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## Configuration Space in Second Boundary Value Problem of Non-classical Plate Theory

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The article contains investigation of second boundary value problem for equilibrium equation «in mixed formulation» describing non-classical mathematical model for hinged isotropic and uniform plate under generalized Timoshenko hypothesis taking into account initial irregularities. For this problem for the first time were proved the existence of generalized solution and weak compactness of the set of approximate solutions obtained with Bubnov–Galerkin method using V. Z. Vlasov scheme. Basing on functional spaces used to study existence of generalized solution and to investigate convergence of Bubnov–Galerkin method, there was defined configuration space corresponding to the boundary value problem.

*Key words:* nonlinear partial differential equations, non-classical shell theory.

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