

The falling sphere problem and capturing enhanced drag with Boger fluids

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Highlights

- Enhanced drag resolved for different geometry aspect ratios with a swanINNFM model
- Experimental drag measurements have been quantitatively captured
- At fixed elasticity, there is increase in drag with rise in solvent fraction
- Transition phases are detected between steady, oscillatory, and unstable solutions
- Flow-rate increase exhibits larger *drag* compared to fluid-relaxation time increase

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