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DAMPING OF A SYSTEM OF LINEAR OSCILLATORS USING THE GENERALIZED DRY FRICTION

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A. I. Ovseevich, A. K. Fedorov

The problem of damping a system of linear oscillators is considered. The problem is solved by using a control in the form of dry friction. The motion of the system under the control is governed by a system of differential equations with a discontinuous right-hand side. A uniqueness and continuity theorem is proved for the phase flow of this system. Thus, the control in the form of generalized dry friction defines the motion of the system of oscillators uniquely.

Keywords: optimal control, DiPerna-Lions theory, singular ODE.

- A.I. Ovseevich, Dr. Phys.-Math. Sci., Ishlinsky Institute for Problems in Mechanics RAS, Moscow, 119526 Russia, e-mail: ovseev@ipmnet.ru.
- A.K. Fedorov, student, Ishlinsky Institute for Problems in Mechanics RAS, Moscow, 119526 Russia, e-mail: akfedorov@student.bmstu.ru.

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