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KOZYREV-DIRAC EMANATION.

INTERACTION WITH MATTER and METHODS OF DETECTING

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In this paper the authors show the possibility of creation of a new kind of emanation. The magnetic monopole beam can be made in space as a result of focusing of some natural substance. Special devices based on the Moebius band elements make the given focusing. This emanation is able to magnetize graphite and organics, decrease the radioactivity, and influence the oncology diseases. The time reverse technology is realized in such devices.

Experimental data, which allow making a conclusion about existence of previously unknown emanation, are

presented in this report. Here are descriptions of experiments and methods of measurement. The effects of interaction between new type of emanation and matter have been obtained.

Till the present moment theoretical physics didn't pay attention to the nonoriented configurations and spaces. The reason of this situation is the fact, that from the philosophic point of view it is not possible to determine and locate the area of the nonoriented topological structures in our world. We (eight scientific teams) joined our forces and we needed more than 30 years to solve this problem by an experimental approach.

The fundamental tenet of the casual mechanics developed by Kozyrev can be formulated as follows. There are two types of energy in the Universe. The positive or «right» energy acts as a factor of the entropy increase. The negative, or «left» energy tends to decrease the entropy, i.e. it acts as a factor, which regulates the entropy increase. The «right» energy is transformed to the «left» one and this fact may be interpreted as a course of time from the past to the future. When the energy is transformed from the «left» to the «right» form, time is reversed. Kozyrev supposed [1] that through revolving of a body together with a

coordinate system along a circumference the right coordinate system is transformed to the left one at the moment, when the body reaches the point situated at the opposite side of the diameter. For example, let us take a cylinder (a wall of the width h) and let us move

the right coordinate system presented by three vectors along the external surface of the cylinder. We can see that in the case of such a motion the mirror image cannot be obtained. (Fig. 1, left)

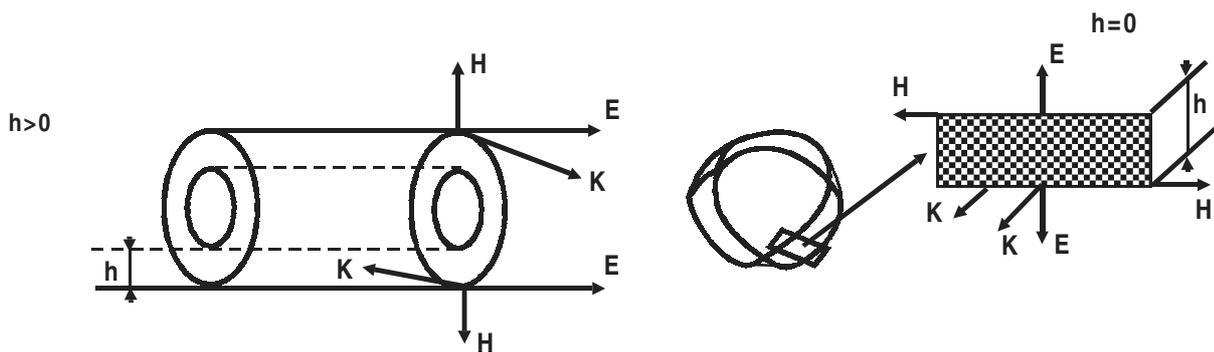


Fig.1

We can also proceed with the same operation after having bisected the cylinder and then rotate one of the edges of the obtained strip at the angle of 180° and splice it with the other end. The geometric figure obtained in such a manner is called the one-sided cylinder or the Moebius band (MB). In this case we have got the full inversion of the vectors E and H without having changed the direction of the propagation (Fig. 1, right). This property of the MB results in the fact, that in contrast with the oriented cylinder (whose

width $h > 0$) the width of the wall of the nonoriented cylinder is equal to zero ($h = 0$). The so called «short circuit» of the space is produced in such a manner. Due to this property one can observe the phenomenon of the super permeability, when one body can penetrate into another body without any interaction [2]. We can also expect, that the signal sent from a point to another point under the condition of $h = 0$ will immediately reach the receiver. Now let us give an explanation of such a property as the nonorientability (Fig. 2).

