

## THE LASER OF EINSTEIN

E. Gigov, 02.04.2018

Abstract: If Einstein discovered the laser, then the Brownian motion must emit laser light.

According to relativistic physics, the laser was discovered by Einstein at 1917 in the article „*The Quantum Theory of Radiation*“. He develops the quantum thermodynamics there, trying to unify the Brownian motion with Planck's theory of light. This happens by means of the chaotic movement of a gas molecule in dynamic equilibrium.

But this article does not mention laser, fluorescence, avalanche light amplifier, coherence, monochromaticity, parallelism, optics, and so on. For example:

*„We now turn our attention to the investigation of the motion imparted to our molecules by the radiation field. We make use in this of a method that is known to us from the theory of Brownian motion and which I have often used in investigating motions in a region containing radiation.“*

If this is a laser, then any fluid must emit laser light arbitrarily, which is not true. Besides, there would be no fluorescence. The laser was discovered in a completely different way and much later.

The Brownian motion does not emit photons, there is only re-emission at it, i.e. chain absorption and emission of photons, as the number of photons does not change. Whereas the laser have fluorescence with avalanche emission of photons, as the number of photons grows avalanche-like. But the article does not contain avalanche emission of photons and probability coefficients.

In addition, avalanche photons are variable, they lose some of their energy and direction, so the spectrum and the beam are expanding. Each fluorescence is due to avalanche emissions, and the more spontaneous avalanches, the wider the spectrum. In that crystals with disturbances create more avalanches.

Consequently, the laser can work in two different modes: amplifier and refractor. In amplifier mode, the laser creates new coherent light, without mirrors. Whereas in refractor mode, the light is constant and the laser only breaks rays or transforms incoherent light into coherent between mirrors. This can be proven experimentally. The ordinary laser contains both effects simultaneously.