

PHYSICAL MATHEMATICS SEMINAR

STRATIFIED FLOWS: FROM THE LAB TO THE OCEAN

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ABSTRACT:

We present the results from a variety of laboratory experiments concerning stratified flow phenomena that can be studied in a laboratory setting, and are particularly relevant to the ocean. We begin on the micro-scale, studying the settling of sub-millimeter-scale particles, and describe the ongoing development and implementation of the Synthetic Schlieren technique as an investigative tool. Moving up in size, we present the first experimental results demonstrating spontaneous locomotion of asymmetric objects in stratified fluids. Finally, we consider internal wave generation by pertinent ocean-floor topography, and discuss our laboratory results in the context of our recent involvement in ocean-going experiments.

TUESDAY, MARCH 13, 2007
2:30 PM
Building 2, Room 146

*Refreshments at 3:30 PM in Building 2, Room 349
(Applied Math Common Room)*



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