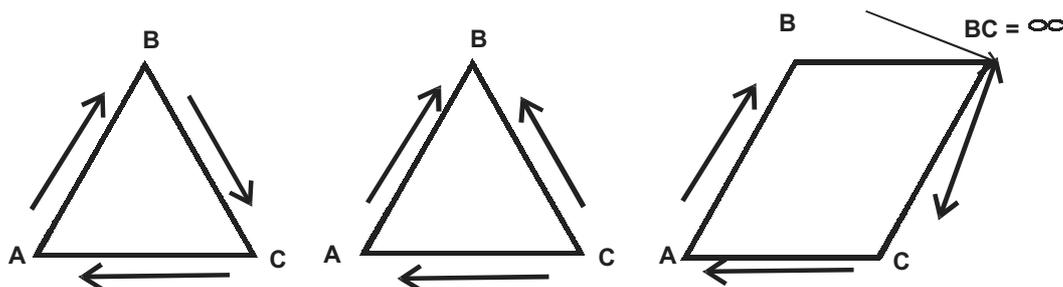


Fig. 2

Let us suppose that we move along the sides of a triangle ABC without changing the direction of motion. We can obtain a closed loop through such movement. This loop will be destroyed if we introduce the counter-motion (motion in the opposite direction), for example along the side CB. In this situation the loop can be restored by introducing of the motion B - C, that is equivalent to the increase of the spatial dimensionality.

Taking this fact into account, we can conclude that nonoriented figures may be considered as intermediary ones between 2, 3 or 4- space dimensions, depending on the dimensionality of the initial nonoriented figure. The entrance in the 4th dimension automatically means the disturbance of the space metric and it should result in the appearance of a gravitational field. In order to make the idea clear let us proceed with the consideration of the MB step by step (Fig. 3)

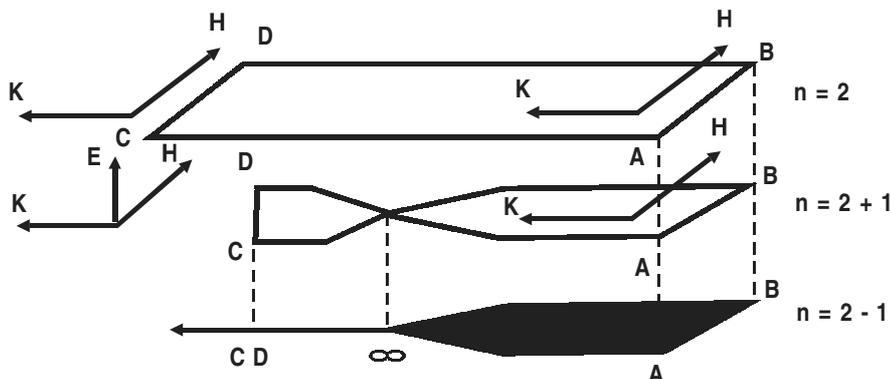


Fig. 3

At the beginning we have the initial strip ABCD. Let us turn CD around AB at the angle of 90° and then make a projection of it on the surface. The rotation of the edge of this strip automatically transforms the figure so that it enters the dimension 2 + 1. The projection of the transformed figure has the dimension 2 - 1. Besides,

the «density» of the straight line is considerably increased. If we proceed with the rotation of the strip, so we'll obtain a twisted figure. By projecting this twisted figure on the surface (Fig. 4) we'll demonstrate the complete inversion of a pair of vectors. Having splices the edges of the twisted figure we'll obtain the MB.

