

## DYNAMICAL HIERARCHICAL MODELS FOR ELASTIC SHELLS

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### *Abstract*

In the present paper dynamical three-dimensional model for linearly elastic shells in curvilinear coordinates is considered and a hierarchy of two-dimensional models of the corresponding initial-boundary value problem is constructed. The well-posedness of the two-dimensional problems is investigated in suitable spaces and the accuracy of approximation of the solution to the original problem by the vector functions restored from the solutions of the reduced problems is estimated.

*Key words and phrases:* Initial boundary value problems for elastic shells, modeling error estimation.

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