Meeting: 1001, Evanston, Illinois, SS 4A, Special Session on Fluid Dynamics, Diffusion and Reaction

1001-35-311 **Robert Jerrard\*** (rjerrard@math.toronto.edu), Department of Mathematics, University of Toronto, Toronto, Ontario M5S 3G3, Canada. Jacobian estimates for Ginzburg-Landau functionals, and applications.

This talk will present some estimates that bound weak norms of the Jacobian of a complex-valued function by its Ginzburg-Landau energy, and will survey some applications of this sort of estimate. If time permits, some refined, nearly sharp estimates will be discussed. (Received August 30, 2004)