

THE DIRICHLET BVP OF THERMOELASTICITY WITH MICROTEMPERATURES FOR THE SYSTEM OF EQUATIONS OF STEADY VIBRATIONS FOR AN ELASTIC SPACE WITH A SPHERICAL CAVITY

L.Bitsadze

In the present paper the linear theory of thermoelasticity with microtemperatures is considered. The representation of regular solution for the equations of steady vibration of the 3D theory of thermoelasticity with microtemperatures is obtained. We use it for explicitly solving Dirichlet boundary value problem (BVP) for an elastic space with a spherical cavity. The obtained solution are represented as absolutely and uniformly convergent series.