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Discovery of analytical method defined of wave parameters gravitation field

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A strict definition that the wave parameters of the gravitation field is an actual and important task for understanding the basics of material world. Its solution is the main goal of this work. Feature of this scientific work is strict physical-mathematical method of calculation the gravitation field frequency v_G, which based on fundamental physical constants: Speed of light in vacuum c, Plank's constant h and gravitational constant G. This wave characteristic v_G is identified with the Plank's level frequency of oscillation v_p:

$$v_G = v_p = \sqrt{\frac{c^5}{Gh}} = \sqrt{\frac{\left[0.299792458 \cdot 10^9 \left(\frac{m}{s}\right)\right]^5}{6.67408 \cdot 10^{-11} \left(\frac{m^3}{kg \cdot s^2}\right) \cdot 6.626070040 \cdot 10^{-34} \left(\frac{kg \cdot m^2}{s}\right)}} = 7.39995 \cdot 10^{42} \left(s^{-1}\right).$$

The found value of v_G allows determining its other waves and substantial parameters gravitational field, the main ones being as follows:

The period T_G of oscillation wave:
$$T_G = \frac{1}{v_G} = \frac{1}{7.39995 \cdot 10^{42} (s^{-1})} = 1.35136 \cdot 10^{-43} (s).$$

The wavelength λ_G of the oscillation:
$$\lambda_G = \frac{\tilde{n}}{v_G} = \frac{0.299792458 \cdot 10^9 \left(\frac{m}{s}\right)}{7.39995 \cdot 10^{42} \left(s^{-1}\right)} = 4.05128 \cdot 10^{-35} (m).$$

The amplitude A_G of the oscillations which within $A_G = \lambda_G = 4.05128 \cdot 10^{-35} (m),$ the limits of the restriction of all interactions to the speed of light c at the frequency of oscillation period T_G, actually coincides with the wavelength λ_G:

Wave energy: $E_G = hv_G = 6.626070040 \cdot 10^{-34} (J \cdot s) \cdot 7.39995 \cdot 10^{42} (s^{-1}) = 4.90328 \cdot 10^9 (J).$

On the basis of found parameters it is possible to define all the other parameters of gravitation field.

Biography

Valentiyn Alekseevitch Nastasenko, the Kherson State Maritime Academy Ukraine, faculties Electrical engineering and electronics, the department of transport technologies. Professor of the Department of Transport Technologies candidate of Dr. technical sciences. His scientific interests include quantum physics, the theory of gravitation, fundamentals of the material world and the birth of the universe and he has authored more than 50 scientific works in these spheres.

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