

ABOUT THE INFLUENCE OF PLASMA PARTICLES
COLLISIONS ON THE EFFECTIVE GRAIN
POTENTIAL

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S u m m a r y

Kinetic solutions of the problem of the effective potential of a macroparticle charged by plasma currents are analyzed in detail. Calculations are performed taking the dependence of the ionic charging cross-section on the ion velocity into consideration. Analytical expressions for the potential are obtained for arbitrary values of ion mean free path. It is shown that the analytical approximations are in agreement with the numerical calculations, and the conditions for applications of these approximations are found.