# Magnetoteluric and electrodynamics Research, April 2017, the mission "Rtanj", Serbia

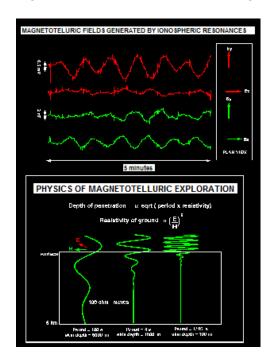
# **Measuring equipment:**

- 1. Teslameter TM 40 [H<sub>50Hz</sub>, nT]
- 2. Trifield meter, 100XE [H, mG; E, V/m]
- 3. The digital multimeter Mastech MS8229 [T, °C; Hum, %; Noi, dBrel]
- 4. HF-broadband amplifier IB Mraz, "E" probe: rod antennas, L = 30 cm; "H" Probe: open coil;
- 5. PC oscilloscope OWON, VDS1022
- 6. Notebook MSI, Quad Core, Win 8.1
- 7. S-meter, Bedini version of Dea / Faretto Detector, IB Mraz, [Sc, Ampl., % Deflection]
- 8. Experimental life energy meter, Heliognosis model LM3, [[**O**<sub>r</sub>, Range, Fine, Coarse, % deflection]

**Note 1**: EM spectrum varies slightly, the signals are changeable in amplitude and frequency, except ordinary signals generated by measuring equipment (Inverter/ Oscilloscope switch + sampling rate, etc). The signals that originate from measuring equipment and devices used during measurements were registered before measuring at selected locations. Vrms value registered by equipment no 5 and 6 should be considered as a relative values, considering that the equipment no 4 was used during the measuring. In case of need, the registered values can be recalculated and expressed as absolute.

### **Measurement Method:**

Magneto Telluric (MT) and Audio Magnet Telluric (AMT) methods /ref. 1/





MT and AMT methods /ref. 1/ are a electromagnetic methods that measures variations in the earth's surface electromagnetic fields at different frequencies.

It samples the electric and magnetic fields in the low (IF-Audio-UF) frequency range. Sources of the MT/AMT signals may be either artificial or natural.

Solar energy and lightning cause natural variations in the earth's magnetic field, inducing electric currents (known as telluric currents) under the Earth's surface. Earth currents arise from both natural and manmade sources, including the magma in the earth's core and the normal distribution and use of electricity. Combined, these phenomena create strong magneto telluric source signals over the ULF/LF frequency spectrum.

MT measurements can investigate depths down to hundreds of kilometers. Greater depth requires lower measuring frequencies, which in turn requires longer recording times. Very deep, very long-period measurements (mid-crust through upper mantle depths), may require recordings of several days to weeks or more to obtain satisfactory data quality. AMT is a higher-frequency magneto telluric technique for shallower

investigations. While AMT has less depth penetration than MT, AMT measurements often take only about one hour to perform (but deep AMT measurements during low-signal strength periods may take up to 24 hours) and use smaller and lighter magnetic sensors.

Magnetic fields in the frequency range of 1 Hz to approximately 20 kHz are part of the audio-magneto telluric (AMT) range. These are parallel to the Earth surface and move towards the Earth's centre. This large frequency band allows for a range of depth penetration from several meters to several kilometers below the Earth's surface. Due to the nature of magneto telluric source, the waves generally fluctuate in amplitude height. Long recording times are needed to ascertain usable reading due to the fluctuations and the low signal strength.

The multidirectional MT sounding, performed on different locations can clearly indicate a different ratio of the electric to magnetic field and theirs phase shifting caused by the different speeds of propagation, pointing in that way to different subsurface areas mechanical, magnetic and electric conductivity, i.e. its anisotropy and in fact - its structure.

# Measuring values:

The research include the recording of electromagnetic and mechanical energy spectra, and are performed on magnetotelluric method in the frequency range from extremely low to medium frequencies (25 mHz – 50 kHz) for electric and/or magnetic phenomena.

