Abstract Submitted for the MAR14 Meeting of The American Physical Society

Chiral Double Emulsions: Breaking Symmetry with Microfluidics LAURA ADAMS, THOMAS KODGER, JIAWEI YANG, DAVID WEITZ, Harvard University — We will present a new microfluidic encapsulation technique for generating chiral double emulsions, drops inside of drops, with a specific handedness. In presenting the data, we will discuss the effect of the number, size and composition of encapsulated drops on the double emulsion structure before and after pinching off from an injection capillary in a microfluidic device. These results support theoretical models in which the pinch-off mechanism is in direct analogy to boundary layer considerations.

> Laura Adams Harvard University

Date submitted: 15 Nov 2013

Electronic form version 1.4