

# Galactic & solar gas-dust streams: from seeds to flu

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## Introduction

This article is continue modern understandings as common general problem about exolife transform to private but very important problems which applied to narrow band of humanity existing. That is main place seeds take for research but not for explanation appearance the life or more precision the exolife but how seeds born flu. So if there is now about exolife [1] how protect people and animals from the flu, which accompanies seeds. Firstly we must exactly see the exolife, gas dust streams and seeds together [1].

The hypothesis that bacteria and protozoa microorganisms are able to travel from one planet to another and become of exolife was not taken seriously by the scientific community for a long time. However at the end of the 20th century the situation changed dramatically. Firstly, in 1990, meteorites consisting of Martian rocks were found. Secondly, it became clear that many microorganisms especially bacteria spores have an uncanny ability to endure the rugged environment of the outer space for a long time and then re-activate in a more favorable environment. If we compare these findings, the idea of interplanetary transmigration of the simplest forms of life on meteoroids ceases to look so illusory. The final dot in this issue was made by the works of academician Rozanov, and later Hoover (Professor Richard B. Hoover) through the discovery of fossilized microbes inside of a meteorite massif, that is to say, seeds of life. However, to tie only the simplest forms of life to meteorites or comets are to introduce strong constraints on the likelihood of delivery of seeds (spores of life) to Earth for many obvious reasons. Besides, exobiology does not negate the problem of origin of life, and transfers it into the era of the young universe. Therefore, it is necessary to consider in detail the essence of seeds of life or cosmic particles of dust and gas-dust streams as their carriers, their penetration path to Earth and forms of their existence. So again repeat next.

Current research in biology gradually beginning to emerge in scientific world and it should be attributed to astrobiology. Astrobiology initially even from ancient times included a philosophical component and of course the scientific sense was integrated discipline. Of the major challenges of astrobiology are the ways of penetration on the planets and other celestial bodies are the simplest forms of life (bacteria, viruses) and the conditions for the existence of life dispute the passage of the galactic space. At the same time it is necessary to address the main problem - the origin of life. All of these issues to some extent addressed in this paper and some of them brought to the

technical solution. The study has no place anthropocentrism and geo centrism and understanding of modern problems of astrophysics already leaves no place for Darwinism or Darwinian hypothesis of evolution. In general about in many wrote and search Chandra Vicramasingh and his teacher Fred Hoil.

Before was find a connection between gas-dust flows of the solar system and the processes in the Earth's atmosphere, since only by demonstrating the connection of dust flows and the Earth's atmosphere, it can be argued that the possibility of penetration of the spores of life on the Earth exists (Figure-1). To accordance fig. 1 are existing days when emergency appear on Earth atmosphere flu seeds is strong probably.

There are two factors (interstellar dust and gas flows and plasma dust structures) which are able to retain and spores life in outer space and transport them across the galaxy. It is possible not only extremophiles survival, but also more complex organisms. Release of spores of life in outer space from the surface of habitable planets is possible not only due to the fall of large meteorites, but other processes. Estimated magnetologist Tom Dehel, on the Earth magnetic field fluctuations in the upper atmosphere can inspire space possessing an electric charge bacterium. It followed by the inclusion in the organization structure of the plasma. Permanent population of the upper layers of the atmosphere of the earth and modified microorganisms proved British scientist Wickramasinghe (Chandra Wickramasinghe) in Indian experiments with high-altitude balloons, so by different mechanisms (magnet atmospherical storms, dust and gas flows) is a constant emission of terrestrial microorganisms in space. This is now quite obvious process, existing since the completion of the Earth as a planet, which is ignored by experts in the preparation of the space program to find space for life on other planets. Other concrete results of other researchers are