Measuring of mechanical vibrations covers an area of infrasound, audio and ultrasound range. For these measurements we used the conventional devices numbered as 1. to 6. in the list of measuring equipment.

In addition to these measurements the detection of the presence of scalar fields [10] was performed by "S-meter" (Eq. 7). Investigations of unconventional energy fields, as "Orgone energy" is e.g., was carried out by special alternate energy device (Eq. 8.) that is intended for scientific research into life processes.

Furthermore, at each measuring point control parameters were measured: a) presence and intensity of the "EM smog" caused by power network (50 Hz); strength of the dynamic magnetic (b), dynamic electric (c) fields and radio waves strength (d); temperature (e), humidity (f) and noise (g).

Complete measurement recordings are stored in my database but in this paper we introduce only the most interesting findings just as a illustration of ours analyses and conclusions.

### **Measurements:**

**Location 1:** "Rtanj, Šiljak, position on the edge of the vertical hole", 09. April 2017, 14.06 h.



### Measured values:

 $H_{50Hz} = 4 \text{ nT}$ , H = 0.6 mG, E = 30 V/m,  $T = 16.4 \,^{\circ}\text{C}$ ,  $Hum = 15 \,^{\circ}\text{M}$ ,  $Noi = -28 \,^{\circ}\text{dBrel}$ ,  $S_c = 10, 0.5; O_r = 100, 3, 1, 100 \,^{\circ}\text{C}$ 

**Note 1:** The device for "alternative energy phenomenon's" measuring (Eq. 8) was reacted a very intensive. This device is calibrated in relative units and therefore is set to "calibrated" sensitivity. Any change (reduction) of sensitivity would reduce possibility of comparing this measurements and measurements performed earlier - at other locations. My impression, for this measuring setup, is that the relative value of "life energy" at this location is several times higher than all so far measured by this apparatus.

# **Characteristic spectrums:**

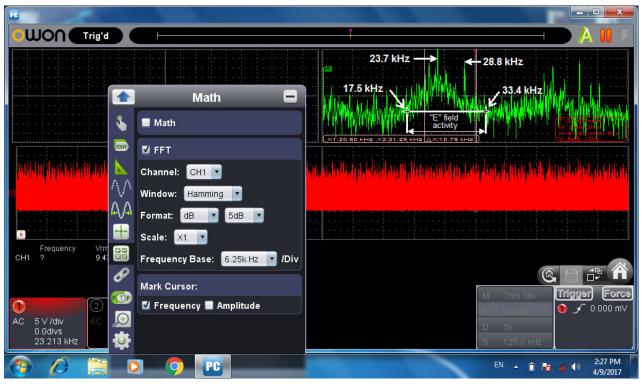


Figure 1, "E" signal in the range 0.1 - 62.5 kHz. A large electrical activity is visible in the area of 17.5 - 33.4 kHz.

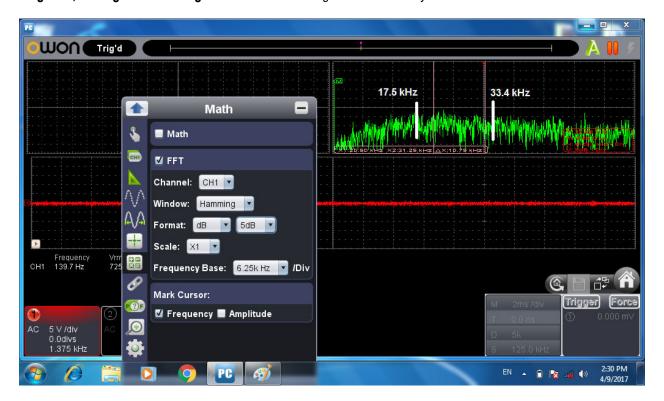


Figure 2, "H" signal in the range 0.1 - 62.5 kHz. There is no any significant magnetic activity in the same part of the frequency spectrum.



