

# Discovery of the Wave Nature of Gravitation

Georgi Shpenkov

Retired professor, Independent researcher, POLAND

Recognizing the wave nature of all objects, harmony and interrelation of all processes and phenomena in the Universe, we developed a new generalized theory as an alternative to the Standard Model of modern physics and called it the Wave Model (WM).

Within this new theory, we have come to a series of key discoveries. One of them is the discovery of a previously unknown equation,  $\hat{F}_s = \frac{4\pi r^3 \varepsilon_0 \varepsilon_r}{1 + k^2 r^2} (1 - ikr) \hat{\omega} i \omega$ , which describes the behaviour of elementary particles considered as pulsating wave formations.

On its basis, we have discovered the fundamental frequencies ( $\omega_e$  and  $\omega_g$ ) and fundamental wave radii ( $\lambda_e$  and  $\lambda_g$ ) of the fields of atomic, subatomic and gravitational levels of the Universe.

Another key discovery is the Universal Law of Exchange (interaction), from which follows the true form of the Coulomb and Newton Laws, as well as the expression for strong (“nuclear”) interaction.

Thus, the laws of Newton and Coulomb are laws that, in essence, describe wave interactions of masses and charges, respectively, which, like all objects in the Universe, have a wave nature and behave like wave formations.

The mystery of the existing order in the arrangement of the orbits of the planets at strictly defined average distances from the Sun and the order in the arrangement of the orbits of the satellites of these planets was also finally unravelled thanks to the WM. Planets and their satellites move in space along orbits formed in discrete regions of the spectrum  $r_{v,q} = \tilde{\lambda}_g z_{v,q}$  ( $z_{v,q}$  are roots of Bessel functions) of the gravitational wave spherical shells of the particles that make up the Sun and the planets of the Solar system.

## Biography

Georgi Shpenkov completed his PhD at Ioffe Physico-Technical Institute of RAS (1968, Leningrad) and Dr.Sc. degree in 1991 (Tomsk, RAS). Retired professor, an Honorary Member of the Russian Physical Society. Published 9 books and more than a hundred papers in different issues.

Main his achievements are a series of the discoveries: nature of mass and charge, shell-nodal (molecule-like) structure of atoms, microwave background radiation of hydrogen atoms, wave nature of elementary particles, fundamental Period-Quantum of the Decimal Code of the Universe, fundamental frequencies of atomic, subatomic and gravitational levels, true nature of the Lamb shift; etc.