

Problem with displacements for the three-dimensional Bianchi equation

Utkina E.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

We consider the Bianchi equation in a rectangular 3D parallelepiped G . For this equation, we analyze the problem of finding a regular solution on the basis of three given linear relations each of which relates the values of the unknown function at 60 points lying on the faces of G and inside the domain. We obtain sufficient conditions for the unique solvability of the problem in terms of the coefficients of these relations. © 2010 Pleiades Publishing, Ltd.

<http://dx.doi.org/10.1134/S0012266110040099>
