Fall 2012
18.355 FLUID MECHANICS
INSTRUCTOR: John W. M. Bush
MWF - 11:00 AM -- Room 2-142

Prereq.: Undergraduate fluids course or permission of instructor.

Mathematical methods applied to problems in fluid dynamics. Particular attention will be given to the power of dimensional analysis and scaling arguments. Topics will include: particle motion (e.g. the dynamics of sports balls); animal locomotion (swimming and flying); viscous flows (e.g. geological fluid dynamics); rotating and stratified flows (geophysical fluid dynamics); gravity currents and plumes (environmental fluid mechanics); drops, bubbles and films. Course material will be supplemented by classroom and laboratory demonstrations.

For further information, contact
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