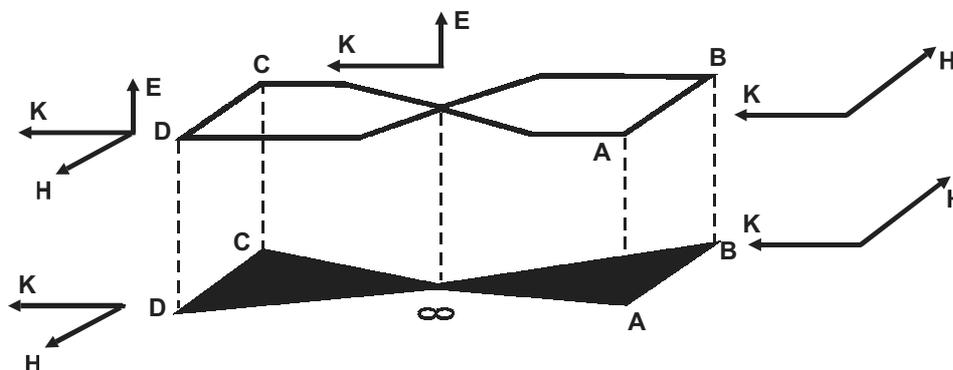


Fig. 4

Having considered this design we can conclude, that for real MB models the electromagnetic fields, which have negative energy, will appear. Exactly in this case, when the synthesis of the magnetic monopole (Mon) is possible, it will be the antipode of the electric monopole (electron) in our «positive» space. By contrast with spiral (helicoidal) movement along the surface of the cylinder, for the case of nonoriented figures such trajectories are transformed into closed knotted curves. The topology of such a field is presented on the Fig. 5 [3]. If the field is a magnetic one (that inevitably occurs, when the electric current exists in the surface layer of a conductive MB model) the obtained topological construction demonstrates the magnetic monopole structure. Really, it is similar to a dandelion flower with a dense central stem. That is why the MB can generate two types of such formations: luminous («positive» energy) and black («negative» energy).

a projective plane is created by the matching of the opposite points of spherical surfaces. This property can be explained if we suppose that the nonoriented fields are primary and the oriented ones are secondary.

EXPERIMENT

The previous experiment with conductive MB models [4] was aimed on obtaining of plasma formation, which can be considered as the model of natural ball lightning. In the work [5] the strategy of experiment, the technologies of production of the MB and some results are given. The profiles of the image of a natural ball lightning and profiles of the formations obtained in laboratory are shown on the top of Fig. 6.

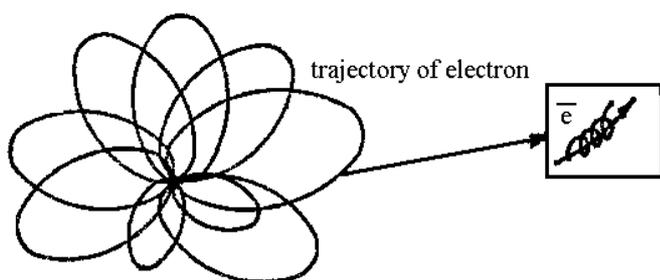


Fig. 5

Because of the fact that the nonoriented figures are formed by the mutual (in pairs) cruciform conjunction of the opposite points, we can notice, for example, that the one-sided torus (the Klein bottle) is formed from a half of an oriented torus; the formation of the models of

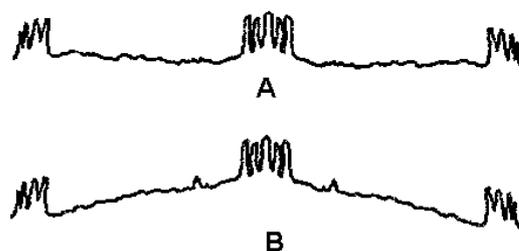


Fig. 6

The recent works were focused on the discovering of the factors, which cause the formation of such objects. As a result of this investigation a radiation of a new type was discovered. Because one MB device generates a small amount of negative energy, we continued our research with the construction of assemblies made of several MBs. At present time we created industrial

prototypes of powerful emitters of negative energy by means of the developed nanotechnologies. Fig. 7 shows the scheme of the MB assembly.

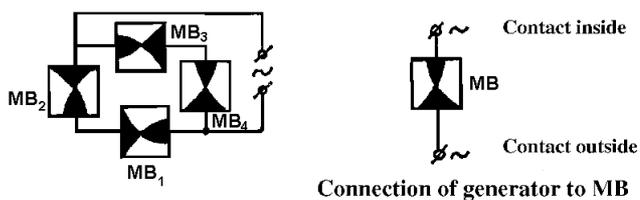


Fig. 7

In order to keep the nonorientability of the assembly as a whole, one of the elements must be produced with a reversed twist or it should be connected in series to the circuit in opposition to the other elements. Because it was expected that the assembly can generate a powerful gravitational wave, in the first experiments a single thermostatic quartz resistor shielded from electric and magnetic fields was used as a detector. Due to this quartz detector the wave, which have an unknown nature, was discovered. In this situation the acoustic wave could be mistakenly detected as a gravitational one. To determinate the nature of this wave we made an experiment on determination of its speed. It is well known, that the speed of an acoustic wave in the air is equal to 0.3 km/sec., depending on the density of the substance. The scheme of the experimental equipment is shown on the Fig.8. Two quartz detectors are situated at the distance of 1 meter from each other. The signals were transmitted from the detectors to the input of a double-gun storage oscillograph. The measurements were made for the base of 5 meters. The results of the measurements are shown in Table 1.

