

Department of Ocean and Resources Engineering

Seminar

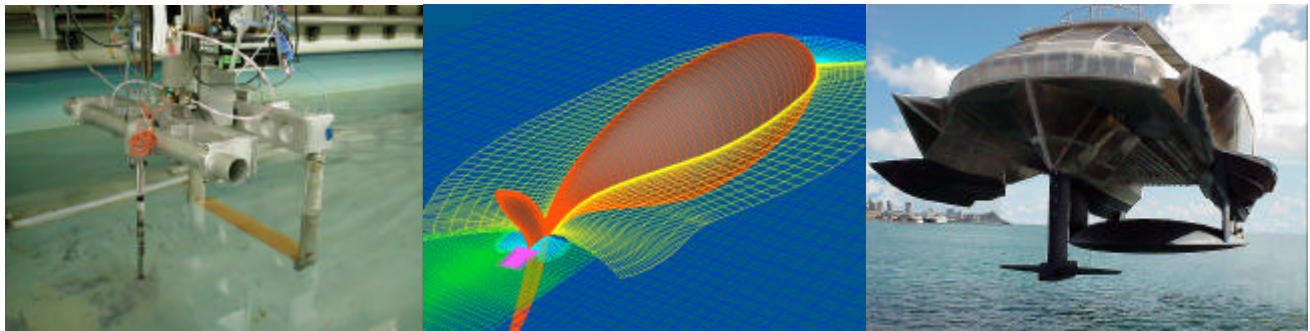
Flapping Foil Technology for Motion Stabilization of Novel High-Speed Vehicles

by

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ABSTRACT

The presentation will provide a general overview of novel ship development being undertaken by Navatek (Pacific Marine) in Hawaii and the joint project undertaken by SAIC, Navatek and MIT on the use of Flapping Foil for motion stabilization. The project is funded by National Defense Center of Excellence for Research in Ocean Sciences. In Phase I, MIT mapped out the performance of flapping foils. SAIC build an empirical model of the flapping foil system for incorporation into the LAMP simulation system framework. The Large Amplitude Motions Program (LAMP) developed by SAIC is a physics based nonlinear time-domain ship motion prediction simulation system. Navatek provided empirical ship motion data and corroborated numerical predictions with experimental results.