a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

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MECH 493 project: Flexibility enhanced propulsion at low Reynolds number

Background and research goal

At low Reynolds number, viscous forces dominate and inertia is negligible. The linearity of the resulting Stokes equations results in a severely constrained capability to generate hydrodynamic thrust. In this research project the student will explore using flexibility to facilitate, enhance and optimize the generation of thrust.

Tasks to be performed by the student

The student will develop mathematical models and then design custom numerical methods for their solution and compare with experimental results.

Facilities and team:

The student will be given a desk and computer in my lab, CEME 1051, for the duration of the academic year and will interact with Elfring group graduate students.