

Linear stability of shear-thinning fluids in deformable channels: Effect of inertial terms

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## Highlights

- Mooney-Rivlin gels having a negative  $N_2$  are more stable than neo-Hookean gels.
- Reynolds number, no matter how small it is, has a destabilizing effect on hydroelastic instability.
- The effect of shear-thinning can be stabilizing or destabilizing depending on the Reynolds number.

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