

Abstract Submitted
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The United Forces in the Nature of Matter RASULKHOZHA S. SHARAFIDDINOV, Institute of Nuclear Physics, Uzbekistan Academy of Sciences, Tashkent, 100214 Ulugbek, Uzbekistan — The nature has been created so that to any of the electric (E), weak (W), strong (S) and other types of charges corresponds a kind of inertial mass. The lepton ($l = e, \mu, \tau, \dots$) or its neutrino ($l = \nu_l$) masses and charges are united in rest mass m_l^U and charge e_l^U equal to all the mass and charge:

$$m_l = m_l^U = m_l^E + m_l^W + m_l^S + \dots, \quad (1)$$

$$e_l = e_l^U = e_l^E + e_l^W + e_l^S + \dots \quad (2)$$

Such a correspondence principle expresses the mass-charge duality [1], confirming that we cannot exclude the existence of both Coulomb and Newton parts in any of the existing types of the actions. In other words, each of all possible types of forces becomes function of corresponding components of the united masses or charges of the interacting objects. Therefore, any particle with the united mass and charge come forward in the system as a unified whole. Nobody is in force to separate its by parts in the mass or charge type dependence. This in turn expresses a great responsibility of gravity for the structure of the united forces as well as for their unified nature.

[1] R.S. Sharafiddinov, Bull. Am. Phys. Soc. 59, T1.00009 (2014).

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