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Isoperimetric inequalities for the energy of uniform-vorticity flows in channels of uniform width. (English) [Zbl 0951.76078](#)

Math. Methods Appl. Sci. 23, No. 3, 255-269 (2000).

The main results of this paper are isoperimetric inequalities concerning the dependence of the kinetic energy of the constant-vorticity flows in a uniform channel on its width and on the length of its middle axis.

Reviewer: Valeriu Al.Sava (Iași)

MSC:

[76M30](#) Variational methods applied to problems in fluid mechanics

[76D17](#) Viscous vortex flows

[76B47](#) Vortex flows for incompressible inviscid fluids

Keywords:

isoperimetric inequalities; channel flow; kinetic energy; constant-vorticity flows

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