

CHAPTER 13: VORTICITY**Reading:**

Chapter 13 of Blandford and Thorne.

Movies To Be Downloaded and Viewed:

Vorticity, Part 1 and *Vorticity, Part 2*. At
<http://web.mit.edu/fluids/www/Shapiro/ncfmf.html>

Note: the film clips that I showed in class on Monday were from these movies. Viewing movies such as this is a much better way to build up your physical intuition about fluid mechanics, than reading any textbook.

Problems: solutions due in class on Wednesday, 7 February

A. Do:

1. Ex. 13.1 Vorticity and Incompressibility, OR
2. Ex. 13.2 Joukowski's Theorem

B. Do:

Ex. 13.3 Rotating Superfluid

C. Do:

1. Ex. 13.6 Potential Flow Around a Cylinder, OR
2. Ex. 13.9 Laminar Flow Down a Long Pipe

D. Do:

1. Ex. 13.7 Reynolds' Numbers, OR
2. Ex. 13.8 Fluid Dynamical Scaling