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A Light-Force Duality Principle RASULKHOZHA S. SHARAFID-DINOV, Institute of Nuclear Physics, Uzbekistan Academy of Sciences, Tashkent, 100214 Ulugbek, Uzbekistan — The light used in the Michelson interferometer has the electromagnetic structure. Its source must be unified system of the photon and monophoton. The structural particles suffer in it the periodical interconversion [1], in which an electric force is converted into a magnetic one and vice versa. Furthermore, the electromagnetic light with his own speed can possess either longitudinal or transversal spin polarization owing to which, ether, namely gravity bends its trajectory in the Michelson interferometer. Of course, in such phenomena appears a part of Newton and Coulomb components of each of the electric and magnetic forces. If these situations follow from a unified principle, the light and force correspond to the two forms of the same matter. Such a correspondence principle expresses the light-force duality. Therefore, any of gauge bosons may serve as the source of a kind of light, confirming that we cannot exclude the existence of both strong and weak light beams in nature. They together with an electromagnetic light constitute naturally united light beam which comes forward in the universe either as a flux of gravitons or as a gravitational wave.

[1] R.S. Sharafiddinov, Bull. Am. Phys. Soc. 59(5), T1.00005 (2014).

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