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Letter to the editor[☆]

In the article attributed to V. A. Vladimirov and Yu. G. Gubarev and entitled “The conditions for the non-linear stability of plane and helical MHD flows”, published in the journal *Prikladnaya Matematika i Mekhanika* (1995, **59**(3), 442–450), I was indicated as a coauthor. Please publish an official disclaimer of my coauthorship, as I took no part in the writing of this paper, and indeed became aware of it only after its publication. The appearance of my name as a coauthor of this article is erroneous.

V. A. Vladimirov

Springer has published the following monograph:

Chernousko FL, Ananievski IM, Reshmin SA. *Control of Nonlinear Dynamical Systems. Methods and Applications*. Berlin: Springer; 2008, 396 pp. (ISBN:978-3-540-70782-0)

The monograph is devoted to new methods for controlling dynamical systems with many degrees of freedom. Non-linear systems where various forms of constraint are imposed on control inputs and phase coordinates or their combinations are generally considered. The presence of uncertainties of various kinds is taken into account, including the action of unknown but limited disturbances, and also the presence of uncertain parameters of the system. A number of fairly general methods are described, making it possible effectively, and often in explicit form, to construct the controls required. Feedback control methods, based on the decomposition of non-linear controlled systems, and piecewise-linear feedback control algorithms are presented, as well as other methods. The controls constructed satisfy the constraints imposed and bring the dynamical system subject to unknown but limited disturbances to a specified terminal state in a finite time. Explicit upper estimates of the time of the control process are obtained. Rigorous justification of the control algorithms is given. The methods are illustrated with a large number of control problems for various mechanical and electromechanical systems, and the results of a computer simulation are given. The book is based on studies by the authors that have been published over the past 15 years. Some of the material has been presented previously in the book *Methods for Controlling Nonlinear Mechanical Systems* by the same authors, published by Fizmatlit in 2006. The new monograph has been substantially enlarged. It contains brief introductions to optimal control theory and stability theory. Chapters devoted to synthesizing continuous control of Lagrangian mechanical systems using the Lyapunov function method have been added. The results of the solution of problems of the time-optimal swinging up and damping of a nonlinear pendulum are given. The monograph will be a useful addition to the extensive literature on the theory and methods of controlling dynamical systems.

The book is available in electronic form. It can also be ordered on the website www.springer.com.

Translated by P.S.C.

[☆] *Prikl. Mat. Mekh.* Vol. 73, No. 1, p. 156, 2009.