Heat effect of orientation a mechanical systems in the space

An orientation effect in the space of bodies depending from temperature experimentally was discovered and researched. This effect is peculiar for mechanical systems which possess maximum the number of degrees of freedom. An outer space is an ideal environment for the manifestation of all six degrees of freedom. Laboratory experiments were conducted with the test objects suspended from a relatively thin filament. It was found that heating or cooling of these objects lead to their rotation around the axis on the filament. Suspended body turns on a certain corner and stops from the resistance of the filament. Obviously, absolutely a free body will be to rotate without stopping. Experimentally established what rotation occurs at the expense of forces which manifested inside of body on the level of elementary particles. As is known, an electrons, atoms and molecules in composed of any bodies are in constant thermal motion. This motion is chaotically, but at the vertical direction it occurs under control of two forces - acceleration of free fall and coriolis. Vector of gravity force is directed to down and force of Coriolis to left by the progress of the movement (for northern hemisphere). Experiments of F. Reich (1831) shown that the ratio between these two forces are equal 5784. Alternative derivation of this ratio at the article is given on the basis of the equations atomic physics and on new phenomenon, named fundamental pressure of the Universe. This phenomenon discovered by author is a static pressure (P) of the physical vacuum with a value of $4.8e^{24}$ Pa (rounded). Unlike to usual atmospheric pressure it operates only to the surface of fundamental particles - electrons, nucleons, mesons, etc. and does not work at the space between these particles, even inside molecules and atoms. Said ratio of Reich directly is follow from properties of the atom hydrogen and force of fundamental pressure. For that case, one can easily prove that rotation of electrons at an orbit of atom hydrogen is a result of action Coriolis force. According to experimental data, the potential energy of atomic hydrogen is equal 27.2 eV and conform the energy of the electron in the first Bohr orbit. Then the centrifugal force of the electron in the first Bohr orbit with a radius of $5.29e^{-15}$ m must comply with the Coriolis force. The formula for the Coriolis force is given as $F_C = mv\omega$, where m - mass of electron, v - speed of electron (2187690 m/s), ω - angular velocity of the electron in orbit, which equal $vme^2\pi/\varepsilon h$, where e - electronic charge and ε - electric constant. A value of the force by this formula accurate to five decimal is equal the ratio of the potential energy of the atom and the length Bohr radius. All used parameters are fundamental constants what attest to the fact that the rotation of the electron in orbit could well be the result of manifestation of the Coriolis force. Force of pressure to the surface of atom is equal to product of the fundamental pressure on sphere's area classical radius of the electron ($R=2.818e^{-15}$ m), $F_P = P4\pi R^2$. The ratio of this force to the previous Coriolis force is exactly equal to the ratio of forces Reich, i.e. 5784. Thus, it is shown unity of forces responsible for dynamics of behavior of mechanical systems on the macro - and micro level. The presented mechanism also on the atomic - molecular level gives a new possibility to explain and predict the trajectory of moving of heavenly bodies at the galactic space. The observed effect highlights the special nature of the physical vacuum of a universe. On the basis of its theoretical properties by the author is developed the algorithms of the thermodynamic abinitio calculations. Such algorithms are necessary for simulation of physical and chemical processes in the remote thermodynamic systems, which include planets, stars and galaxies.