frequencies are outside the audible range.

Another test was done using a wave machine (torsion pendulum chain). An observer stands in such a way that he looks at the up and down transversally-oscillating masses from the side. It is important to note that he only noticed significant effects when the wave runs from one end to the other. With standing waves (reflection at both ends) no perceptible sensation is felt (Fig. 27c).

## 3.5 Rotating Body

## 3.5.1 Rotating masses



Fig. 28: Rotating grinding wheels produce torus-like structures

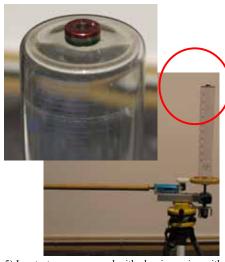
When rotationally-symmetrical bodies (e.g. hollow bodies, wax candles) are turned slowly (like a record player), extended toroidal structures can be found around the axis of rotation. Two distinct qualities alternate similar to the structure of a bicycle tire: the tube on the inside and the mantle outside (Fig. 28).

Vincent Reddish concerned himself extensively with the fields of rotating masses as well as materials for reflection and shielding ((5)). / Reddish 2010 /

He refers to the groundwork of Nachalov and Parkhomov.

Reddish assumes that rotating bodies emanate a special "radiation". He tested this using a shielded laboratory.

### 3.5.2 Rotating homogeneous bar magnet



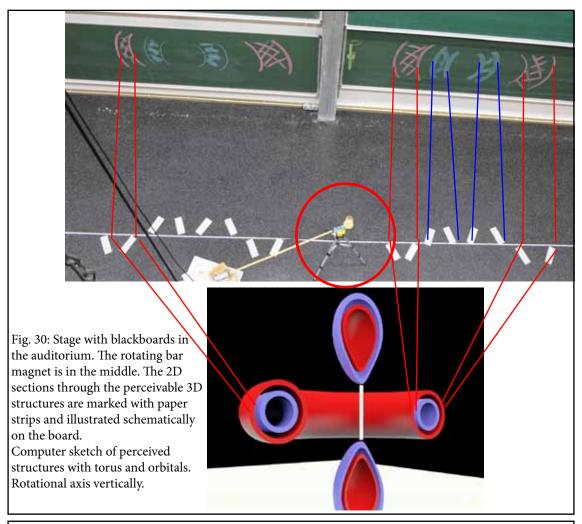
According to the law of induction, when a cylindrical bar magnet rotates around its longitudinal axis, this should not be perceivable in the space around it, if the magnet is homogenous (Fig. 29).

However, large rotationally-symmetric structures like those of rotating hollow bodies can be observed. When the structures are dissected along the central plane of the magnet perpendicular to the axis of rotation, then a total of 16 positions results. Their size increases with speed. In the diagram, each of the 16 positions are plotted for five different speeds (Figure 30, Figure 31).

Fig. 29: A small cylindrical bar magnet is located on top of a glass cylinder. The cylinder rotates slowly..

<sup>5)</sup> In a test room screened with aluminum, i.e. without external "radiation", he has experimented with electrically driven masses (grinding wheels for sharpening tools). So he created "radiation" that allowed the same interference experiments as without these aids in unshielded areas, i.e. with natural excitation..

V.C. Reddish, The field of rotating masses, Makar Publishing, Edinburgh, ISBN 978-0-9551334-2-8 (2010) Nachalov und Parkhomov http://www.amasci.com/freenrg/tors/doc15.html



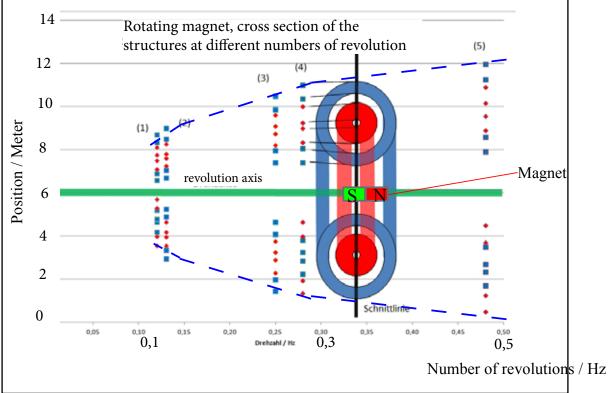


Fig. 31: Rotating magnet. The diameter of the tori increases with increasing speed. (Data from 80 observed positions) Horizontal rotation axis.