Derivation of gravitation wave

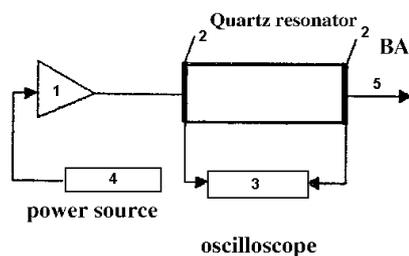


Fig. 8

TABLE 1

BASE (m)	SPEED (km/s)
0	100
1	1000
2	5000
3	10000
4	50000
5	100000

The value of the speed of this wave allows concluding that this wave has gravitational nature. It is rather surprising, that the wave moves in the direction away from the source with some acceleration. Such a behavior can be explained by the generation of a flow of very heavy particles, which cause the distortion of space. However, the big speed of this wave cannot be considered as an absolute proof of its gravitational nature. It is desirable to make such an experiment,

which can unambiguously determine the nature of the wave and its characteristics. In theory it is known as a phenomenon of the alteration of the frequency of light wave. When the light wave approaches the gravitational field, a photon accelerates or «becomes a little more blue», but when it is moving away from a gravitational field, a photon «becomes a little more red». Such an effect can be used as a general principle for the proposed experiment. An important point is to avoid using of the complex composite optical systems, because they can possibly cause side effects and it is difficult to take them into account. That is the reason, why all the measurements should be made on the ray path. If we are able to provide the «frequency-amplitude» conversion in the optic frequency band, the problem can be solved. We can use a light filter with a sharp characteristic curve, which is compatible with the wave length of the light source as such an element (Fig. 9).

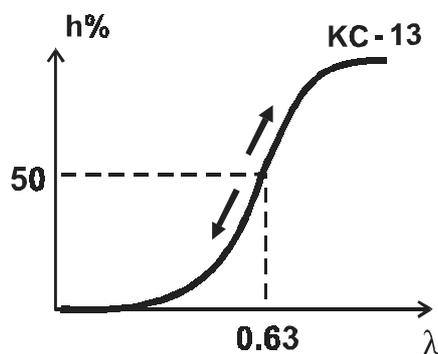


Fig. 9

The scheme of the experiment is shown on the Fig. 10. If we consider the characteristic to be the function of the distance between the light filter and the light source and the frequency of “pumping” of the MB assembly, then we can determine not only the gravitational potential, but also the value of the gravitational disturbance caused by the magnetic monopole beam. A simple calculation shows [6], that the space disturbance is equivalent to the one caused by a body of the mass of 10^{32} g, i.e. a mass only 10 times smaller, than the mass of the Sun. The experimental curves, which allow making such a conclusion, are shown on Fig. 11.

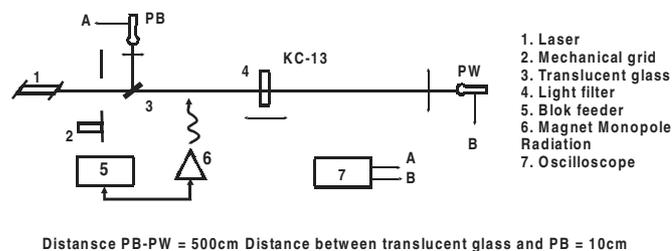


Fig. 10

This experiment also discovered the effect of overligh speed in vacuum (Fig. 12). The speed was measured by comparison of location of the fronts of both the working pulse and the basic (reference) pulse

