Department of Mathematics and Statistics Colloquium

Applications of fluid flow around slender bodies using the method of regularized stokeslets

Eva Strawbridge, JMU

Abstract: Movement of or in very viscous fluids (low Reynolds number) is a problem with a wide number of applications in biology, physics, and engineering. In a regime where flow is reversible, how can mixing be established? How do microorganisms swim? We seek to address these questions by modeling low Reynolds number fluid flow using the method of regularized stokeslets and comparing our numerical results to experimental data.

Monday, February 17 at 3:45 in Roop 103

refreshments at 3:30