THE LAGRANGIAN AND HAMILTONIAN FORMALISMS FOR THE CLASSICAL RELATIVISTIC ELECTRODYNAMICS MODELS REVISITED

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S u m m a r y

The work is devoted to studying some new classical electrodynamics models of interacting charged point particles and the aspects of the quantization via the Dirac procedure related to them. Based on the vacuum field theory no-geometry approach developed in [6, 7, 9], the Lagrangian and Hamiltonian reformulations of some alternative classical electrodynamics models are devised. The Dirac-type quantization procedure for the considered alternative electrodynamics models, based on the obtained canonical Hamiltonian formulations, is developed.