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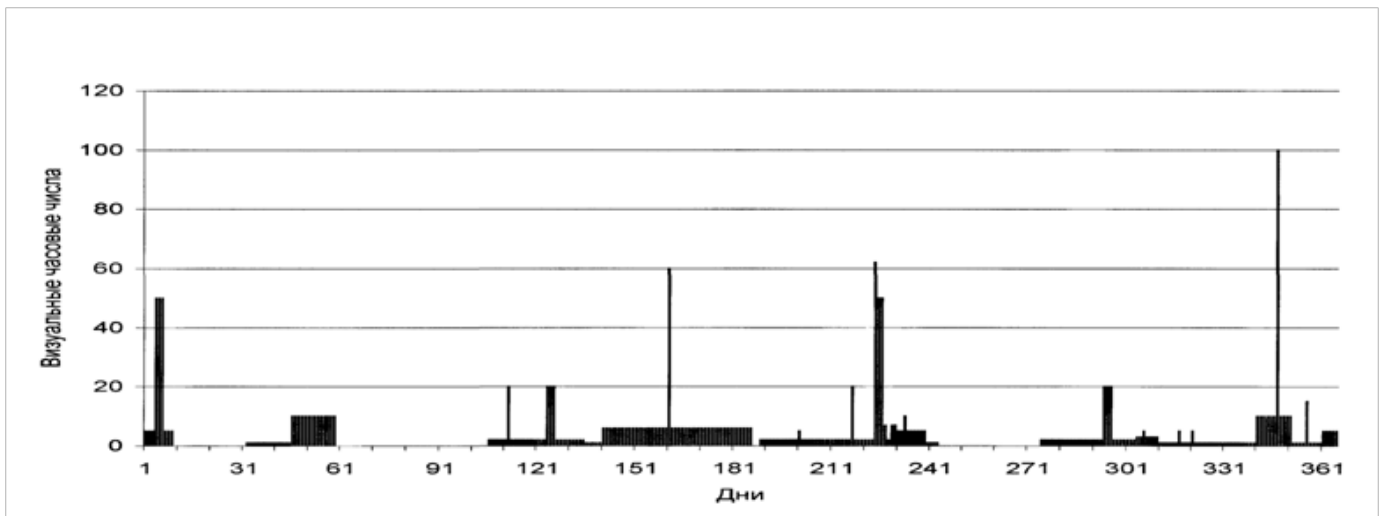


Fig.1. Annual number according to the major meteoroid streams

also not taken into account. Unknown form of microorganism appeared on the space station “Mir”, and cosmonaut Serebrov got an infection, so it could not be identified before his death. Rather than conduct a comprehensive study of the Serebrov’s state deep, this case was kept secret for a long time. Philosophy Russian Darwinists transparent-we all know there is no studies or absent of exolife. Although this is the excellent conditions to undertake pilot studies!

Because the presence of cosmic dust in the universe everywhere, the dust (and spores of life) is on all known galactic objects. Therefore there are pass aging of comets and their fall on Earth as well as meteoroids often accompanied by an unknown disease of the local population. The more that is estimated Wickramasinghe galactic dust contains a significant percentage of spores and microbial life viral type (60%-80%), covered ice shell.

That agrees well with the results of recent research at Cornell and Harvard (Cambridge, USA) universities, according to which the background temperature of space in 15 million years after the Big Bang was up to 30 degrees Celsius and it allows for the existence of liquid water on the planet. That is the universe could be a great area for origin of life. Loeb of Harvard University believes that the planet is able to exist in a time when it already appeared short-lived stars with masses ranging from tens to hundreds of solar, these areas are filled with heavy elements necessary for the formation of planets, due to stellar winds and supernova explosions. Intense short decay processes by Vladimir Tsarev stars led to a single chirality occurred living matter which confirms Carroll on which homo chirality origin and the origin of life-one event.

## Real state picture now

The flow of dust to earth exceeds tens of tons per day. In this case, there is a paradox in this thread, epidemic disease and the population is not so frequent, what are the reasons? Firstly, the human genome is largely made up of viruses (previously, the so-called junk part of the genome) which is now considered by many. For example, Dr. Ewan Birney from the European Bioinformatics Institute in Cambridge wrote about viruses as an important part and that not all viruses are dangerous. Secondly, the percentage of dangerous viruses probably is a small part of the total weight since the wildlife on Earth arose a dispute at a flow of life which have already formed before and since then has undergone little change. Thirdly, every type of virus adapted to the living conditions of those characters that were at its establishment on his planet. But it seems that researchers have overlooked some important factor. Consider the illustrative material on the structure of viruses taken from the Internet (Figure. 2).

Most types of viruses in their structure have a common element as usual a spherical shell contains genetic material of the virus that is injected into the cell body. Further, the genetic material of the virus rebuilds cells working on the reproduction of the virus and the cell dies. One of the main mechanisms of penetrating or overcome to the cell membrane can be defined as the hydrodynamic. When you attach the virus to the cell membrane in the amount of virus creates overpressure P huts. (~30 atm), and through which is injected into the cells of a living organism’s genetic material hazardous. Therefore, if the body and viruses under Psp.(surplus pressure) and the body tolerates this pressure without damage, it is not in danger. On Earth P ~ 1.0

