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**Spin Polarization Type Dependence of the Neutrino Mass and Nature** BEKHZAD S. YULDASHEV, RASULKHOZHA S. SHARAFIDDINOV, Institute of Nuclear Physics, Uzbekistan Academy of Sciences, Tashkent, 100214 Ulugbek, Uzbekistan — A massive neutrino must have either longitudinal or transversal polarization. This does not exclude of course from the discussion a sharp dependence between the mass of the Dirac neutrino and its spin nature [1]. Therefore, to express the idea more clearly and to generalize the expected connection to the case of truly neutral neutrinos, we investigate their interaction with the field of emission in the polarization type dependence. Analysis shows that between the studied processes with longitudinal and transversal polarized Majorana fermions there exist well defined relations. They satisfy the conditions, which follow from the fact that at the availability of a nonzero mass, the longitudinal neutrino can be converted into a transversal one and vice versa. Such a connection between the truly neutral neutrinos in the spin polarization type dependence may serve as an indication to the existence of fundamental differences both in nature and in masses of longitudinal and transversal neutrinos of Majorana. [1] R.S. Sharaididinov, Bull. Am. Phys. Soc. 61(5), APR16-2015-000041 (2016).

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