



# Differential Equations and Applied Math Seminar

Dr. Ray Treinen, Texas State University

11am-12pm September 4th, 2020

Zoom

**Title:** Theory and applications of representing certain functionals with integrals

**Abstract:** In this introductory talk I will outline two classical papers from Ambrosio and Braides (Functionals defined on partitions of sets of finite perimeter I & II). We will also discuss an earlier paper by Buttazzo and Dal Maso which treats a similar problem with functionals defined on Sobolev spaces. We will discuss some more recent works as well, time permitting.

This talk is intended to be the first in a sequence of talks where we work through the proofs of the main theorems. My hope is to make these talks as accessible as possible to graduate students that have had a full year of analysis.

Interested faculty and graduate students are encouraged to attend.