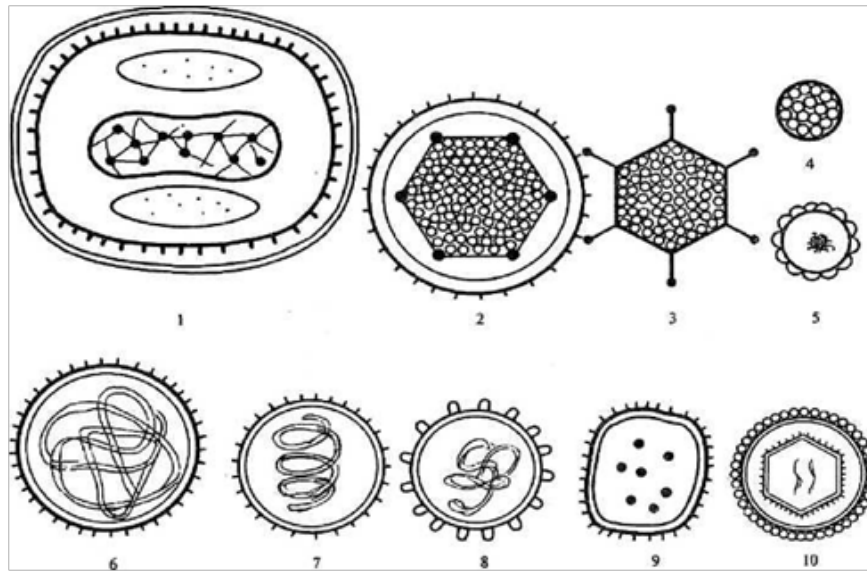


Fig.2. Viruses schematic structure.

atm. so all viruses having  $P_{huts} > 1, 0$  atm. smoothly penetrate into the cells of living organisms. This means that for those of terrestrial organisms dangerous disputes life (viruses), native to the planet with an atmosphere of  $P > 1.0$  atm or, more generally with  $g$  (gravity), providing more ambient pressure of 1 atm. That is viruses (spores of life) with the planets, where  $P < 1$  atm for terrestrial organisms are not dangerous (for space stations in the general case, this rule does not work). This effect can be used in applications, such as in the treatment of leukemia virus, flu virus, immunity – deficit (speed) virus: the patient must be placed in a special pressure chamber ( $P \sim 30$ atm). Also acceptable pressure and viruses play a useful role due to the effect of parallel transport contribute to the evolution of terrestrial creatures including humans that almost cancels Darwinist evolutionary ideas. Given the above, the question arises—where disputes life when they were born and why they are not earthly. That is not earthly as it was stated previously.

My colleague, physician S. Glotov tested this method using special pressure chamber ( $P \sim 17$ atm). One virus colony was beside chamber, other virus colony was inside chamber. After hours virus colony which was inside chamber perish beside was life.

We give a briefly information about the expected conditions, some well-known features of the simplest biological structures and their place in a possible future picture of the new paradigm of life and the life of the existing, as well as the first task for future research especially against flu.

1. Dimensions of the universe and galaxies at  $\tau_c < 1$  billion years could be significantly smaller than the existing ( $\sim 15$  times the diameter). With such a dense arrangement permitted the

existence of galaxies in the early Universe total dust and gas exchange at admitting the existence of liquid water.

2. Density physical fields and radiations at  $0\tau$  superior currently existing density by several orders (approximately 103-104 times), and the probability of a high degree of coherence significant that promotes self-organization of matter.

3. Certain types of radiation, the decay of nuclear matter young stellar formations can functionally replace the enzymes in the formation of self-replicating molecular structures and define the left chirality of living matter.

4. Difficulties using a model for the formation of dissipative structures primary living matter are eliminated if the mechanism for (factor) ordering take stable frequency external radiation, and emerging models of structures to move from systems with distributed parameters to systems with lumped parameters; it opens up the possibility of effective display of structuring within wave dynamics.

5. Genome and experimental data on the relations of the simplest objects of life and radiation indicate the important role of external radiation.

6. Stability of DNA with respect to external influences: 10<sup>-7</sup>-mutation probability regardless of local conditions.

7. Resistance DNA super dense radiation fields: no damage dose loads  $> 10$  Mrad.

8. At least 10% human use genetic information. This indicates the overall total excess informative genetic material of Earth's biosphere. Probably at the time  $\tau_0$  in the unique conditions and with sufficient time for the creation was created universal galactic genome, different elements of which can give rise to the biosphere on the planet with the widest range of environmental conditions and for different stages of development of each.

9. Celestially there is universal galactic genome. This versatility and manifests as redundancy. This redundancy ( $\sim 90\%$ ) roughly determines the number of higher life forms in the universe, including the "earth"; their number does not exceed 10.

10. Universal model genome logically linked to the concept of foresight and design, hence the origin of life creationism model more logically justified.

11. The carrier and the universal code, or "dispute" life, almost there in the galaxy in the form of dust everywhere. When forming the star system of the proto planetary cloud, once on planets there are conditions similar to those now existing earth (the last 2-3 billion years), the code of life starts from the Oort cloud and comets. On Earth, this code is only used by 10%, in preceding periods could be different.

12. Accordingly, the search for extraterrestrial life and the mind splits into two directions. One that exists is passive, consisting of attempts to find a micro - or mega scale traces of existence, the second is active. Search micro scale manifestations of life – it is Mars programs implemented on the Earth, and Mars; mega scale traces -the pyramid of Earth and Mars, the anthrop principle. Paleo archeology necessary to self form that is paleontology, admitting the existence of traces of intelligent life. Active search for extraterrestrial life involves activation of redundant information of the human genome, the attempts of its development.

