

Vortex Dynamics on Nonsimply Connected Surfaces

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This conference paper is concerned with motions of an ideal incompressible fluid on a two-dimensional manifold which can be reduced to finite-dimensional dynamical systems, for example, systems of point vortices. An analysis is made of the case where on the nonsimply connected surface there is a field of constant vorticity

$$\operatorname{rot} v = \omega_0 = \text{const.}$$

The work is supported by the Ministry of Science and Higher Education of Russia (FEWS-2024-0007).