Effective diffusion of microscopic swimmers

זעירים שחיינים של אפקטיבית דיפוזיה

Abstract: Many advection-diffusion processes appear diffusive at large times, with the effective diffusion different from the Brownian diffusion. The paradigm of Taylor dispersion allows to calculate the effective diffusion. The goal is to study this paradigm and apply it to the problem of microscopic swimmers that undergo Brownian motion in both physical and orientation spaces.