#### 3.5.3 Rotating electrically-charged sphere

A hollow metal ball with a nickel surface about the size of a ping-pong ball rotates slowly on an electrically-insulated vertical axis. The ball is briefly connected to a high voltage source to 20 kV DC and thereby charged. The insulation is sufficiently good so that, after a few minutes, a large part of the charge can still be measured using an electric field mill (Fig. 32b).

As with the rotating hollow sphere, large structures consisting of at least two different qualities can be perceived around the axis of rotation Figure (32a). It is shown that the diameter of the structures depends on the speed and on the charging voltage. Since the ball is hollow, annular zones with an average diameter of about two meters arise even without charge, i.e. in a briefly grounded ball, at a speed of about 30 revolutions / minute

This diameter increases or decreases with the charging depending on the sign of the charging voltage. At +6000 volts it increases to about 8 meters, at

- 6000 volts it shrinks down to about 1 meter (Fig. 33).

This all takes place during counter-clockwise rotation. Now, if the rotational direction is changed, then similar readings apply for the voltages but with the opposite sign! Rotational speed and direction as well as the sign of charge influence the dimensions of the zones (Fig. 34).

At higher speeds, the zones are larger.

They expand with

- Positive charge and counter-clockwise rotation (ccw)
- Negative charge and clockwise rotation (CW).

The following fundamental questions then arise:

- If you charge more electrons on the ball in one polarity, which charge carriers are then active for the other sign?
- What is the relationship between the rotating charges and significant zones?





Figure 32a. 32b: At the stage of the lecture hall, the turntable is rotating with the hollow sphere. Right: metal ball in front of the electrodes of the "Feldmuehle" (E-field meter). Paper and colored chalks on the ground mark the positions of significant structures. There are four marks per charge voltage.

 $(/ \setminus / \setminus)$ 

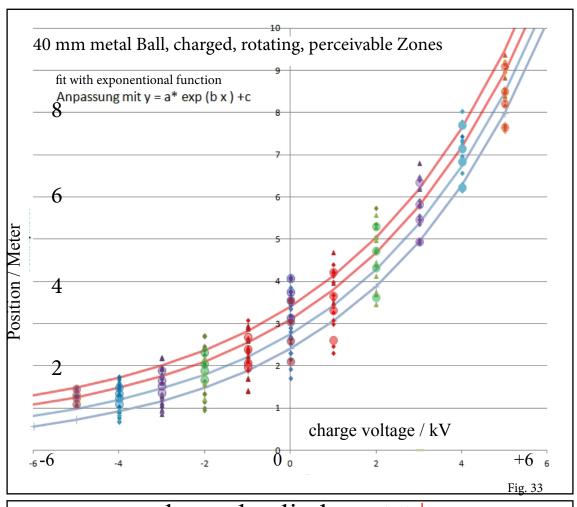
Fig. 33: (right side) The four positions of a structure as a function of charge voltage. (192 positions) In this direction of rotation counterclockwise,

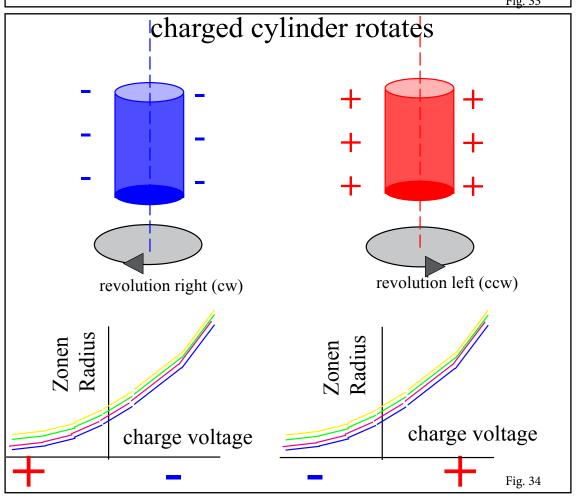
the radii increase with increasing positive charge voltage.

