

Abstract Submitted
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Particles in shear-thinning fluids CHARU DATT, GWYNN ELFRING, The University of British Columbia, Vancouver — The dynamics of particles in non-Newtonian fluids can be markedly different than in Newtonian fluids. In this talk, we present analytical results for the motion of spheres in weakly shear-thinning fluids. The results are obtained using the reciprocal theorem of low Reynolds number hydrodynamics and demonstrate ways in which shear-thinning rheology non-trivially affects the particle dynamics.

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