# ON ONE TWO-DIMENSIONAL INVERSE PROBLEM OF STATIC'S IN THE THEORY OF ELASTIC MIXTURES

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The problems with unknown holes (with so-called equidurable contours) for an infinite plane have been considering since the 60-s of the last century in the works G. Cherepanov, R. Bantsuri, R. Isakhanov and others.

We have solved plan inverse problem of the theory of elastic mixtures in determination unknown holes with equidurable contour of infinite isotropic plate.

We consider the case of finite number of holes in supposition, when either all of them have a common axis of symmetry which crosses them or considered multiply connected domain has cyclic symmetry.

For solving of the problem we use methods of function theory of complex variables namely complex representation, obtained by earlier M. Basheleishvili and the author, which are similar to Kolosov-Muskhelishvili representation formulas.