THE CHARACTERISTIC OF THE GEOMETRIC MODELS OF THE PROFILES OF THE WAVE SOLITONOV IN NONLINEAR PROCESS IN CRYSTALS

Darinskii B. M., Grebennikov D. Yu., Krutov A. V., Chaplygin M. N., Shershnev S. V.

Mathematical modeling and study of the different nonlinear phenomena in crystal, in particular, phase transition in material and nonlinear waves, is at present spared big attention. The typical particularity of the nonlinear phenomena in crystal is a form of the profile of the running wave. For possibility of the comparison, as test are offered some geometric ideal models of the profiles of the waves defined parametric, and are researched their characteristic. It is expected that particularity of the form correspond to the certain physical nonlinear effects and regularities, including founded on symmetries. The particularities of the silitonform decisions which physical interpretation can be a subject of the further studies are pointed.