ION-SOUND WAVES PASSING IN INCLUSIONS OF DUSTY PLASMA

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The simulations of interaction of non-soliton and soliton ion sound wave (ISW) pulses with the inclusions of dusty plasma in electron-ion one have demonstrated that such inclusions behave as resonators for ISW. These resonators can be excited effectively by non-solitonic ISW pulses. The interaction of the Korteveg – de Vries (KdV) soliton with the region of dusty plasma has demonstrated that only a small part of the soliton energy is trapped by the resonator. Nevertheless, the interaction may lead to destruction of the soliton.