On the Anomalous Structures of the Vector Leptonic Currents

RASULKHOZHA S. SHARAFIDDINOV, Institute of Nuclear Physics, Uzbekistan
Academy of Sciences, Tashkent, 100214 Ulugbek, Uzbekistan — According to a
mass-charge duality [1], any type of charge says about the existence in nature of a
kind of inertial mass. Therefore, the steadiness of the electric charge distribution in
leptons ($l = e$, μ, τ, ...) can be explained by the intralepton interratio of forces of
different nature. From its point of view, we not only must present the Dirac ($i = 1$)
and Pauli ($i = 2$) form factors F_{il} in the form

$$F_{il}(q^2) = f_{il}(0) + R_{il}(q^2) + A_{il}(\vec{q^2}) + ...,\tag{1}$$

but we also need to conclude that each type of charge comes forward as the source
of a kind of dipole moment. Herewith the independent components f_{il} coincide with
normal sizes of the electric charge and magnetic moment. The functions R_{il} describe
the interaction between the lepton electromagnetic radius and the field of emission.
The terms A_{il} characterize the dependence of form factors F_{il} on the square of three-
dimensional momentum transfer $\vec{q^2}$ and at $\vec{q^2} = 0$ are reduced to their anomalous
values. They show that the electron similarly to all other the leptons possesses as
well as the anomalous electric charge. To such a type of charge corresponds a kind
of inertial mass. 1. R.S. Sharafiddinov, Bull. Am. Phys. Soc. 59(5), T1.00009
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Rasulkhozha S. Sharafiddinov
Institute of Nuclear Physics, Uzbekistan Academy of Sciences,
Tashkent, 100214 Ulugbek, Uzbekistan