

**Homework problems on Fluid Dynamics**  
(1.63J/2.21J)

Chiang C. Mei, 2002

disp-channel.tex

**Dispersion in an open channel**

Show that the shear-enhanced dispersion coefficient  $E$  for the uniform flow in a wide and inclined channel of depth  $h$  is  $(8/945)U_o^2h^2/D$ .