

# Method for Hyper Speed in Moving Body by Temperature Cooling, According to the Theory of New Axioms and Laws

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## Abstract

*In the present article, a method and technology for obtaining Hyper Speeds for a moving body in a fluid medium is proposed. This is done by using the Theory of new Axioms and Laws that contains 2 new Axioms and 8 new Laws (briefly called the new Theory). In the present development the author applies only 1 Axiom and 4 Laws are applied.*

*The new Theory is based on two types of motion - motion of an open longitudinal vortex and an open transverse vortex. Each of them can be accelerating (with positive acceleration) or decelerating (with negative acceleration). Thus, the new Theory is based on 4 (rather than 1) non-uniform motions with variable velocity and acceleration.*

*On this extended basis the new Theory explains the resistance and heating of surface with the appearance of open decelerating transverse vortices. The decelerating motion is described by Law 5. It describes how the decelerating motion generates decelerating transverse vortices that are hot waves.*

*The essence of the new method is to suck from out the decelerating hot vortices that are formed due to friction of the moving body in a fluid environment. The suction is done by applying Law 6. It describes how the accelerating movement sucks in transverse vortices.*

*The role of a decelerating transverse vortices are played role by the hot waves of hot vortices (due to the friction) emitted by the surface of body toward the environment. The role of open accelerating vortex is played by a frozen fluid that sucks and absorbs the warm from environment according Thermodynamic Theory.*

*Therefore the Theory of new Axioms and Laws intersects with the Theory of Classical Thermodynamics is Law 6. That is why the application of Law 6 is modified according to the conditions. Accelerated sucking in is replaced by a layer of the surface of the body with a very sharply reduced temperature. This part of body can be performed by a longitudinal layer of body filled by special material (gel), pre-cooled and poured in the volume of layer. Thus, suction due to accelerated movement is replaced by suction due to a difference in temperature by a special material.*

## 1. Introduction

The author can write a long and very detailed analysis of the Classical Theory of fluid matter. But this activity will take many pages. It will be necessary to describe these limitations of the ratios in the arguments which cause simplifications and shortcomings of the present theory of fluid matter.

The Classical Theory of fluid matter is well known. It is based on the Bernoulli equation [1]. The author expands the Classical Theory and the perceptions of fluid matter. The expansion of Classical Theory of fluid matter is done by invention of the Theory of new Axioms and Laws. This requires to describe and explain in more detail what the behavior of fluid matter is, according to the Theory of new Axioms and Laws [2-4].

The arguments of the new Theory are the same - speed and

pressure. But the expansion consists of several things. The velocity vector can be decreasing or increasing in every point of time. In addition, pressure has an opposite effect – suction. The pressure or suction forms an open vortex. The open vortex is always uneven - accelerating or decelerating (Axiom 1). The pulsating transverse decelerating vortex from out generates pulsating accelerating longitudinal vortex to up (Law1). This pulsation emits transverse waves with constant velocity around this system [4-6].

According new Theory the pressure is exerted by a decelerating open vortex with dynamic amplitude, and the suction - by an accelerating open vortex with a dynamic amplitude. When (due to friction in the environment) the velocity vector is delayed and decreases by a constant factor  $\varphi$  in every point of time, then it emits a delay vortex with an amplitude that increases by a constant

factor  $\phi$  in every point of time (Law 5). But when the velocity vector accelerates and increases with a constant coefficient  $\phi$  in every point of time, then it sucks in an accelerating vortex with an amplitude that decreases with a constant coefficient  $\phi$  in every point of time (Law 6). The velocity vector pours out (or sucks in) as the amplitude of the open vortex according to own an internal law and by only own internal coefficient  $\phi$ . Thus the process is not commanded from the outside or it cannot be controlled by changing parameters from outside Therefore the process is non-parametric (Law 3). And furthermore, these two expanded dynamic arguments (speed and press with positive or negative sign) are mutually orthogonal. That is, the velocity vector and the direction of the amplitude of the coiled open vortex are mutually perpendicular. Therefore, as an expression of the Law of Conservation, their product, (not a sum) is a constant (Law 4)) [6-8].

## 2. A Brief Overview of Classical Fluid Mechanics (Wikipedia)

Bernoulli's principle states that for an inviscid fluid, an increase in flow velocity is always accompanied by either a decrease in pressure or a decrease in the potential energy of the fluid (book *Hydrodynamica* in 1738) Bernoulli's principle applies to compressible fluids as well (air) as well as for incompressible (such as most liquid flows). The relationship between velocity increase and pressure decrease is only true for low Mach number flows, i.e. flow speed less than the speed of sound in the given medium.

