

NONLINEAR SHIELDING OF AN ELLIPSOIDAL
CONDUCTING DUST PARTICLE IN A PLASMA

*V. Kubaichuk, E. Meinarovich*¹

Bogolyubov Institute for Theoretical Physics,
Nat. Acad. Sci. of Ukraine
(14b, Metrolohichna Str., Kyiv 03680;
e-mail: kubaichuk@bitp.kiev.ua),

¹Institute of Mathematics, Nat. Acad. Sci. of Ukraine
(3, Tereshchenkivska Str., Kyiv 01601)

S u m m a r y

An iteration method is applied to solve nonlinear integral equations for the field of the potentials produced by a conducting sphere and an ellipsoid in a plasma. The results are illustrated by computations for a plasma with the Boltzmann distribution of particles.