



COMMUNICATION BASED ON THE QUANTUM ENTANGLEMENT

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ABSTRACT

In this short paper, the authors described one prototype of the communication system based on the quantum entanglement between two related objects. A short introduction to the phenomena of the quantum entanglement is represented, and how it manifests in the living organisms, and how it can be used with nonliving objects. It is also represented construction of the communication system and shown some test results.

Keywords: Quantum entanglement; luminescence; radiation from crystal; communication system.

INTRODUCTION

Quantum entanglement, or in other words, as relationship between objects already known many years ago, it often applies to the living organisms. For living organisms, it can be described as intuition – for example – between mother and her son. Mother can feel remotely if something bad happens to her son no matter what is the distance between them. Many inventors and scientists are trying to develop communication systems based on the mentioned above phenomena.

How it works – when some object is divided into two pieces (or broken into two halves) then those pieces are still connected to each other via a “thin field” or in other words they connected via a torsion field (Rexresearch, 2015). Torsion Field, Spin Field. <http://www.rexresearch.com/torsion/wikipedia.htm>).

Theory of the torsion field and quantum entanglement was finally developed by theoretical physicist Shipov in the 1990s (Shipov, 2009).

If we apply some disturbance to one piece then other piece will “feel” those changes in the first one and it will change its physical properties according to the influence on the first piece. Two halves from one object are called addressing components – so between them exists connection via thin field or in other term – via torsion field.

If we connect some sensitive detector to one piece then detector can register changes in this piece, according to the influence to the other piece no matter what distance between them. These changes can be as electrical

parameters, chemical, optical properties or any other physical properties.

First communication experiment based on the quantum entanglement was conducted by Akimov’s group in 1986 and then by Krasnobryzhev (<https://www.imsig.pl/szukaj/osoba,Viktor,Krasnobryzhev>). Many experiments were conducted by Zamsha in conjunction with Shkatov starting in 2011 and all these experiments were widely published (Shkatov and Zamsha, 2015). They become as source of scientific information for many inventors and scientists. Similar phenomena of quantum entanglement were used in many experiments conducted by Shevtsov – he used that to treat different plants like “medicine” – to recover plants from diseases. From that time appeared many followers in different countries – Kernbach in Germany, Gao Peng in China, etc. Next is a theoretical introduction for better understanding of the torsion field physics.

Theoretical description

The theoretical description of the quantum entanglement of physical objects begins with the well-known work of Einstein-Podolsky-Rosen (Einstein *et al.*, 1935), in which for the first time in science the theoretical possibility of superluminal (informational) interaction was shown. Experimental work in the microcosm to determine the existence of entanglement of elementary particles (photons) began with the pioneering work of Alain Aspect in 1981 and then constantly improved in various scientific teams. The serious attitude of researchers was caused by work at the University of Geneva in 2008, when it was possible to separate two streams of entangled photons at a distance of 18 km and measure with great accuracy the speed of information interaction, which turned out to be at

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least 5 orders of magnitude higher than the speed of light. In 2010, the entanglement of electrons was discovered by the combined efforts of groups in Germany, France, and Spain, and in 2011 an entangled state between rubidium atoms was observed at the Max Planck Institute. Of particular interest was the work of Finnish scientists who observed the entanglement of macroscopic objects – massive oscillators (Ockeloen-Korppi *et al.*, 2018), which showed that there is an information connection between both the microscopic and macroscopic objects. This fact tells theoretical physicists that it is necessary to change the existing picture of the world so that the new equations of physics combine quantum theory with general relativity, which is what Einstein sought. As a result of solving Einstein's first and second problems, a theory of Physical Vacuum was proposed in the book by Shipov (1998), in which quantum theory is combined with extended relativity in accordance with the Einstein's ideas. In the extreme case, the equations of the new theory coincide with the equations of both quantum theory and relativity theory, while in the Schrödinger, Dirac equations, etc., the wave function turns out to be a real physical field – the field of inertia, which is the third fundamental field (after gravitational and electromagnetic) given to us in sensations. Mathematically, the inertia field is described by torsion of the space of absolute parallelism $A_4(6)$ (Shipov, 1998), and is usually called torsion field in physics. The torsion field is generated by the rotation of any kind of matter on both macroscopic and microscopic scales, and manifests itself in a wide class of experiments (Akimov, AE. 1991. Heuristic discussion of the problem of searching for new

long-range effects. EGS is a concept. ISTC VENT, preprint N 7A. pp.63). The peculiarity of torsion fields is that their propagation velocity exceeds the speed of light (Shipov, 1998) which is observed in experiments at the macroscopic level. Therefore, the torsion field is, in our opinion, the main participant in such an exotic phenomenon as macroscopic entanglement.

