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Taking into account the random component in the quantum representation of particles

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Dynamic chaos is observed experimentally in macro objects, but did not receive a proper explanation. To take it into account in the quantum representation of the particle motion, an attempt was made to introduce a random component into the equation of motion. Its magnitude depends on the intrinsic energy of the particle, equal to the resting energy. The total energy of the particle is equal to the sum of the deterministic and random energy. The deterministic energy of the particle is equal to the kinetic energy of the particle and the energy of the field in which it is located. The dynamics of the particle movement is considered in a quantum representation. A system of ordinary differential equations in finite differences is obtained. The principle of minimal action is carried out without taking into account the random component of the movement and without taking into account the second boundary condition. The division of motion into deterministic and random components is also random. The calculation technique was tested on data depicting the movement of an electron in in a hydrogen atom around its nucleus in the form of a proton. Estimates showed a satisfactory coincidence of calculated and experimental data. Quantum approximation was also used to infer a number of equations of physics. It includes the derivation of the equations of classical mechanics describing translational and rotational movements. Then, in the same way, the equations of classical electrodynamics bearing the name Maxwell were deduced. This was followed by the conclusion of the equation of non-relativistic quantum mechanics, called the Schrodinger equation. Then the equation of relativistic quantum mechanics, known as the Klein Gordon equation, was derived. Finally, the same approach was used to infer the first onset of thermodynamics.

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