Meeting: 1003, Atlanta, Georgia, SS 27A, AMS-SIAM Special Session on Analysis and Applications in Nonlinear Partial Differential Equations, I

1003-49-61 **Irene Fonseca** and **Cristina Popovici*** (`cristina@webmail.math.cmu.edu`), Department of Mathematical Sciences, Carnegie Mellon University, Pittsburgh, PA 15213. *Coupled Singular Perturbations for Phase Transitions.*

A Gamma-convergence result for non-convex functionals of vector-valued functions arising in the study of coupled singular perturbations for phase transitions is obtained in the case where the energy density has two potential wells. (Received July 26, 2004)