

ANTIPLANE STRAIN (SHEAR) OF ISOTROPIC NON-HOMOGENEOUS PRISMATIC SHELL-LIKE BODIES

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Abstract. Antiplane strain (shear) of an isotropic non-homogeneous prismatic shell-like body is considered when the shear modulus depending on the body projection (i.e., on a domain lying in the plane of interest) variables vanishes either on a part or on the entire boundary of the projection. The dependence of well-posedness of boundary conditions on the character of vanishing of the shear modulus is studied. When the above-mentioned domain is the half-plane and the shear modulus is a power function with respect to the variable along the perpendicular to the boundary, the basic boundary value problems are solved in quadratures.