THE ELECTROSTATIC POTENTIAL IN NONLOCAL POLARIZABLE MEDIA

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S u m m a r y

We consider the interaction of charged grains with a medium that is capable to a nonlocal polarization. The potential distribution problem has been solved with regard for the polarization effects that arise in the spatial charge field of a smoky plasma in the presence of charged condensed grains. It is shown that there could be the local minima that testify to the existence of a stable equilibrium of equally charged condensed grains due to such an environment at particular values of the polarizability and plasma parameters.