

Zhukov, K. A.; Kornev, A. A.; Popov, A. V.

Acceleration of the process of entering stationary mode for solutions of a linearized system of viscous gas dynamics. II. (English. Russian original) [Zbl 1397.35236](#)

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Summary: For finite-difference approximation of the linearized system of differential equations of viscous gas dynamics, the governing Dirichlet boundary conditions are constructed to guarantee the acceleration of the process of reaching the steady state solution. Necessary estimates are presented for the rate of convergence in the case of zero boundary conditions as well as the calculation results for stabilization in the case of initial conditions with jumps of pressure and/or density.

For Part I, see [the authors, *ibid.* **73**, No. 1, 24–29 (2018; [Zbl 1393.35191](#)); translation from *Vestn. Mosk. Univ., Ser. I* **73**, No. 1, 26–32 (2018)].

MSC:

35Q35 PDEs in connection with fluid mechanics

76N15 Gas dynamics (general theory)

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