Figure 3, "E" signal in the range 0.1 - 12.5 Hz. Electrical activity with duration of about 6.2 sec was recorded in the interval of 200 sec.

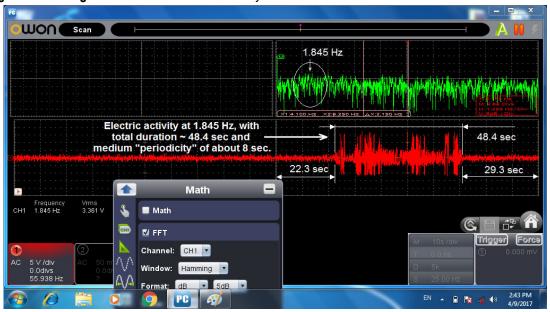
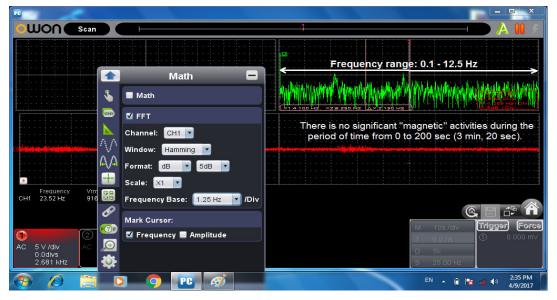


Figure 4, "E" signal in the range 0.1 - 12.5 Hz. Electrical activity with duration of about 48.4sec and with mean "periodicity" of about 8 sec was recorded in the interval of 200 sec.



**Figure 5, "H" signal in the range 0.1 - 12.5 Hz.** In this frequency range, during measurements with "H" probe, for the time interval of 3 minutes and 20 seconds, any significant magnetic activity was not observed.

## Measurement analysis

of ambient fields at the location 1, "Rtanj, Šiljak, position on the edge of the vertical hole":

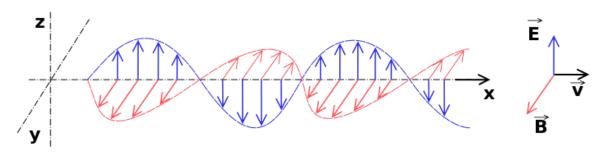
- Measured value of "EM smog" caused by the power network 50 Hz (Eq. 1)  $H_{50Hz} = 4 \text{ nT}$  has a minimal value, which is usual in non-urban areas. This means that all electromagnetic phenomena measurements done with other equipment (Eq. 2 8) do not originate from the power energy networks, nor are the result of its actions but are exclusively of MT / AMT nature.
- The measured value of the dynamic magnetic field has a fairly low value of **H = 0.6 mG**, characteristic for non-urban areas.
- The measured value of the dynamic electric field has a value slightly higher than the usual: **E = 30 V/m**, indicating increased "electrical" activity at this location and the possible presence of longitudinal [10] electrodynamics vibration.
- The temperature (T = 16.4 °C), humidity (Hum = 15%) and noise ( $N_o = -28$  direly) are within normal values, pleasant for work and extremely favorable for apparatus operation.
- Value Sc = 0.5, registered with measuring equipment Eq. 7, intended for scalar fields detection, indicates the presence of "scalar field" on this location.
- Experimental life energy meter (Eq.8, LM 3) showed extremely high level of orgone energy at this location (Or >> 100) which is much higher than the average level.

The "E" field signal registered at the top of Rtanj, in the range from 0.1 kHz to 62.5 kHz, shown in Figure 1, indicate the really emphasized electrical activity in the frequency range from 17.5 kHz to 33.4 kHz. It is obvious that central part of that frequency segment is considerably raised. At the same footage a very strong signals at 23.7 kHz and 28.8 kHz are clearly visible.

