

Check out our active
instability videos!



Dynamic Finger Instabilities in Active Matter Systems

Kayla Baker, Rodrigo Martinez, Ryan McGorty
University of San Diego

Individual nematodes (outlined in blue) wiggle and swim, but when crowded together display fascinating collective dynamics. We use this system as a model active matter fluid. Through our rheo-optical experiments, we observe unique fingering patterns resulting from both hydrodynamic forces and active motion. Our lifting Hele-Shaw experiments offer insights into active fluids and bio-inspired material behavior.

