

NONLINEAR EVOLUTION OF 3D DRIFT-ION-SOUND STANDING WAVES

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Drift-ion-sound standing waves are considered in a magnetized inhomogeneous plasma. Effects of three dimensionality, dispersion and vortex nonlinearity are taken into account. Perturbation theory solution is obtained by the multiple-time-scale formalism. It is shown that no secular terms are present up to the second order in amplitude and that second order corrections are homogeneous in the drift direction.