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## **On the boundary conditions for Navier-Stokes equations in stream function-vorticity variables in simulation of a flow around a system of bodies**

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### **Abstract**

A method of determining the boundary conditions for the Navier-Stokes equations in stream function-vorticity variables, used for simulation of a nonstationary, asymmetric laminar flow of an incompressible viscous fluid around bodies, has been proposed. Universal relations for desired functions on surfaces around which the stream flows, independent of the method of spatial discretization, have been obtained. © 2005 Springer Science+Business Media, Inc.

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