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**Dynamics of Swimming Particles in Chaotic Fluid Flows** NIDHI KHURANA, JERZY BLAWZDZIEWICZ, NICHOLAS T. OUELLETTE, Yale University — We numerically investigate the effect of swimming (modeled as an intrinsic velocity) on the transport of particles in chaotic two-dimensional, incompressible fluid flows. We consider spheroidal particles advected by an externally imposed flow, and show that even a small amount of swimming significantly changes the particle dynamics. The phase space is examined as the magnitude and direction of the swimming speed are varied.

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