## Abstract Submitted for the DFD07 Meeting of The American Physical Society

Stirring fluid with a 'taffy pulling' device J. ALEC CALHOUN, MARK STREMLER, Virginia Tech — The four-pronged taffy pulling machine is a classic candy-making device. Two intersecting U-shaped pieces stretch and fold the taffy as they rotate. We demonstrate that this mechanism is an effective tool for stirring viscous fluid. The rods 'braid' the fluid in a way that guarantees exponential stretching of non-trivial material lines. We analyze this stirring experimentally and using methods from topology and dynamical systems theory.

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