13. Targeted expedition to the moon, to the polar craters, delivery regolith column with "disputes life" on earth as the promotion of the latest positive results in the field of exobiology.

14. If disputes life, continuously reaching the Earth contain even the simplest proto virus, then this is sufficient for the development of extraterrestrial life.

15. Genome fund all organisms potentially constitute a common gene pool of all life on Earth and the transfer of genes between different tax on - a reality. There is gene flow between distant organisms and micro - organisms in the world it occurs regularly.

16. Thus the spores of life constantly coming from space primarily with gas and dust flows interact with microorganisms of the upper atmosphere and is gradually moving into the lower layers. Next is the turn of birds, especially migratory (bird flu)

and other larger mammals (swine, sheep flu, etc.).

17. Since the type and intensity of the flow of life until the dispute is fundamentally not predictable and horizontal gene transfer there permanently, it makes a fatal uncertainty and destroys nomo genesis speculations evolutionary sense.

18. Group of biologists currently particularly emphasizes the role of viruses throughout the time evolution of life on Earth: the origin of the brain, emotions, love and even monogamy.

### **Astrobiology component of dust particles (ACDP): practical aspects ore what we must do**

As a percentage of total number of particles of dust component carrying astro-biologic active component or "living spores" is likely negligible. With space exploration and other technical processes amount astro-biological component of dust particles increases but their astrobiology component will have a terrestrial origin, that is terrestrial organisms are modified the influence of space environment. Consider the interaction with biological processes ACDP on Earth, including higher life forms and humans, but without affecting the genetic processes. This interaction is, there initially, but the history of this section of natural science, especially physical mechanisms of its manifestations, were uneasy, largely influenced by the ideas and research work and A. A. Chizhevskii, N. D. Kondratyev, especially in the "socio-economic theory of genetics". No need, obviously, to challenge the influence of space solar fields, magnetic, electrical, electromagnetic factors in Earth's biosphere. However, if we consider more narrowly purely epidemiological aspect here is necessary to analyze the role of the ACDP and associated physical mechanisms and cosmogony. And it must be remembered visionary A. A. Chizhevskii remarks: "The action of the sun, around probably only fuel the epidemic". In this case, excluding background ACDP conceptual model is simple and includes: source ACDP-permanent or temporary; reserve accumulation and preservation of the ACDP with the possibility of release and capture of particles; object and / or a dynamic process of transport of particles to the atmosphere of the planet. The primary sources of ACDP significance level should include the following cosmogony and astrophysical objects and processes.

1) Oort cloud and Kuiper belt part;

2) point (zone) Lagrange;

3) gas and dust and meteoroid streams of the solar system;

4) dust and gas flows from the nearest multiple star systems;

5) of the comet, including galactic;

6) the shock waves from supernova explosions;

7) dust and gas flows from variable stars and pulsars. At the same owners own ACDP probably be only the fifth first-objects, and other objects in their distribution ACDP produce a seizure.

Mechanisms of objects 6 and 7 with certainty speak particularly difficult. On the one hand, the substance of shells in supernova-a noticeable component of interplanetary dust, and the shock waves from the flash mixing ACDP in the solar system. But the capture of the gas-dust plasma of these waves in the solar system may not be visible due to the relatively small cross-section of facilities and high speed of the shock wave. Consequently, there must be other, ongoing mechanisms delivery of gas and dust plasma, and here it is necessary to evaluate the role of the pulsar as a source of dust particles. Closest to Earth sources ACDP-essentially secondary, it is dust accumulations in the libration points as a kind of small dust "planets" and craters at the poles of the Moon and other bodies in the solar system, deprived of its own atmosphere. Mars is the proxy object and its surface, especially the pole may have a diverse set of ACDP. The objects and / or dynamic processes, carrying trucks ACDP to the Earth and to secondary sources ACDP should include both sources, but only the solar wind, particularly solar flares serve as delivery mainly from secondary sources and comets. Naturally, the source should be on the ACDP Earth-Sun. Taking this into account will enhance the value of the correlation estimates for identifying "earthly echo of solar storms", but in this case plays the role of the Sun only transport system. Because the relationship between supernovae and the appearance of comets galactic type solar activity terrestrial processes (epidemics and pandemics, social disturbance, genetic changes like a time bomb, etc.) has a strong historical and statistical basis, then these processes in the light of the foregoing, no less dangerous for civilization, like an asteroid collision. Therefore astrobiology danger to the Earth must also be in the field of academics and politicians.

## P. S

Our ideas some time have response: NASA Astrobiology Institute's specialists have found living organisms trapped in the giant crystals. This is encouraging in that life could exist on other planets or their satellites, writes The Telegraph.

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