

ON HIERARCHIC MODELS FOR NONHOMOGENEOUS ANISOTROPIC ELASTIC PRISMATIC SHELLS ¹

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Abstract

In the present paper static boundary value problems for nonhomogeneous anisotropic elastic prismatic shells are considered and corresponding two-dimensional hierarchic models are constructed. The existence and uniqueness of solutions to the obtained boundary value problems are proved and the relation of the models to the original three-dimensional problems is studied.

Key words and phrases: Static boundary value problems for prismatic shells, linear theory of elasticity, modelling error estimation.

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¹Dedicated to the memory of Professor Victor Kupradze on the occasion of the 100th anniversary of his birth