Abstract Submitted
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Spinning Rods: Experiment & Theory[1] JONATHAN TOLEDO, University of North Carolina at Chapel Hill, RICHARD M. MCLAUGHLIN, ROBERTO CAMASSA, TERRY JO LEITERMAN, RICHARD SUPERFINE, JING HAO, LEANDRA VICCI, ADAM BROOKS, University of North Carolina, UNC RTG FLUIDS GROUP, UNC RTG FLUIDS GROUP TEAM — Mixing and transport properties of the fluid motion induced by a slender rod attached to a plane sweeping out a cone are examined in a table- top experiment. This experiment is used to validate an exact solution for the motion of a spheroid sweeping out a double cone in free space and an asymptotic solution for a slender body attached to a plane. Validation of the theory is used to examine mixing and transport of the same experiment on the microscale.

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