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Linear instability of the polymeric fluid flow with constant flow rate in an infinite plane channel with perforated walls

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We study a rheological Pokrovski-Vinogradov model for the flows of solutions and melts of incompressible viscoelastic polymeric medium in case of a flow in an infinite plane channel with perforated walls. We prove the linear Lyapunov instability of the base solution with the constant flow rate in a perturbation class, periodic with respect to the variable, changing along the channel wall.

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