

THE SUBATOMIC LEVEL OF THE ORGANIZATION OF MATTER

The subatomic level of the organization of matter is the world of energy quanta.

- Energy quanta are produced from dark energy by oscillating electrons of atoms.
- Energy quanta are set in motion by particles of dark energy.
- Energy quanta are a necessary precondition for the existence of bodies. In the interatomic space of these bodies, quanta play the role of an "antigravity agent", preventing atoms from bonding into a single firm body.

Having fulfilled their role, the "used" quanta accumulate in the depths of space as the cosmic quantum gas.

- On the other hand, energy quanta of the cosmic quantum gas are a necessary precondition for the existence of galaxies. In the intergalactic space, energy quanta of this gas play the role of an "antigravity agent", preventing stars of galaxies and galaxies themselves from bonding into a single firm body.

- Quantum gas is what we call heat.

THE WORLD OF ENERGY QUANTA = QUANTUM GAS = HEAT

If filling the Universe quantum gas is heat, then the Universe should have a temperature. And the Universe has such a temperature. It is 2.725 K. This is the temperature of "something" which physicists call microwave background radiation.

THE WORLD OF ENERGY QUANTA = QUANTUM GAS = HEAT = MICROWAVE BACKGROUND RADIATION

In the modern physics, the concept – the world of energy quanta – does not exist. However, the concept – dark matter – is known. It is supposed to be a mysterious form of matter, not emitting nor reflecting magnetic radiation, therefore undetectable, and its existence is only shown by resulting gravitational effects. Its amount, according to the latest research, is 26.8 % of the energy of the Universe. It is easy to notice that the concept of the world of energy quanta corresponds well with the concept of dark matter. Dark matter (the world of energy quanta) play the role of "this something" which prevents stars of galaxies from "bonding" by the force of gravity into a single firm body.

THE WORLD OF ENERGY QUANTA = QUANTUM GAS = HEAT = MICROWAVE BACKGROUND RADIATION = DARK MATTER

The lack of knowledge on the existence of the world of energy quanta (and the world of dark energy) gave rise to three branches of physics alternative to the classical physics. They are the general (GTR) and special (STR) theory of relativity, quantum mechanics (QM), and the particle physics called the Standard Model (SM). They are completely new beings in physics, independent one from another and from the classical physics, usurping the right to be superior to the classical physics.