



## Differential Equations and Applied Math Seminar

Dr. Ray Treinen, Texas State University

11am-12pm February 17th, 2017

330 Derrick Hall

**Title:** An introduction to  $\Gamma$ -convergence, part I

**Abstract:** We will introduce the notion of  $\Gamma$ -convergence, which is a notion of convergence on functionals. This can be a useful tool when the function space you would like to work with does not have a rich structure, but you can approximate that space by a more structured function space. The notion of  $\Gamma$ -convergence gives some ability to measure how minimizers of a functional in the more structured space converge to minimizers of a related functional in the less structured space. We will provide a variety of examples where one may apply these convergence results. Also, these results have implications to both analytical and computational approaches to solving certain problems. We will be mostly following the book by Andrea Braides.

Interested faculty and graduate students are encouraged to attend.