

1067-AE-1672      **Rachel Levy\*** (levy@hmc.edu), 301 Platt Blvd, Claremont, CA 91711, and **Students from DYNAR Research Group** (levy@hmc.edu), 301 Platt Blvd, Claremont, CA 91711. *An economical micro-submarine testbed for validation of 3D cooperative control strategies for underwater robots.*

Undergraduate students from the Dynamic Networks for Aquatic Robots (DYNAR) research group at Harvey Mudd College will describe a new aquatic robotic testbed designed to test algorithms for coordination and control of micro remote control submarines. The testbed is implemented with a three-dimensional tracking algorithm utilizing views from two planes. Results from experiments in the testbed will be compared with simulations of a mathematical model describing the motion of the submarines in response to propeller forces. (Received September 22, 2010)