Figure 34: (right side) Schematic summary: The sign of the charge and the direction of rotation have an influence on the extent of the zones. At higher speed, the zones are bigger. They expand when

1. charge is positiv and counterclockwise rotation (CCW)

2. Carge is negative and turning clockwise (CCW).





## 3.6 Rotating fields, torsional fields

#### 3.6.1 Magnetic field: AC motor

In a three-phase motor, three magnetic coils generate a rotary magnetic field which drives the rotor. Three alternating currents run staggered through the coils. Depending on the phase angle between the three streams, either a clockwise or a counterclockwise rotating field is produced. However, even just two coils suffice to produce a rotating field with a predetermined direction.

## 3.6.2 Electric field: quadrupole capacitor

Analogous to the three-phase motor, an electrical rotating field can be generated from two plate capacitors perpendicular to one another (quadrupole) (Fig. 35a).

If such a quadrupole capacitor is operated with two out-of-phase AC voltages (about 1 volt) in the range of a few oscillations per second (2 Hz, 20 Hz, 200 Hz), then sensitive persons can perceive structures around this experimental setup (Fig. 35b).

The structures have several distinct qualities. They consist of annular elements around the rotational axis as well as "cup-shaped" areas above and below the center plane. When the rotation axis is moved into the horizontal, then such "cups" can easily be identified over long distances along both sides of the axis (Figure 36, Figure 37). They have properties similar to the "beams" of, for example, the torsional coil.

When the wires connecting the signal source are interchanged, then the rotational direction of the electric field changes. This changes the perceivable qualities, with the one direction of rotation feeling noticeable more unpleasant than the other.

In dowsing, it is said that counterclockwise sensed objects behave differently than clockwise.

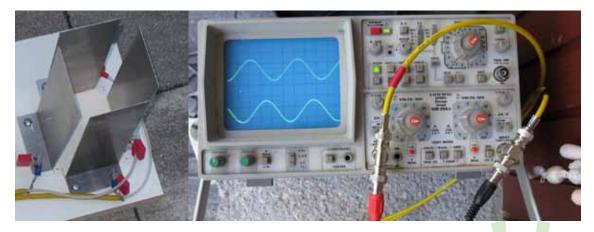


Figure 35a. 35b: The quadrupole capacitor of four aluminum sheets is operated from the headphone jack of a computer with two sinusoidal voltages having a phase shift of 60  $^{\circ}$ .

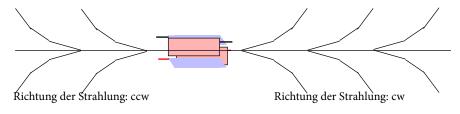
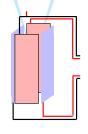


Fig. 36: View from the side, goblet-shaped structures

Fig. 37: zones around the quadrupole at adjoining rotating field, view from the side, f = 11.7 Hz, U0 = 0.8 V,  $\phi = 60^{\circ}$ 



## 3.6.3 Electromagnetic field: rotating or tumbling dipole

A small dipole (total length of about 15 cm) is mounted above the axis of rotation of a turntable. The axis of the dipole is slightly oblique to the axis of rotation. A motor is used to turn the plate and the dipole executes a wobbling motion (Fig. 38).

During the experiment, an AC voltage of 1 V was applied at a frequency of 56 Hz. While the dipole is rotating, structures arise at a distance of several meters. As the observer moves radially through these structures, either toward or away from the rotation axis, direction of rotation, the sign of the dipole's inclination angle and the observer's direction of movement influence the quality of the perceivable effects. These sensed differences in quality are comparable to those described above for the clockwise and counterclockwise systems.

Similar structures can be observed when the dipole is aligned perpendicular to the rotational axis during spinning.



Fig. 38: turntable with small dipole. The dipole axis is inclined to the rotation axis and stumbles upon rotation of the plate. The small generator is battery powered and rotates on the plate with.

## 3.6.4 Torsion fields: IGA-1 (Indicator Geophysical Anomalies) and SEVA (Spinning Electric Vector Analyzer)

In optics, circularly polarized electromagnetic waves (light) are recognized. There are clockwise and counterclockwise waves. They can act differently on biological systems. Such circular electromagnetic waves with rotating field vectors are generated when the electric field rotates in a quadrupole capacitor.

The effects that thereby result are perceived differently, or have a different bodily effect, depending on the rotational direction.

