

# EXTENDED SYMMETRIES OF THE KINETIC PLASMA THEORY MODELS

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Symmetry extension of the kinetic theory of collisionless plasma containing particles with equal charge to mass ratio is considered. It is shown that this symmetry allows us to reduce the number of equations. Symmetries obtained for the integro-differential equations of the kinetic theory by the indirect algorithm are compared to those obtained by direct methods. The importance of additional conditions – positiveness and integrability of distribution functions, existence of their moments - is underlined.