Abstract Submitted
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Irreversibility in the motion of suspended particles GERMAN DRAZER, Rutgers, The State University of New Jersey — We discuss the observed irreversibility in the motion of suspended particles in Stokes flow and its effect in a wide range of transport phenomena, from the rheology of non-Brownian suspensions to the separation of colloidal particles in microfluidic devices. The work of Prof. Acrivos in shear-induced diffusion was instrumental to explain the observed irreversible and stochastic behavior in suspensions flows. The same ideas explain the underlying mechanisms in some popular microfluidic devices used for the separation of suspended particles.

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