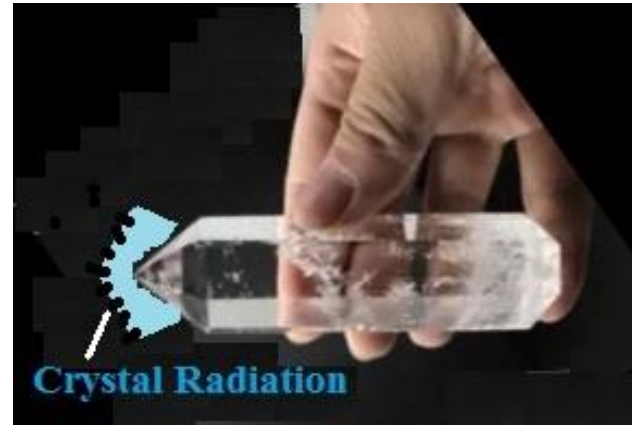


Fig. 1. The radiation from the crystal.

Description of the experiment

The prototype of the proposed communication system consists of the transmitter located in Belarus and receiver located in Perth, Western Australia. As addressing components, it used a broken into two pieces rock crystal. Even if it is broken into two pieces, they still connected to each other via thin field also called torsion field. So, this is a “heart” of this communication system. In the receiver,

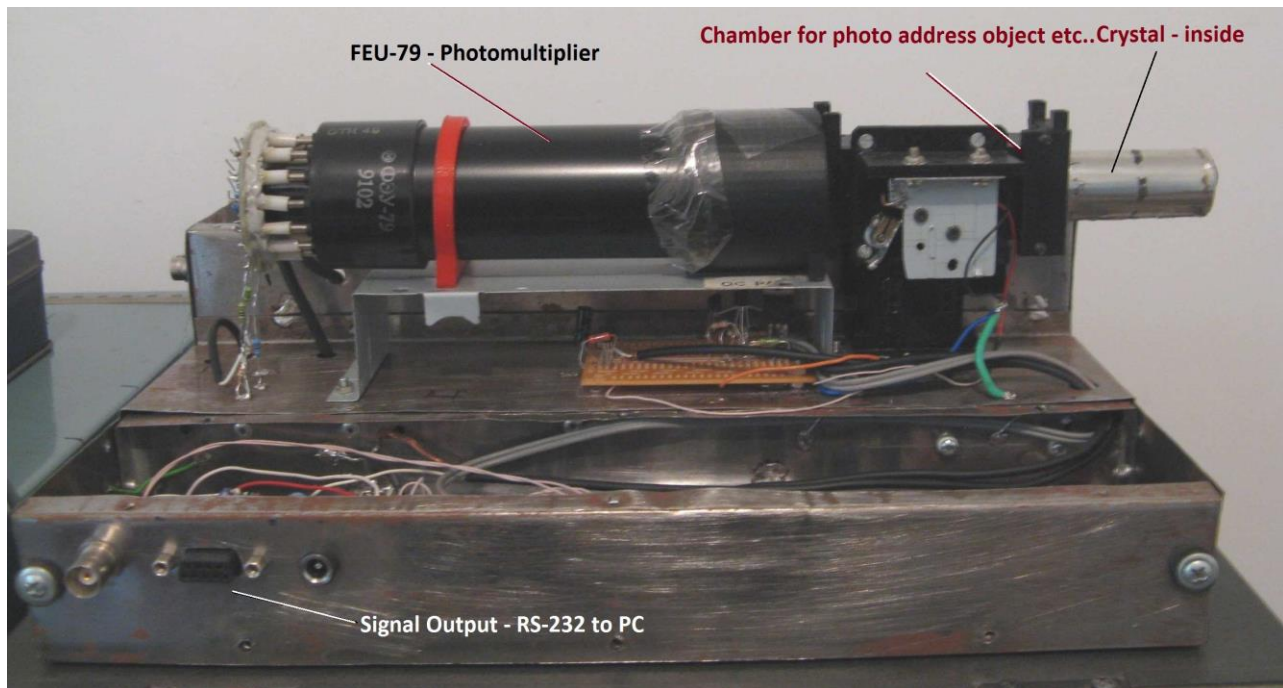


Fig. 2. The aura detector (receiver).

for primary sensor it was used top half from the crystal, the bottom part from the crystal was used in the transmitter. According to the extra-sensory people, the top of the crystal emits some sort of radiation as shown in Figure 1. But this emission cannot be seen by ordinary people. However, this radiations (emissions) from the crystal can be detected if between the top of the crystal and the photomultiplier it is placed a paper screen with luminophore. This screen serves as scintillator (Wikipedia, 2022) which converts thin field from the crystal into the visible lights which can be detected with photomultiplier FEU-79.