It is more than interesting that the signals with similar frequency (22.5 kHz and 28 kHz) were registered in the localities in the Archaeological Park of the Bosnian Pyramid of the Sun [see ref. 2] with completely different equipment of the same type. Namely, instead of measuring equipment no 6 used in these measurements, during the measurement at the APBPS [2] a "Digital oscilloscope with FFT option, Agilent Technologies, DSO3202A, 200 MHz, 1GSa / sec" was used. However we have registered a signals whose frequency was very close to the frequency signal registered in this measurements at the top of Rtanj. This fact, despite their essentially different but harmonious dimensions<sup>1</sup>, indicates a "resonant consent" and energetic coherence of the Rtanj with facilities in APBPS!

Figure 2 is a recording of magnetic signal measurement in the range from 0.1 kHz to 62.5 kHz. On the magnetic signal frequency spectrum graph (shown in green) can be seen that in the same part of the frequency spectrum in which previous measurement was performed with "E" field probe, there was not registered any significant magnetic activity.

According to the definition (Wikipedia) of so-called "Hertzian" electromagnetic waves, classically, electromagnetic radiation consists of electromagnetic waves, which are synchronized oscillations of electric (E) and magnetic (H) fields that propagate at the speed of light through a vacuum. The diagram in the figure below shows the EM wave which propagates from left to right. The oscillations of the two E and H fields are cause and effect of each other, mutually perpendicular, and direction of energy and wave propagation (V) is perpendicular to both, forming a vectorial, transverse oscillating wave.



<sup>&</sup>lt;sup>1</sup> Visočica hill (Pyramid of the Sun) altitude: P.S.<sub>alt</sub>= 782 m, Rtanj altitude: RT.<sub>Alt</sub> = 1565 m; P.S.<sub>Alt</sub>= RT.<sub>Alt</sub> /2 ! P.S.<sub>Alt</sub>= 782 m/4 = (in terms of a quarter wavelength in wave mechanics) = 196 m, that is almost identical to real height of Visocica hill PS<sub>Height</sub> = 197 m ! Pyramid of the Sun and Rtanj distance is exactly 300 km - that is decadal multiple of light velocity! Fact that operating frequency of the Nikola Tesla famous "World Wireless" Broadcasting system, Wardenklif tower, was just 28 kHz obviously is not strange nor accidental, bearing in mind that Tesla's is used Earth as a resonator! Signals with same frequency of 28 kHz were detected on Rtanj in Serbia as well as on Pyramid of the Sun in Bosnia.

Comparing Figures 1 and 2, i.e. recordings of registered magnetic and electrical signals within corresponding frequency spectra (i.e. Fast Fourier Transform charts, FFT) clearly shows the **complete absence of a magnetic component of the EM signal, indicating that registered energetic phenomena have a "longitudinal electrodynamic" form [10].** 

It is shown in [3] that the layout of APBPS objects is extremely specific, in complete agreement with the wave mechanics rules, and that their geometry and theirs internal structure provide them all the key features that multi-dimensionally resonant systems have, giving them a possibility of the affirmatively-interferential processes of vibrations amplification and corresponding standing wave patterns creation!

Bearing in mind that the 3-dimensional standing waves are only a special case (of "stationary") "Torsional fields" [4], wherein the term "torsion field" implies a subtle-energy flows of NO-Gravitational and NO-ElectroMagnetic nature that in certain conditions of direct and reflected wave interactions and affirmatively-destructive interference processes occurring in a PARTICULAR MEDIUM WITH PROPER GEOMETRY AND STRUCTURE (including the "pyramidal", and sacral structures e.g.) create a Scalar field, or standing waves which may have a "standing" or a "slow moving" feature or can propagate with arbitrarily high speed – even over light speed velocity. According to Russian researchers [4] measurements, torsion fields are a billion times (10<sup>9</sup>) faster than the light and therefore are more suitable phenomenon for interplanetary communication than the classic (vectorial, transversal, i.e. "Hertzian") electromagnetic waves.

