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An Axial Vector Nature of a Neutrino with an Electroweak Mass

RASULKHOZHA SHARAFIDDINOV, Institute of Nuclear Physics, Uzbekistan Academy of Sciences, Tashkent, 100214 Ulugbek, Uzbekistan — A classification of elementary particles with respect to C-operation admits the existence of truly neutral types of fermions. Among them one can find both a Dirac and a Majorana neutrinos of an electroweak nature. Their mass includes the electric and weak parts, in the presence of which a neutrino has the anapole charge, charge radius and electric dipole moment. They constitute the paraneutrino of true neutrality, for example, at the neutrino interaction with a spinless nucleus of an axial-vector current. We derive the united equations which relate the structural components of mass to anapole, charge radius and electric dipole of each truly neutral neutrino at the level of flavour symmetry. Such a principle can explain the C-noninvariant nature of neutrinos and fields in the framework of constancy law of the size implied from the multiplication of a weak mass of the C-odd neutrino by its electric mass. From this point of view, all neutrinos of C-antisymmetry regardless of the difference in masses of an axial-vector character, possess the same anapole, an equal anapole radius as well as an identical electric dipole.

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