Bernoulli's principle is derived from the Law of Conservation of Energy, which states that at any point on a given current line the total mechanical energy is the same, i.e. the sum of all energies is a constant. Hence, an increase in fluid velocity leads to an increase in kinetic energy, hence a decrease in pressure or potential energy.

Caution In the classical theory, it is considered that the quality of kinetic energy with the speed argument is the same as the quality of the potential energy with the pressure argument.

Incompressible fluid formulation Bernoulli's equation, which can be applied to any fluid element along a given streamline, is usually write:  $v^2/2+gz+p/r=\text{constant}$ ;

$$v^2/2+(gz+ p/r)=\text{constant}; E_k+E_p=\text{constant},$$

where:  $v$  is the velocity of the flow at the given point,  $g$  is the ground acceleration,  $z$  is the height above the ground that grows inversely to the geopotential,  $p$  is the pressure, and  $r$  is the density of the fluid:  $E_k= v^2 / 2$ ,  $E_p= gz + p/r$ .

Result: In the Classical Fluid Theory is considered that the qualities of Kinetic and Potential energy are the same.

Result: The Total energy (that is constant) is obtained by algebraical summing the two parts –Kinetic ( $E_k$ ) and Potential ( $E_p$ ) energy.

## 2.1. Advantage of Theory of New Axioms and Law (called New Theory) before Classical Fluid Theory

The Theory of new Axioms and Laws consists 2 Axioms and

8 Laws. In this report is necessary to use only 1 Axiom and 3 Laws.

## 2.2. Comparison

In the New Theory two basic movements are used - longitudinal open vortex and transverse open vortex (Axiom 1). Each of them can be accelerating or retarding Thus, in New Theory 4 different movements are obtained, instead 1 as in Classical Mechanics. The speed is carried by longitudinal vortices, it can be accelerating or decelerating. This means that the speed increases with positive acceleration or decreases with negative acceleration.

Transverse vortex expresses the Pressure and Potential. It can also be accelerating or decelerating. The decelerating transverse vortex exports heat and Potential energy into the surrounding space, and the accelerating one absorbs heat and Potential energy from the surrounding space [7,8]. Therefore, the decelerating transverse vortex heats up, and the accelerating transverse vortex -cools the environment. Obviously, the longitudinal vortices that carry the Kinetic energy are qualitatively different from the transverse vortices that manifest the Potential energy.

**Result:** The New Theory considers that the quality of kinetic energy with velocity argument is different from the quality of potential energy with pressure argument of an open vortex.

**Result:** Kinetic energy represents by *longitudinal vortex as vector velocity* ( $V$ ), but Potential energy represents by transverse vortex ( $W$ ) as plane in 2D.

Therefore we cannot sum qualitatively different movements as sum vector ( $V$ ) and plane ( $W$ ). So we must find their total volume as multiplication of plane of transverse vortex to vector of longitudinal vortex [9].

**Result:** In the new Theory, the Total energy (which is a constant) is obtained by multiplication of the plane (in 2D) of transverse vortex to the vector (in 3D) of longitudinal vortex (Law 3).

## 2.3. Explanation of Classical Fluid Theory using the Theory of New Axioms and Laws

Let's start with this very famous picture demonstrating the behavior of a fluid around a moving body according Classical Fluid Theory (Figure1). Why are the lines around a moving body sharply become closer to each other in a direction perpendicular to the movement. Why vortices appear behind a moving body. How is the resistance of the fluid to a moving body in the opposite direction of motion explained. And how will the fluid react to a moving body that has a complex profile, not a round one. We intend to answer using the more expanded New Theory (Figure1) [9,10].

The Theory of new Axioms and Laws consists 2 Axioms and 8 Laws. In this report is necessary to use only 1 Axiom and 4 Laws [4-6].

**Axiom 1:** Every uneven vortex with changing speed of tangent vector  $E$  is open vortex:  $\text{div}(\text{rot } E)$  is not equal to zero (0).

**Law 1:** The transverse decelerating vortex in 2D (from out to in) emits in its center accelerating longitudinal vortex in 3D (from center to up) perpendicular to plane 2D.

**Law 3:** The Total energy is obtained by multiplication of the plane (in 2D) of transverse vortex to the vector (in 3D) of longitudinal vortex.

