

Abstract Submitted  
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**Transverse swimming in a dilute suspension of active swimmer under an oscillating shear flow** FRANCISCA C. GUZMAN LASTRA, RODRIGO SOTO, Universidad de Chile — Simulations of a dilute suspension of pusher swimmers under an oscillating shear flow show that a large fraction of them swim preferentially in the vortex and flow direction, perpendicular to the gradient direction. These two directions alternate in a collective way among all the swimmers. Experiments of a suspension of E.Coli in a Hele-Shaw cell under an oscillating flow manifest the same behavior.

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