
M4A32: Vortex Dynamics

Course details

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General comments: This is an advanced course aimed at giving students with a basic knowledge of fluid dynamics an introduction to the study of vorticity. A knowledge of material in course M3A2 is a desirable prerequisite (but not essential).

- (i) There will be no assessed coursework.
- (ii) **Texts:** The following are recommended reference texts:
 - P.K. Newton, *The N -Vortex Problem*, Springer-Verlag.
 - P.G. Saffman, *Vortex Dynamics*, (CUP).
 - D.J. Acheson: *Elementary Fluid Dynamics*, (OUP).
 - G.K. Batchelor: *An Introduction to Fluid Dynamics*, (CUP).
 - H. Lamb: *Hydrodynamics*, (CUP).
 - Homsy *et al*: [CD-Rom] *Multimedia Fluid Mechanics*, (CUP).
- (iii) Office hours – Mondays 1-2pm.
- (iv) A total of five problem sets will be handed out throughout the term. Solutions will be available in due course.
- (v) Downloadable copies of the example sheets and past examination papers can be found on the website www.ma.ic.ac.uk/~dgcrowdy (and click on “Classes”).
- (vi) This course has run for four previous years and past examination papers are also available in the library.