**Law 5:** Along 2D Decelerating vortex the initial longitudinal velocity ( $V_0$ ) decreases in every time ( $t_i$ ) with (i) degrees of Golden proportion ( $f_i$ ) or  $V_i = V_0 \cdot (f_i)$ , the initial transverse vortices ( $W_0$ ) increase in every time ( $t_i$ ) with (i) degrees of Golden proportion ( $f_i$ ) or  $W_i = W_0 \cdot (f_i)$ .

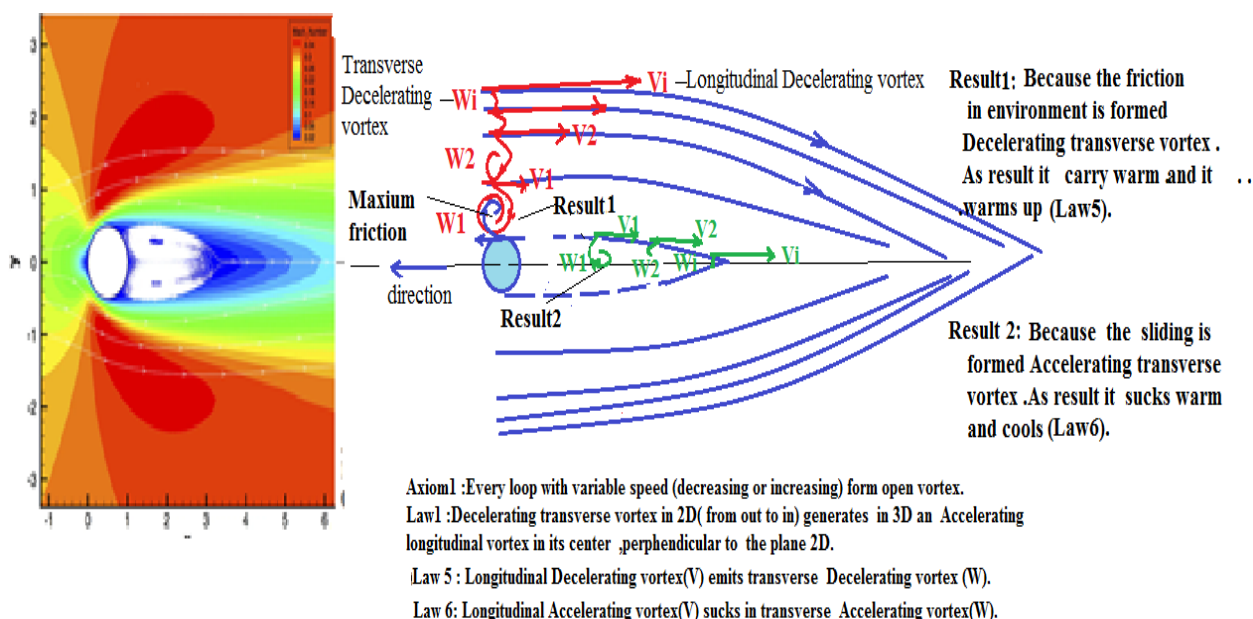
In Figure 1 the different layers (1,2,3,...) of decelerating

vortices are described in Space, where:  $V_1 < V_2 < V_3 < \dots$ ,  $W_1 > W_2 > W_3 > \dots$

**Consequence 1 of Law 5 in Space:** Decelerating longitudinal vortex in 2D emits decelerating transverse vortices.

**Consequence 1 of Law 5 in Time:** Pulsating in time decelerating longitudinal vortex in 2D emits pulsating transverse vortices to around space.

This means that pulsating in time decelerating vortices play roles of transmitter and broadcaster of transverse waves to environment.



**Figure 1:** Explanation of Classical Fluid Theory using the Theory of new Axioms and Laws

**Law 6:** Along 2D Accelerating vortex the initial longitudinal velocity ( $V_0$ ) increases in every time ( $t_i$ ) with (i) degrees of Golden proportion ( $f_i$ ) or  $V_i = V_0 \cdot (f_i)$ , the initial transverse vortices ( $W_0$ ) decrease in every time ( $t_i$ ) with (i) degrees of Golden proportion ( $f_i$ ) or  $W_i = W_0 \cdot (f_i)$ .

It has already been written that the Theory of new Axioms and Laws claims that when a fluid moves, it carries with it 2 components of speed - the first is linear vector in the direction of movement and the second is spiral vortex, which is perpendicular to the direction of movement. Their size and the ratio between them depend on friction, as in another boundary surface as well as the surface of an adjacent fluid layer.

