

## Applied Physics 2019: About the phenomenon of free energy, described by the new axioms and laws - Valentina Markova Kirilova - Bulgarian Academy of Sciences

**Valentina Markova Kirilova**

Bulgarian Academy of Sciences, Bulgaria

The Extended Field Theory is described of the new axioms and laws. The new theory includes two new axioms and eight laws and ten consequences. It is well known the classical Maxwell's Axiom of Field Theory. It claims that the movement of a closed-loop vector  $E$  is always even or velocity is a constant:  $\text{div}(\text{rot } E) = 0$ . The first new axiom is fundamental and claims that the movement of vector  $E$  describing an open circle is always uneven or velocity is variable:  $\text{div}(\text{rot } E) \neq 0$ . The second axiom does not apply in this report. When the vortex is in a plane (2D) a cross vortex is obtained. When the vortex is in volume (3D), a longitudinal vortex is obtained. If  $\text{div}(\text{rot } E) > 0$ , the vortex is accelerated. If  $\text{div}(\text{rot } E) < 0$ , the cross vortex is decelerated. The most important consequences are that a decelerating longitudinal vortex emits decelerating cross vortices to the environment and the accelerating longitudinal vortex sucks accelerating cross vortices. A Positive Feedback mechanism exists in accelerating longitudinal vortex.

The accelerating longitudinal vortex accelerates as it sucks cross vortices and sucks up even more cross vortices because it has become faster. Thus, when the longitudinal field is accelerated, the cross field is sucked in and the longitudinal field accelerates further in every next step again and again. Therefore, there is no loss of energy from the cross field, as is the electromagnetic field. The unique Positive Feedback turns the acceleration process into a generator process. The suction is imitated by using a simple electrical current at the inlet but with a very specific shape. Aspiration of transverse vortices by the accelerating longitudinal vortex causes the temperature to decrease as a result. By comparison, in the area of weakening due to radiated transversal vortices, the temperature increases. Only one axiom and four laws are used in this report. It is known that the Electromagnetic Field is spreading crosswise with constant velocity on the length of the cross wave and with at a limit speed in the perpendicular direction ( $v=c$ ). So an increase in the size of voltage leads only to an increase in the size of current but not to an increase in the velocity. This report offers a new type of field that has the properties to accelerate. It not only keeps its internal energy but multiplies it, at the expense of the energy of the environment.

This new type of field organizes the energy generation. The block diagram of generator itself is made up of very common electrical blocks. The secret is in the unique shape of input to the antenna electrical signal. By using well known

electromagnetic field we can imitate the accelerating signal that suck in free cross vortices from the environment. Something like that was done by Nikola Tesla in its "free energy generator" used in his electric car.

The Classic Axiom in the Theory of the Electromagnetic Field certifies Maxwell's laws (1864). It postulates that the movement of an electric vector  $E$  in a closed loop is evenly:  $\text{div}(\text{rot } E) = 0$ , 1 where  $(\text{rot } E)$  is the movement of the vector  $E$  in a closed loop;  $\text{div}(\text{rot } E)$  is the divergence (the variation in increase or decrease is zero) of the vector  $E$  during its movement in a closed loop  $(\text{rot } E)$ ; the movement of the vector  $E$  in a closed loop  $(\text{rot } E)$  with zero divergence (variation) of the vector  $E$  is equivalent to evenly movement or to movement with constant velocity  $(V)$ . The defect of the classic axiom (1) is that it does not describe movement in an open loop or a vortex and movement with a non-constant or variable velocity  $V$ . Now is the time to break the restriction of Maxwell's axiom (1) and to expand the space of theory. For the purpose of describing a larger range of movements, it is obviously necessary to expand the base of service theory. This means that such an axiom must be used which can certify wider set of movements. The main motivation for altering the classic axiom (2) follows after the need to describe the causative relationships in uneven movements in open systems. It turns out that open vortices are the cause of closed vortices, which means that open vortices are more fundamental than closed ones. So it is the necessity to change the existing axiom of the Classic Field Theory for close loop to axioms of Expanded Field Theory for open loops.