



Differential Equations and Applied Math Seminar

Dr. Ray Treinen, Texas State University

11am-12pm September 8th, 2017

333 Derrick Hall

Title: A recap of general results pertaining to Γ -convergence

Abstract: We will summarize the results on Γ -convergence that we discussed last spring. This will include the definition, convergence of minimizers, upper and lower Γ -limits, as well as two applications of particular interest. We will present the framework for the gradient theory of phase transitions, as well as the approximation of free discontinuity problems such as Mumford-Shah. The first application is one way to determine the equilibrium shapes of fluids, and the second application is used to model fractures. We are mostly following the book by Andrea Braides.

Interested faculty and graduate students are encouraged to attend.