When the fluid flows close to the body the vector of longitudinal velocity ( $V$ ) decreases and the amplitude of spiral from transverse component ( $W$ ), (which is perpendicular to the direction of movement) increases sharply (Figure 1). The reason is in the Law 4 of Conservation of Energy of this particular lamella of the fluid. The quantitative explanation and exactly distribution is in Law 5 for decelerating fluid vortex. Here is why behind the moving body the longitudinal component decreases sharply and

therefore the vortex component sharply increases. Thus it forms of a resistance cloud behind the body.

The Theory of new Axioms and Laws consists 2 Axioms and 8 Laws. In this report is necessary to use only 1 Axiom and 4 Laws.

### 3. Proposal for Invention to Accelerate the Speed to Hyper Size

Let we 2 layers are fitted instead of 1 in the moving body boundary layer.

#### 3.1. The First Layer

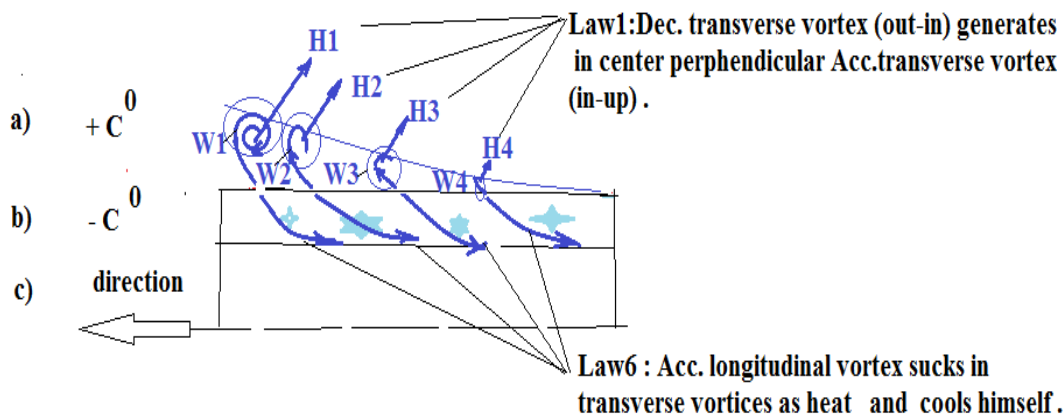
The first outer layer is heated by the natural friction during the movement of the body in the first fluid layer (Figure 3a). As it is well known the movement of the fluid in space on the surface of the body is a strong decelerating (Law 5).

On one side open vortices are formed in the space (Axiom 1) which are directed from the surface of body outwards in a direction perpendicular to the movement. Their shape is such that they are bent in the opposite direction of the movement

(Law 5). That is why they pull the body back (inertia), trying to reduce the speed and stop it. Simultaneously these open spirals pulsate in time. According to Law 1, each outside-in delay vortex generates at its center an accelerating pulsating longitudinal vortex in space. When pulsating, this system of transverse vortex and perpendicular longitudinal vortex emits closed transverse

waves in Space with a uniform velocity of propagation.

On other side -the open decelerating vortices are essentially compressed energy or pure Potential energy It is perceived by objective observers as heat.



**Modified Law6:**  
**According classical Thermodynamics a low-temperature medium absorbs the energy of a high-temperature meedium .**

**Figure 3:** Device Using Supercooled Material (Gel) To Absorb Heat Waves From The Boundary Surface

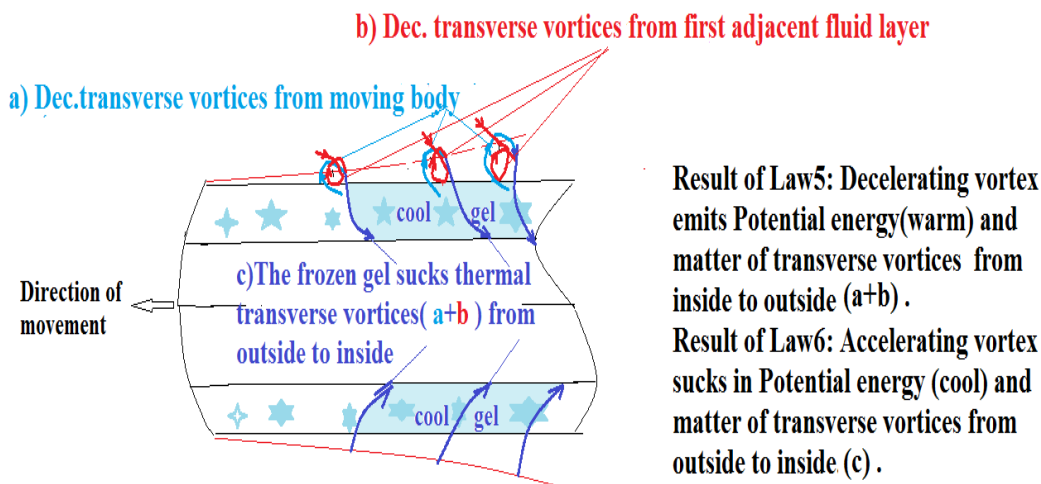
In this way, the complex transverse-longitudinal system emits (Law1) transverse closed waves around itself, which propagate at a constant speed outside them (Figure 3a) Thus, they warm both the fluid outside the moving body and the material from the inner layer of the body