In the represented here long-range communication experiment, it was used already the known aura detector

described by Zamsha and Shevtsov (2021a) and it is shown in Figure 2. To detect the aura of any object it can be used luminescence phenomena which is a light emission from the luminophore under an external influence on it by different types of radiation – like X-ray or any other with high energy emission, chemical reaction, torsion field, scalar wave (Zamsha and Shevtsov, 2021b), etc. This was confirmed by extra-sensory people – they can see similar aura around the human head or other objects by their “3rd eye”.

System description

The communication system consists of a receiver located in Perth, Western Australia and transmitter located in Belarus. The block diagram of the system setup is shown in Figure 3.

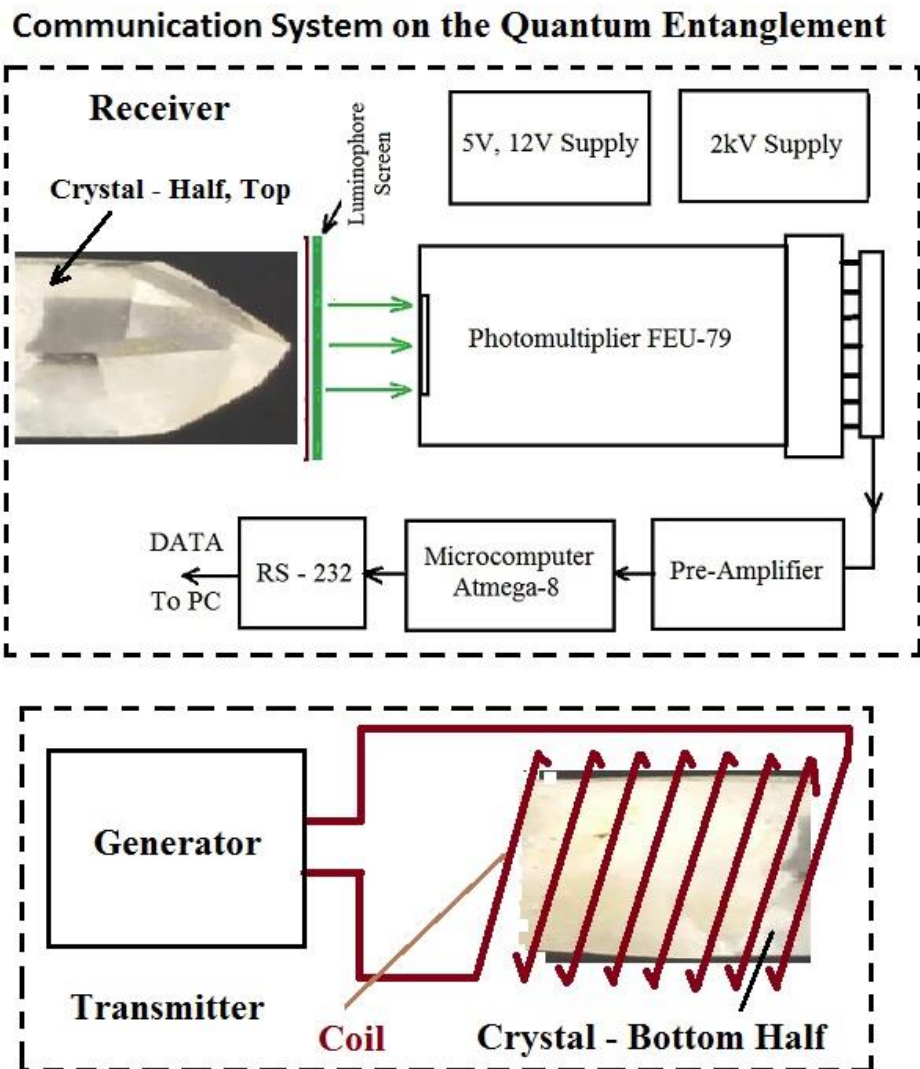


Fig. 3. The block diagram of the communication system.