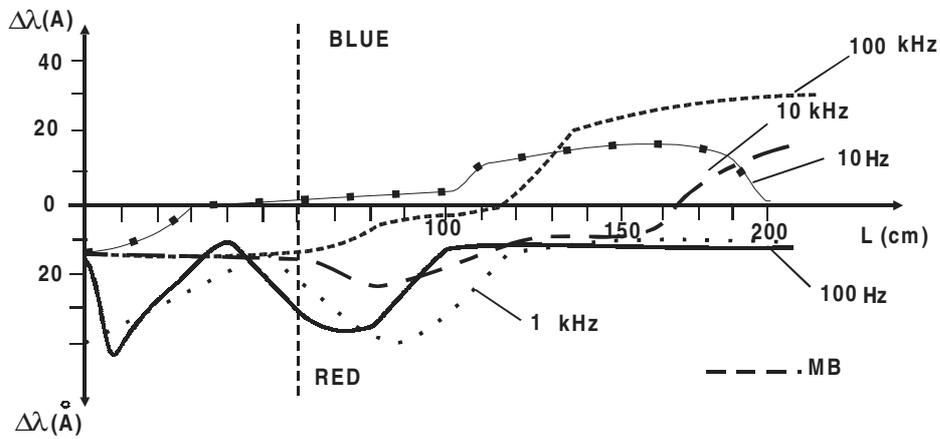


Fig. 11

(Fig. 12, A), as well as by 50% modulation of each of the pulses (Fig.12, right top). From the comparison of the lengths of the measuring base and the reference base the conclusion that the pulse front propagates faster than light can be made, which is in a good agreement with the theory [7]. Besides this, when the pulse was wholly biased relatively to the reference pulse, there was no modulation of this pulse any longer, and the pulse has changed its form (Fig.12, C) also in good agreement with the theory. When the average power of pumping of the MB assembly was increased up to 3 kW, this observation made it possible to determine, that the gravitational wave is a scalar type wave [8]. As it was mentioned above, we supposed the hypothesis that the gravitational wave is not formed by itself, but it is caused by the interaction between space and the magnetic monopole beam. It was suggested, that [9] the interaction of magnetic monopole with matter causes considerable ionization losses of energy of the magnetic monopole. Also by virtue of the fact that magnetic monopole accelerates even in weak magnetic fields it cannot reveal itself in thick layers of matter.

which proves the existence of intensive magnetic field in the place of interaction (Fig. 13). We found that the depth of the damages varies in the range from 15 mm to 150 cm. An estimated energy of the magnetic monopole beam amounted to 18-1800 GeV or even more.

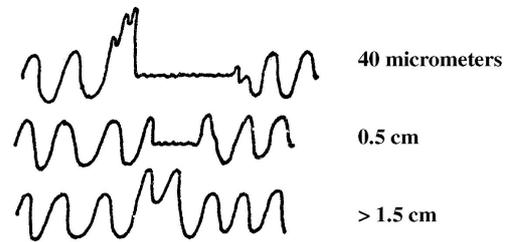


Fig. 13

The magnetic monopole beam produces some effect on different substances and radio components. In particular, when a measuring resistor was used as a detector of emanation, both the increase and decrease of its resistance were recorded. The increase of the resistance corresponded to the cooling of resistor, and the decrease corresponded to its heating. The shielding of the detector by means of a thick iron layer resulted in cooling. Changes in its resistance have a long period and they are interesting mainly for the purpose of their demonstration. And for quick measurement of the parameters of magnetic monopole beam we have made a thermocouple detector. Design of the detector and the experimental curves are shown on the Fig. 14.

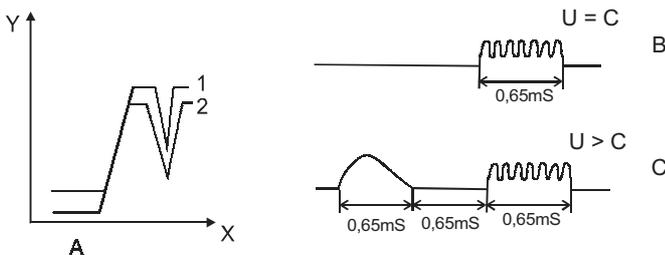


Fig. 12

In order to identify the magnetic nature of the flux of particles we used a trajectory tracking device based on the interaction with iron. The principle of magnetic monopole detecting and recording of its trajectory consists of the following. It is necessary to record the harmonic signal of the frequency of 1000 Hz on a magnetic tape. Then we should expose the reel to the magnetic monopole beam and then insert it in the tape recorder. The output of the read head is connected to the input of the stored oscillograph and on the screen of oscillograph we can see the information about any changes of 1000 Hz signal. In the place, where the beam passed, distortion of the recorded signal was observed,