Agreement of the Tesla technology principles and the measurement results illustrated in Figures 1 and 2 is completely full and is explained in detail in [5, 6]. Very unusual, but authentic and very well documented **Tesla's statement**<sup>2</sup> that he does not use the "Hertzian" waves (defined above), but "WAVE of a "very different kind" which he called "Non-Hertzian" waves, and a more controversial one<sup>3</sup> - that his most significant discovery was "... the discovery of stationary waves", unambiguously are supported with measurements figures 1 and 2, as well as the measurements presented in [2, 3]. This facts provides us an opportunity to claim that the detected phenomena at Rtanj actually are a "Tesla waves".

Figure 3 shows the "E" signal in the range from 0.1 to 12.5 Hz.

This frequency range largely correlates to the states of the human mind and, therefore, any activity in this part of the frequency spectrum is more than interesting. In fact, depending on the type of brain activity (states of consciousness), the human brain produces EM waves with appropriate pulsations speed that can be registered with the electro-encephalogram, known as EEG. In a relaxed but conscious state, EEG register waves with frequencies from 7 to 14 Hz, the so-called. "Alpha" waves and "theta" waves whose frequency is from 4 to 7 Hz. Frequency area below 4 Hz, named "Delta" waves, characterize a deep sleep state, and state of consciousness when the ratio is excluded. Rational, analytical mind generates a "beta" waves with a frequency above 14 Hz. It is more than interesting, indeed, that the so-called "Transpersonal communication" between persons with a "extra sensory perception" abilities takes place " simultaneously", exactly in the "alpha-theta-delta" area - so just in that area in which our measurements was done.

In Figure 3 frequency spectrum is shown in green and amplitude spectrum is in red. "E" signal amplitude recorded during the measurement interval of 200 seconds, or 3 minutes and 20 seconds, shows the emphasized electrical activity lasting about 6.2 seconds.

Since such signal is considered as "unusual", we repeated measuring with the same probe and with the same parameters and get a result shown in Figure 4. During the "E" signal measurement in the same frequency range from 0.1 to 12.5 Hz, in the new time interval of 200 sec, more "complex" electrical activity was registered with duration of about 48.4 seconds with an average periodicity of about 8 seconds (red colored graph on fig.4). It is more than interesting that such form of signal is characteristic for digital communication systems or systems for information transmission ...

In Figure 5, shown is the recording of the magnetic ("H") signal measurement in the range 0.1 - 12.5 Hz for

<sup>&</sup>lt;sup>2</sup> Canadian Patent 142,352 – "Art of Transmitting Electrical Energy through the natural Medium":

<sup>&</sup>quot;... IT IS NECESSARY TO EMPLOY OSCILLATIONS IN WHICH THE RATE OF RADIATION OF ENERGY INTO SPACE IN THE FORM OF HERTZIAN OR ELECTROMAGNETIC WAVES IS VERY SMALL. To give an idea, I would say that the frequency should be smaller than twenty thousand per second, though shorter waves might be practicable. The lowest frequency would appear to be six per second, in which case there will be but one node, at or near the ground-plate, and paradoxical as it may seem, the EFFECT WILL INCREASE WITH THE DISTANCE and will be greatest in a region diametrically opposite the transmitter ..."."

<sup>&</sup>lt;sup>3</sup> Nikola Tesla, Colorado Springs Notes; On July 3, 1899, Tesla claimed to have discovered "terrestrial stationary waves": "... I was very lucky to discover new and amazing phenomena, such as rotating magnetic field, glowing of wireless vacuum tubes and many other high frequency effects, which amazed the world, BUT WHAT IMPRESSED ME AS MORE BEAUTIFUL THAN ANYTHING ELSE WAS THE DISCOVERY OF STATIONARY WAVES, to which I came in 1899, and which showed that that the whole planet on which we live, despite its incomprehensible size, could be made to response with vibration to the lowest whisper of human voice. ...".

