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Solvability of evolution problems for viscous incompressible flow in domains with non-compact boundaries. (English) [Zbl 0588.76044](#)

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One considers the question of solvability of initial-boundary value problems for the Stokes and Navier-Stokes equations in unbounded domains with non-compact boundaries assuming that the initial data and the external forces are not square integrable over the whole domain. For the linear problem the sketch of the proof of the existence theorem is given.

MSC:

76D05 Navier-Stokes equations for incompressible viscous fluids

35Q30 Navier-Stokes equations

Keywords:

nonsquare integrable forces; solvability; initial-boundary value problems; unbounded domains; non-compact boundaries; external forces; linear problem; existence

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