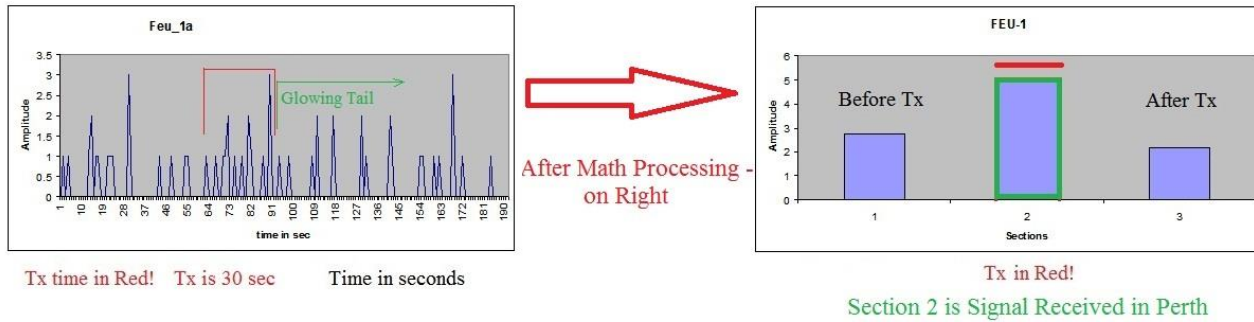


Fig. 4. The raw data (left) and the processed data (right).

The receiver consists of the top piece from the broken into two parts crystal, scintillator, photomultiplier (FEU-79 - Russian), high voltage (2 kV) supply, pre-amplifier, microcomputer – ATMEGA-8, and laptop computer to record and mathematical processing of the upcoming data. The transmitter consists of an electronic generator, coil, and the second half of the broken crystal, which is in the quantum entanglement with the crystal piece in the receiver. This system detects aura by counting photons of the light emission from the luminophore screen, which is “bombarded” by the test sample’s spin field (or influences by its aura). Should note that luminophore screen plays a role as “translator” (or in other words as a scintillator) which converts the crystal field emission into the visible light necessary to count by the photomultiplier. Prime result is processed by the local microcomputer (ATMEGA-8) and then results are sent to the big computer for further mathematical processing.

Communication protocol

After system warmed up to the stable temperature condition, it was conducted 6 communication sessions. Each session was synchronized in time between the transmitting station and the receiving station in order to evaluate the quality of the communication.

First at all, receiver was switched on and first 30 seconds it was in the idle mode recording background noise, etc. After 30 seconds, the transmitter was turned on for a duration of 30 seconds and receiver station was recording the incoming signal, then transmitter switched off and receiver was kept recording background noise for a duration of 60 seconds, etc. Some graphs of sessions are shown below in Figures 4, 5 and 6. There were conducted 6 communication sessions, 4 of them confirmed a good result.

For a better visibility and for convenience, all raw graphs were converted to the columns for better observation of tests results. Background noise was cut off from the total signals, only actual signal and some other unknown signals were left and mathematically processed.

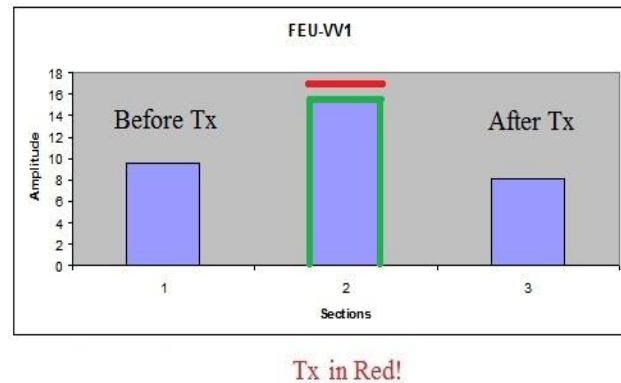


Fig. 5. Some result of the communication session.

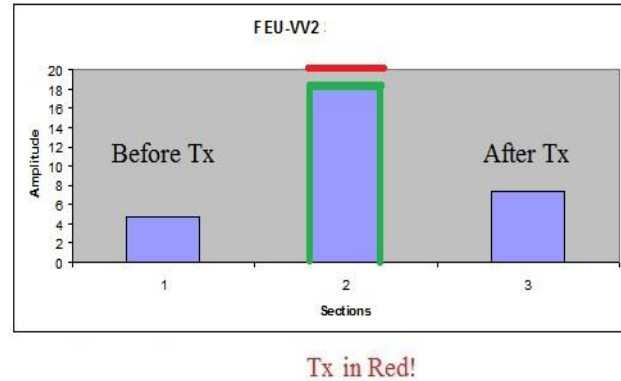


Fig. 6. Another result of the communication session.

CONCLUSION

According to the first results, the proposed communication method has shown promising results but it needs some further development in the combination with theoretical support. Maybe detecting system in the receiver needs some cooling to reduce noise in the photomultiplier. The authors continue to improve their system.

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