An Axial-Vector Photon in a Mirror World RASULKHOZHA S. SHARAFIDDINOV, Institute of Nuclear Physics, Uzbekistan Academy of Sciences, Tashkent, 100214 Ulugbek, Uzbekistan — The unity of symmetry laws emphasizes, in the case of a mirror CP-even Dirac Lagrangian, the ideas of the left- and right-handed axial-vector photons referring to long- and short-lived bosons of true neutrality, respectively. Such a difference in lifetimes expresses the unidenticality of masses, energies and momenta of axial-vector photons of the different components. They define the unified field theory equation of C-odd particles with an integral spin. Together with a new equation of a theory of truly neutral particles with the half-integral spin, the latter reflects the availability in their nature of the second type of the local axial-vector gauge transformation responsible for origination in the Lagrangian of C-oddity of an interaction Newton component giving an axial-vector mass to all the interacting particles and fields. The mirror axial-vector mass, energy and momentum operators constitute a CP-invariant equation of quantum mechanics, confirming that each of them can individually influence on matter field. Thereby, findings suggest at the level of the mass-charge structure of gauge invariance a new equation for the C-noninvariant Lagrangian.

Rasulkhozha S. Sharafiddinov
Institute of Nuclear Physics, Uzbekistan Academy of Sciences, Tashkent, 100214 Ulugbek, Uzbekistan

Date submitted: 12 Jan 2016   Electronic form version 1.4