

# MATH865 HW6

May 23, 2008

1. Extend the two-phase code for Chan-Vese piecewise constant model to four phase (two level set functions) code. Do the image segmentation on the provided image : two.jpg ( $u_0$ ) with two different initial guesses of the contours you pick. Plot the approximating image  $u$  and zero contours of  $\phi_1$  and  $\phi_2$ .