In Russian literature, names like "torsion fields" and "axion fields" can be found in this context ((6)).

Two device developments exist to detect such rotating fields:

Over fifteen years ago, Juri Kravchenko (Russia) came out with a device with which circular electromagnetic waves can be measured at extremely low frequencies (IGA-1)

((7)) (Fig. 39).

(IGA Indicator Geophysical Anomalies).

A different design is also available in the U.S. by Mark Krinker

(SEVA Spinning Electric Vector Analyser) ((8))

The developers write that these devices can electronically detect geopathic zones, fault lines or underground running water.

Torsional fields generated by electronic devices (mobile phones, WLAN, quadrupole capacitors) should therefore also be detectable. This would make it pos- Yuri Kravchenko



Fig. 39: The device IGA-1 from

<sup>6)</sup> Torsion fields http://www.eskimo.com/~billb/freenrg/tors/.

Yu.V.Nachalov, Theoretical Basics of Experimental Phenomena. http://amasci.com/freenrg/tors/tors3.html

A.E. Akimov, G. I. Shipov, 1996, Torsion Fields and their Experimental Manifestations. http://amasci.com/freenrg/tors/tors.html Yu.V.Nachalov, A.N.Sokolov., Experimental investigation of new long-range actions. http://amasci.com/freenrg/tors/doc17.html Yu.V.Nachalov, E.A.Parkhomov. Experimental detection of the torsion field. http://amasci.com/freenrg/tors/doc15.html

A. Shpilman hat einen Generator zur Erzeugung von Torsionsfelder entwickelt. Er verwendet dazu rotierende Magnete.

Alexander A. Shpilman, Spin-field Generator. http://amasci.com/freenrg/tors/spin1.html

<sup>7)</sup> IGA-1, ИНДИКАТОР ГЕОФИЗИЧЕСКИХ АНОМАЛИЙ, http://www.iga1.ru/iga.html

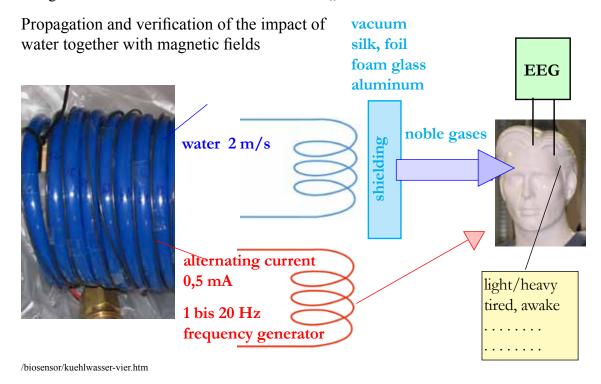
sible to collect objective evidence of circular waves emanating from technical devices that stress biological systems.

Torsion plays an important role for the rest of physics. Mechanical examples of stable and durable rotating objects are whirlpools, eddies, smoke rings, tornadoes and hurricanes.

## 3.7 Interaction of moving water, minimal AC magnetic fields and brain waves.

When running water and minimal alternating magnetic fields are brought together, perceptible effect can develop at selected frequencies. These influences can be demonstrated objectively using brain wave measurements (EEG). If the frequencies of alternating fields lie in the range of important brain frequencies (e.g. 1 to 30 Hz), the observer can sometimes also associate certain states of consciousness such as nausea, deep sleep, excitement etc. with them (Fig. 40).

The following experiment was performed in order to determine whether the transmission to the brain takes place via the alternating magnetic field or on the moving water: A hose with flowing water is placed into an evacuated vessel (Fig. 41). The "transfer" to the brain is not apparent when, after drawing the vacuum, the air pressure has dropped to under a few percent. The subsequent refilling the vessel with air brings about reappearance of the effect. When a noble gas (argon, neon, helium) is introduced instead of air at about one percent of the normal air pressure, then the "transfer" is possible again. This content is comparable with the natural amount of argon in the air. Filling with pure nitrogen or carbon dioxide is insufficient for the "transfer".



8) SEVA http://www.royriggs.co.uk/www.royriggs.co.uk/Geopathic\_Water.html

"SEVA and IGA are absolutely different instruments! SEVA is not a similar to IGA. SEVA is a very first instrument where spinning was in patent claimes. There are no "spinning" and "rotation" in other patents. But you ask me, why their readings are compatible? Easily. IGA measures an integral of phase shift of EM field between different point of surface rather than the circular electromagnetic waves.

