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COSMOLOGICAL DARK ENERGY THROUGH NEUTRINO OSCILLATIONS, AND QUANTUM MECHANICS.

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We argue that the present classical formalism of neutrino oscillations is just approximate (cf. PDG 2006), thus requiring various second-order corrections : internal kinetic dispersion from internal mass dispersion ; curing Lorentz invariance violation between different MASS EIGENSTATES, in transitions of the kind $m_1=m_2$, through energy shifts $(m_2^2-m_1^2)/(2p)$, made salient in phase factors ; so, necessary transfers of quadri-momentum with any medium, even “vacuum” ; so, evidence of ethereal “DARK ENERGY” of purely weak essence, within “vacuum” oscillations ; actual violation of some deeply rooted principles of “quantum mechanics” (corpuscular elementarity, orthogonality of eigenstates amplitudes, Wigner’s rules of super-selection, Heisenberg’s relations of uncertainty) ; strict non-hermiticity of the Hamiltonian operator, involving FINITE PROPER LIFETIMES ; neutrino mass matrices duly of the “CKM” type, as for quarks ; “UBIQUITY” concept and existence of “PROBABILITY WAVES”, instead of matter waves, giving serious credibility to the paradoxical lemma of intense radiation from the vicinity of so-called “black holes” and “pulsars” (so, faking genuine “white wells”). Spontaneous individual birth of zero-mass neutrinos (not by pairs, from Lorentz invariance !), might explain the paradoxical excess of “dark energy” over “dark mass”, overwhelming at cosmological scales.

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