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THE BIOLOGICAL,CHEMICAL AND PHYSICAL ROLES OF “EARTH’S ORBITAL CHIRALITY” IN
SPACE-TIME**Abstract**

The right-handed helical spin and revolution of the Earth in space-time form the “Earth’s Orbital Chirality” (EOC) and the corresponding chiral force field in space-time, both chirality and rhythm is its two major features.

According to our data, it is suggested that the natural EOC chiral force field in space-time may play key roles in living and non-living systems: 1) the possible role in the origin of homochirality in life: the right handed helical EOC force makes the right handed helical proteins with L-amino acids more stable than the left handed helical proteins with D-amino acids, which may result in the origin of homochirality in life; 2) the possible role in origin of biological rhythms: the EOC rhythms with circadian and season periodicities may cause the corresponding rhythms of chiral molecular activities to result in the biological rhythms; 3) the possible role in Michelson-Morley experiment in 1887: the EOC’s helical motion can perfectly re-explain the Michelson-Morley experiment’s results, there should be rhythmic and near 0 but not 0; 4) the possible role in the origin of weak force: the EOC helical force may result in the origin of weak force in chiral physical processes.

In summary, the EOC force field, a natural fact with major features of chirality and rhythm, can cause important biological, chemical and physical effects in nature.