SEVA measures spinning and rotation at one point. There are absolutely different parameters in IGA and SEVA. But the trick is in that where is a phase shift between points on Earth surface (IGA), there are conditions to find spinning fields (SEVA).

When I came to second-physics (www.second-physics.ru), I raised this question about electromagnetic spinning. Yes, IGA was a trigger that activated my interest in GPZ (geopathic zones), but I came to absolutely new conception (SEVA) after studying and considering physics of GPZ." Mark Krinker

This means that the frequency information does not primarily travel directly from the magnetic field to the brain, but indirectly, namely, from the magnetic field to structures in the running water, and then to the brain.

The investigations of structures around moving water are not yet completed.

It has been found that **electrical appliances located above water structures** have a strong negative influence on human beings. This is resolved by removing the devices from these structures. Often, a shift of only a few decimeters is sufficient.

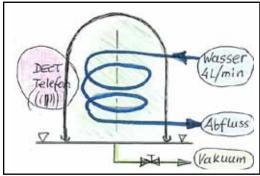


Fig. 41: Water coil in the vacuum vessel, magnetic stimulation (DECT phone) from outside, vacuum or filling with different noble gases. Drawing Werner Auer

Wireless transmitters, DECT telephones, etc. are many times more disturbing when they stand over water structures.

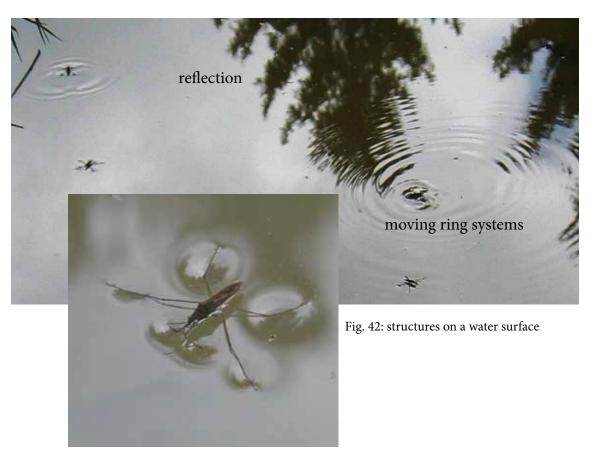
#### 4 Summary

The experimental results are preliminary. They need to be corroborated by further experiments. Nevertheless, the following statements can be made:

- Visible bodies have perceptible structures around them.
- The structures are dependent on the electrical and magnetic properties of the materials (dielectric constant, relative permeability).
- Hollow bodies as resonators have additional zones.
- In linearly moving or rotating bodies, the speed has an effect on the size and shape of the structures.
- When charges, magnets, electric and magnetic fields rotate, additional structures develop depending on the rotational speed.
- The structures can only be observed at slow speeds (low RPM, small electric charges or currents). Higher speeds cause the structures to "blur".
- Mechanical longitudinal oscillations have structures that can be felt in the transverse direction.
- The experiments of Baron von Reichenbach and Oskar Korschelt were confirmed by "seeing" or feeling. A "flow" emanates from magnets, mono cells, wires and hollow bodies.
- A "seeing" experimenter is very helpful for finding and describing universal laws.
- Experiments with radiation (e.g. water, gas discharge, oscilloscope, laser, toroids) produce very similar structures.
- The diversity and the similarity of the structures can be compared with the structures on the surface of water. Stationary and moving objects make the existence of the unobservable surface apparent.
- Electromagnetic fields with rotating field vectors (Spinning Field) effect the body.
- The in-depth examination of the types of perceived structures could lead to an expanded view of our physical world.

Example from our environment:

The water surface is not directly visible. It is only to be recognized by visible objects (water striders or trees) and their interaction with the interface.



Zones, fixed on the body,

## Acknowledgments

The experiments I have described would not have been possible without the help of sensitive individuals. The outstanding radiesthetic knowledge and skills of Werner Auer, Gertraud Engelsing, Jiri Polivka and Andreas Schumacher have promoted the work greatly.

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I would like to thank Ms. Engelsing in particular for the many suggestions, reviews, and discussions.

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