

Abstract Submitted
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Phase synchronization of swimming infinite sheets in viscoelastic fluids¹ JOHN CHRISPELL, Indiana University of Pennsylvania, MICHAEL SHELLEY, Courant Institute of Mathematical Science, LISA FAUCI, Tulane University — A Navier-Stokes/Oldroyd-B immersed boundary algorithm is used to examine the interaction of swimming infinite sheets with a viscoelastic fluid. In particular, we examine the spatial and temporal evolution of the polymer stress field. The effects of the bulk viscoelasticity on hydrodynamic synchronization of swimming sheets and sheets swimming next to solid walls is analyzed.

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