Course: Fluid Dynamics
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Aims:
Aim of this course is to convey an understanding of basic principles in Fluid Dynamics as well as their applications to several physical environments.

Structure:
The Fluid Dynamics course will consist of 9 lectures in Term 2 (in March). Topics covered are:

1. Introduction, concepts and simplifications
2. Equations of fluid motion
3. Bernoulli’s principle
4. Compressible flow
5. Viscosity
6. Vorticity
7. Laminar and turbulent flow
8. Computational Fluid Dynamics
9. Applications (incl. Geophysical)

Course materials:
Course material presented in the lectures is made available for download on Blackboard a few days ahead of each lecture. This includes material presented as slides as well as most material presented on the board. Downloading and reading the material ahead of each lecture will help your general understanding during the lecture.

Problem Sheets:
You will receive a total of 3 problem sheet. These form part of the course and help deepen some of the material & concepts presented in the lectures. Furthermore, the problem sheet will help prepare for the exam.

Office hours:
Office hours will be announced in the first lecture.

Recommended reading:
No single textbook will cover all course material, but good introduction books are given below. More reading resources will be given in the first lecture.