3 minutes and 20 seconds. In this frequency range and the time interval it was not observed any significant magnetic activity - which - bearing in mind the images of the "E" signal recordings in the same range (Fig. 3, 4) significantly disagree with the structure of classical, "Hertzian" EM wave form - so the energy phenomena registered in the figure 3 and 4 have mode that is more similar to the concept of "Tesla waves" also.

### Final considerations

Any intention of bringing an associative relationship between modern information systems and a "pyramidal" interfaces and any connection of recorded signals form with the certain objects geometry, structure, topography, ..., - is quite unacceptable by the scientific establishment. However, the fact that the recording was performed by conventional measuring equipment (Eq. 1-6), applied by scientific methods, leaves us the ability to bring own conclusions according to individual knowledge, experience and beliefs.

In my opinion, measurements illustrated by figures 1 and 2, and particularly by figures 3, 4 and 5 speak in favor of Dr. Sam Osmanagich, Ph.D. idea presented in [7] according to which:

"... The energy phenomena registered above the Bosnian Pyramid of the Sun summons a different definition of the pyramids instead of the conventional, dogmatic explanations. The pyramids are energy amplifiers which have been sending and receiving information through the Sun. The discovery of the Tesla's Torsion Fields above the top of the Bosnian Pyramid of the Sun, travelling faster than the speed of light, withholding energy while passing through the cosmic bodies, empowers the concept of the existence of the Cosmic Internet providing almost instant, intergalactic communication in the Universe."

The reason is very simple. According to the elementary rules of wave mechanics, electromagnetism and topography of APBPS facilities unambiguously indicate the possibility that all these objects are constitutive elements of a unique complex, purpose-builted functional entity [2, 3].

Full consent of here presented measurements on Rtanj mountain and previously performed investigations in APBPS, despite of their **significantly different**, **but harmonious dimensions** (see footnote 1, page 5), indicates strong "resonant consent" and energetic coherence of Rtanj mountain with facilities in APBPS and also to the general analogy with Tesla technology, and therefore a full accordance with the cosmic principles that are woven into the structure of pyramidal facilities with "sufficiently correct" geometry.

Form of energy phenomena registered during this research mission, speaks in favor of the idea which we already have expressed in previous works - that Rtanj mountain, or APBPS objects have not been formed exclusively - as a result of stochastic, natural processes and a high probability that they however are artificial objects created (partly or in whole) by the careful planning of their shapes, internal structures and locations.

Numerical accordance of energetic phenomena frequencies registered on the Rtanj mountain and in APBPS, as well as their completely analogous "scalar" form - shown and registered in the form of electrodynamics vibration measurable with conventional, scientific equipment indicates a possible synchronously-simultaneous connection of these facilities. In this way, and **Rtanj mountain becomes an integral element of "Intergalactic communication network of the Universe"** [7].

## Conclusion:

Magnetoteluric and electrodynamics researches, realized in April 2017, the mission "Rtanj", Serbia, are entirely consistent with our previously performed theoretical and practical investigations. Executed measurements indicate a deep connection, analogy and numerical agreement of geometric, structural and topological parameters of Rtanj mountain with the physical parameters of the radiation frequency of 28 kHz, also with the expected values according to the EDQ Model [5], and – with Nikola Tesla measurings [8]!

Rtanj Mountain abruptly rises from the plains in the form of body limited with almost regular triangles thus making the "pyramidal structure" of extremely unusual geometry and structure (regular cavity, heterogeneous underground area - clusters, with different mechanical, magnetic and electrical conductivity) [more detail: 9], which gives it a very specific features of the "multidimensional resonance". The base of Rtanj mountain is mainly composed of sandstone and rocks, and the higher parts consist of the limestone. All water flows through limestone, sinks, and then, in the lower parts, breaks out as a strong springs of water along the edge of the mountain.

