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Simulation of drop tipstreaming in a flow focusing geometry with a hybrid numerical method MICHAEL BOOTY, MICHAEL SIEGEL, New Jersey Institute of Technology, JACEK WROBEL, Tulane University, QIMING WANG, York University, Toronto — A hybrid numerical method that is designed to resolve the influence of soluble surfactant in the limit of large bulk Peclet number is used to simulate tipstreaming from a drop in the Stokes flow regime in a simple, axisymmetric flow focusing geometry. Examples are presented of the influence of flow focusing on tip-thread formation and tipstreaming, and of the influence of various dimensionless flow parameters on flow dynamics.

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