PHYD37 Fall 2013

Introduction to Fluid Mechanics

T at 10-11:30 am (HW 402) and R at 10-11:30am (SW505B)

Description

This course is an introduction to the analysis of motion of fluids such as water, air, magma, as well as an introduction to transport phenomena such as heat and mass transfer. We will cover the topics of mass, momentum and energy conservation. We will derive and discuss several important dimensionless numbers that can help us understand the type of flow and study in more detail two types of regimes: inviscid and highly-viscous flow. We will also cover the theory of waves and instabilities.

Instructor: Professor Diana Valencia UTSC Office SW504B
dvalencia@utsc.utoronto.ca
Office hours Tuesdays 11:30am-12:30pm and by appointment

Prerequisites: It is expected that the student is familiar with vector calculus and basic solutions to ordinary and partial differential equations. Some knowledge of thermal physics will be helpful.

Assignments: There will be homework assi.((b)2(a)wk a)2 isrea

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