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Identification of rigid inclusions in the thin plate. (Russian. English summary) Zbl 1363.74049
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Summary: The problem of identifying the location of the rigid inclusions in thin plate is considered. The finite element method is being used for discretization the unknown functions of the mathematical model. Geometric inverse problem is formulated in the conditional-correct statement, taking into account restrictions on the number of solutions. Parameters identification is performed via minimization of the Lagrangian.

MSC:

74K20 Plates

34C25 Periodic solutions to ordinary differential equations

Keywords:

rigid inclusion; geometric inverse problem; finite element method; Lagrangian