This complex "mechanism" of watercourses combined with geometry and structural matrix of Rtanj mountain constitute a very sophisticated, subtle energy machine, purposefully constructed, probably with technologies unknown to us. Value Sc = 0.5, registered with measuring equipment 7, indicating the presence of "scalar field", support its phenomenology of subtle energy type as well as the value of Or >> 100 registered with "experimental

life energy meter " (Eq.8, LZ 3), that indicates a very high level of orgone energy, which is significantly more than the average level.

While the numerous institutes around the world spend billions of Euros to the study "of ball lightning" whose functional mechanism hides a secret of controlled fusion, or torsion fields investigations - what is the current hit of the "mainstream" science - in "Laboratory of Nature, on Rtanj mountain, we have these phenomenon's completely free!

Even if we ignore the measurements performed with unconventional equipment (Eq. 7, 8) for which we have listed the manufacturer name, model of the device and which energy phenomena they measure, remains - as undeniable fact - that the Rtanj mountain is very rich in subtle energy phenomena, and is location where, in recent years, were registered a number of controversial physical and physiological effects by a numerous researchers of a very wide range of specialties.

However, our research based on a scientific methodology and measurements performed with conventional measuring devices indicated the full mathematical and principle consent with the current scientific theories, also with the latest insights of modern science and - of course – with Tesla's technologies [8], respectively with the "principles of nature" - should be a great stimulus and impetus for new researches, theoretical and practical, as well as for free-thinking ideas that, perhaps, could lead humankind to new discoveries and the progress of our civilization.

Belgrade, 12.04.2017.

Goran Marjanovic, BScE

### References:

- [1] H. A. Pierce and D. B. Hoover (Electrical Survey of the Honey Lake Valley, Lassen County, California and Washoe County Nevada. US Geological Survey Box 25046, MS 964, DFC, Lakewood, CO 80225]. pubs.usgs.gov/of/1988/0668/report.pdf ,1988
- [2] ELECTROMAGNETISM AND TOPOGRAPHY OF THE BOSNIAN VALLEY OF THE PYRAMIDS, <a href="http://piramidasunca.ba/eng/latest-news/item/11009-new-report-electromagnetism-and-topography-of-the-bosnian-valley-of-the-pyramids.html">http://piramidasunca.ba/eng/latest-news/item/11009-new-report-electromagnetism-and-topography-of-the-bosnian-valley-of-the-pyramids.html</a>
- [3] SCALAR WAVES ON BOSNIAN PYRAMIDS, <a href="http://piramidasunca.ba/eng/latest-news/item/11219-scalar-waves-on-bosnian-pyramids.html">http://piramidasunca.ba/eng/latest-news/item/11219-scalar-waves-on-bosnian-pyramids.html</a>
- [4] A.E. Akimov, G.I. Shipov, "Torsion Fields and Their Experimental Manifestation," Proc. of the Internat. Scientific Conf. on New Ideas in Natural Science, St.-Petersburg, Russia, June 1996.
  - [5] Energy Density Quantization model, http://users.beotel.net/~gmarjanovic/index.html
  - [6] Nikola Tesla Prometheus of the New age, http://users.beotel.net/~gmarjanovic/NT PrometeusNewAge.pdf
  - [7] DISCOVERY OF THE TESLA'S TORSION FIELDS ABOVE THE BOSNIAN PYRAMIDS
- http://piramidasunca.ba/eng/latest-news/item/11413-discovery-of-the-teslas-torsion-fields-above-the-bosnian-pyramids.html
- [8] Analogy of Tesla's measurements, expected values by the KGE model and measurement results on Visočica, TESLA, SPACE-TIME AND BOSNIAN PYRAMID OF THE SUN, <a href="https://www.scribd.com/document/203964613/Tesla-Space-Time">https://www.scribd.com/document/203964613/Tesla-Space-Time</a>
  - [9] Centar za istraživanje i ekologiju Duh Rtnja, http://www.duhrtnja.com/
- [10] K. J. van Vlaenderen, A. Waser: "Generalization of Classical Electrodynamics to Admit a Scalar Field and Longitudinal Waves", Hadronic Journal 24, 609, 2001