

On the formation of the Lagrangian and Lagrange equations for an arbitrary linear electrical circuit.

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For an arbitrary linear electric circuit, the Lagrange function (Lagrangian) is obtained, which allows to derive the entire set of equations of the electric circuit (equations of both the second and first Kirchhoff laws), and the corresponding Lagrange equations are formed. The expediency of using Lagrange equations for electrical circuits is determined by the universality of the Lagrangian formalism, which provides a unified approach to the derivation of equations of physical systems of various nature and emphasizes the generality of the laws of these systems.

Key words: Lagrangian, Lagrange equations, linear electrical circuit, Kirchhoff's laws.