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Microswimmers enhance the rotational diffusivity of colloids. MARCO POLIN, RAPHAEL JEANNERET, SAMUEL GOWER, BENJAMIN SLATER, Warwick University — The random fluid flows generated within a suspension of swimming microorganisms have been shown to affect the translational diffusivity of suspended passive particles. Here we report results from experiments and simulations which show that a dramatic enhancement is found as well for the rotational diffusivity. The consequences of this effect when the passive tracers are replaced with small active particles will be discussed.

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