On Electron Movement in Ether.

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Theory of electro and gravidynamics proposed in [1], [2], and [3] yields that electric charge q moving with speed V is acted by force of ether resistance qV. This is an essential difference between electrically charged and electrically neutral body movement.

In accord with well known Newton ether law doesn't resist steady movement of electrically neutral body. Such resistance appears only when the body is accelerated. It is also well known that an external energy is necessary in order to sustain steady electric current. It is believed nowadays that this is because electrons in their movement collide with conductor's atoms. But this is also necessary for charge movement in free ether.

In other terms electron movement in free ether resembles rather car movement on a road then puck movement on ice/

Electron moving with constant speed V is actually a neutral mass m moving with acceleration ωV, where ω - equatorial rotation angular velocity of the torus defining electron [3]. This problem is thoroughly investigated in [4]. Formulas describing electron movement under different conditions with subluminal and superluminal speed are found in [4].

In particular it is shown that electron must move with double local light velocity to achieve superconductivity. When matter temperature is lessened local light velocity in it is also lessened. And this enables electron moving with ordinary velocity to overcome superconductivity barrier.

It is shown in [5] that hydrodynamic affect of "additional mass" actually takes place in well known Kaufmann's experiment now interpreted as "relativistic effect". This result takes place in full accord with above mentioned peculiarity of electron movement and generalized formula far Lorentz force [2].

References

[1]. J.G. Klyushin, "On the Maxwell Approach to Gravity", Report in seminar of St. Petersburg Physical Society, St. Petersburg, Russia, 1995.
[2]. J.G. Klyushin, "A Field Generalization for the Lorentz Force Formula", "Galilean Electrodynamics", v11, №5, p83.
[3]. J.G. Klyushin, "Electro – and Gravidynamics", NPA conference, Storrs, Connecticut, 2003.
[4]. J.G. Klyushin, "Electron Dynamics in Ether", "Galilean Electrodynamics-Fast (Fall)", Special Issue, №2, p37, 2002.
[5]. J.G. Klyushin, "Generalized Electrodynamics about Forces Acting on Charge Moving in Capacitor and Solenoid", Proceeding of the Congress 2000, "Fundamental Problems of Natural Science and Engineering", v1, St. Petersburg, Russia. Additions information: www.physical-congress.spb.ru