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Modeling of the Shock System Motion with Impacts about Hard Barriers

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We have developed a model of a shock system with a resilient member under periodic force action including impacts about hard barriers. In order to model the shock system we have developed a program providing a computational solution for differential equations of a subject motion taking into account conditions of periodicity and collision, graphical and numerical reproduction of motion parameters in the simulation process. We have performed simulation of modes of the shock system. In the process of computational experiments parameters of the system response have been estimated and corrected upon the results.

Key words: modeling, periodic impact, model of the impact, shock system, motion with impacts about barriers, periodic motion mode, computational experiment.

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