



Biological object's rhythmic structure formation under influence of external environmental factors during evolution

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In 90-th of previous century an idea on helio-geomagnetic rhythms (weak natural electromagnetic fields) as one of the external synchronizers of the biological rhythms by analogy with the solar radiation and temperature variations on premature Earth forming the circadian (diurnal) biorhythms had been invented. The proposed hypothesis has received in recent times some of the arguments in its favor, as:

- the resemblance of biological rhythms and their dynamics at all levels of biological systems from the cell to the population;
- endogenous character of biological infradian and ultradian rhythms similar to rhythms of helio-geomagnetic activity;
- similarity of the frequency bands of internal biological resonators and geomagnetic synchronizers;
- the emergence of the adaptation reactions when external synchronizer is failures – during geomagnetic storms;

It seems that all this arguments led to a preliminary conclusion that very weak natural noise like intensity electromagnetic fields were important in self organization of open nonlinear biological systems including humans.