THE SPECTRAL PECULIARITIES OF RADIATION
EMITTED BY NONLINEAR OSCILLATOR

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In the given work within the limits of model charged nonlinear oscillator spectral features of dipole radiations within the limits of the classical theory are found and analysed. In particular, the kind of spectral density of radiation for various modes of movement is received. Transition from a discrete spectrum of radiation of oscillator to a discrete spectrum of a rotator is in details considered important from the point of view of experiment [1]. We will note the interesting fact of occurrence of a continuous spectrum of the radiation arising at movement on separatrix. It is received energetic vibration rotation spectrum of nonlinear oscillator in frameworks quasiclassical approach of quantum mechanics. Nonequidistantially of this spectrum reflects features of nonlinear dynamics of the given system.