Thus, this second, more inner layer (Figure 3b) will simultaneously cool the surface of the first outer layer (Figure 3a), but will also sharply reduce friction on surface of moving body. This is because the inner cooled layer(Figure3b) sucks passively both the Space of the outermost transverse resistance vortices to themselves and also sucks passively emitted by their pulsation in Time (Law1) transverse heat vortice (Figure 3a).

### 3.2. The Second Layer

The second layer under the surface of the moving body must be made of spetial gel material (Figure 3b).This material have to be pre-treated in such a way that it maximally absorbs .It have to absorb both the open delayed transverse vortices from first adjacent fluid layer (Figure 4b) and also the radiated fromthe moving body transverse heat waves (Figure 4a).

We use Law 6, because the inner cooled layer sucks actively the Space of the outermost transverse resistance vortices to themselves and it sucks actively emitted by their pulsation in Time transverse heat vortices.This means that we replace accelerating movement in inner layer with sharply freezeed gel.



**Figure 4:** Device in Final Which Experiences No Friction and Reaches Hyper Speed

### 3.3. Modified Law 6

The cross point between the Theory of new Axioms and Laws and the Theory of Classical Thermodynamics is Law 6. Therefore we need of modified Law6 .According Classical Thermodynamic law the heat moves from warm body to cool body .Therefore we can modified Law6 in following way: The accelerating vortex play role of thermodynamic power Thus the accelerating vortex can replace with low -temperature substance which sucks the power from high-temperature substance.

**Result:** Instead use Law6 (of Theory of new Axioms and Laws) in pure kind, we can use thermodynamicly sucking of freezing gel. Therefore we can replace accelerating movement in inner layer of moving body with the effect of thermodynamic sucking of *sharply freezed gel*.

### 4. Conclusions

Therefore it turned out to be unnecessary to use actively approach (Law 6). It is enough to use passively approach. For example to use material which can previously cool to very lower level. As result this material will suck the heat waves from external layer to itself. For example this material can be an well known and used Gel. It will suck in both the open decelerating transverse vortices emitted by adjacent fluid layer and also the heat wave emitted by boundary surface of moving body . As result it will decrease the friction to zero.

### References

1. Asir Prabakar, A. E. A., Karthick, P., Chandramohan, D. (2018). Applied Hydraulics and Pneumatics: Hand Book for Mechanical Engineers.
2. Markova, V. (2005). the other axioms (Monograph, Book 2). *Nautilus, Sofia*.
3. Markova, V. (2015). New Axioms and structures, *Fundamental Journal of Modern Physics*, 8(1), 15-24.
4. Markova, V. (2016). A method of movement at a speed greater than the speed of light. In *15th International Conference "Aviation and Cosmonautics"* (pp. 482-482).
5. Markova, V. (2019, September). Extended Field Theory, New Axioms, Laws and Consequences. In *2th International Conference on Quantum Mechanics & Nuclear Engineering, Paris, France* (pp. 23-24).
6. Markova, V. (2018, July). About the new axioms and laws. In *5th International Conference on Theoretical and Applied Physics, Vienna, Austria*.
7. Markova, V. (2019). Expanded Field Theory. New Axioms, Laws and Consequences. *Adv Theo Comp Phy*, 2(1), 1-10.
8. Markova, V. (2019, September). Extended Field Theory, New Axioms, Laws and Consequences. In *2th International Conference on Quantum Mechanics & Nuclear Engineering, Paris, France* (pp. 23-24).
9. Markova, V. (2020). A New Basis for Field Theory. *Adv Theo Comp Phy*, 3(4), 243-249.
10. Markova, V. (2019). Expanded Field Theory. New Axioms, Laws and Consequences. *Adv Theo Comp Phy*, 2(1), 1-10.

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