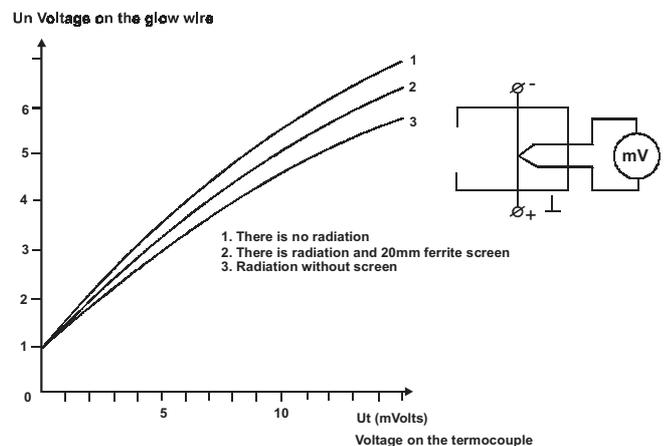


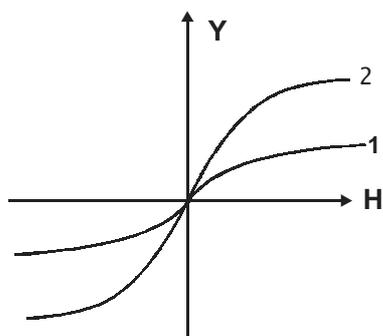
Fig. 14.

Curve 2 demonstrates the cooling effect, when the beam passed through an iron screen of 20 mm width.

APPLIED RESEARCH

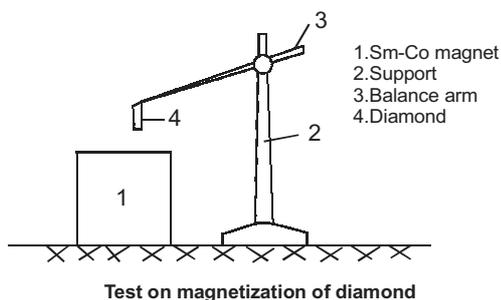
Also applied research was made from 1991 in parallel with fundamental research. It became possible due to the fact, that powerful and reliable magnetic monopole generators were created. It was found out, that the magnetic monopole beam passing through an organic substance transforms this substance in such a manner, that it shows paramagnetic properties in external magnetic fields of 1-1.5 Tesla intensity. The new property can be kept for a long time [5]. We succeeded

in establishing the fact, that the element responsible for the appearance of these new properties is carbon. The effect of the magnetic monopole beam both on carbon (Fig. 15) and diamond samples gave us the fact, that these samples show new properties slightly different from each other. The carbon clearly showed a soft magnetic characteristic, and the diamond showed magnetic properties only when it was attracted by a steel needle in the magnetic field (Fig. 16)



Magnetization of carbon
Adaptation 15 min

Fig. 15



Test on magnetization of diamond

Fig. 16

At the first moment after the magnetizing of the diamond we observed the own residual magnetism of the diamond, but this property wanes and disappears in several days and the diamond remains paramagnetic. From the practical point of view it is quite interesting to identify chemical reactions taking place both in the

field of the beam and in its surroundings. We could considerably improve the quality of both juices and alcohol drinks (wine, cognac, brandy, liqueur, vodka, etc.). At the same time the new properties of the processed alcohol drinks are kept for an indefinitely long time, the production expenses are very small. Considerable success was also achieved in medicine. Research made in Oncological Center at the Academy of Medical Sciences of the Russian Federation showed, that the magnetic monopole beam is absolutely harmless for living organisms and at the same time this emanation produce positive effect during the medical treating of blood diseases. Oncological diseases may be also treated either directly by the magnetic monopole beam or accompanied by other well known means of influence. Attempts were also made [5] in order to develop methods of control on the radio nuclide decay.

CONCLUSION

Taking into account the following experimental data: phenomenon of super permeability, generation of gravitational waves, magnetizing of objects processed by the magnetic monopole beam, considerable penetration capability of the beam, phenomenon of magnetic cooling of matter by its interaction with the beam, we think, that the existence of the magnetic monopole may be considered to be the proven fact. At the same time taking into account the relation between the energies of the obtained particles and the energy spent to obtain them (300 eV) we should conclude, that our generator does not create the magnetic monopole beam, but it only produce focusing of some natural emanation.

Taking into account, that N.A. Kozyrev was the first, who observed magnetic monopole emanation in nature, and the existence of magnetic monopole was theoretically predicted by Dirac, we gave the following name to the new discovered emanation: Kozyrev-Dirac emanation.

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