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On the Critical Analysis of Classical Electrodynamics TEMUR Z. KALANOV, Home of Physical Problems, Pisatelskaya 6a, 100200 Tashkent, Uzbekistan — Critical analysis of classical electrodynamics within the correct methodological basis - unity of formal logic and of rational dialectics - is proposed. The main result of analysis is as follows: 1) quantitative (mathematical) relations proposed by Faraday, Maxwell, Lorentz, and others have following qualitative determinacy: *(field) = (source of field)*; 2) from the formal-logical point of view, the left-hand and right-hand parts of these quantitative relations must belong to one and only one of the following qualitative determinacy: *(field) = (field)* or *(source of field) = (source of field)* expressing the law of the identity of the object; 3) Faraday's, Maxwell's, and Lorentz's quantitative relations did not belong to the qualitative relations *(field) = (field)* or *(source of field) = (source of field)*. Consequently, Faraday's, Maxwell's, and Lorentz's relations contradict the logical law of identity. Thus, classical electrodynamics is an erroneous theory, and it should be replaced by a correct theory.

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