

Differential Equations and Applied Math Seminar

Texas State University

2-3pm September 4, 2015

326 Derrick Hall

Speaker: Dr. Ray Treinen, Texas State University

Title: Functions of Bounded Variation and Sets of Finite Perimeter

Abstract: While Sobolev spaces are fairly well known from the theory of partial differential equations, it is sometimes more natural to work with functions of bounded variation and sets of finite perimeter. These ideas were brought into the spotlight in the 1950's by de Giorgi, and we present here a more recent treatment by Evans and Gariepy. We will discuss approximation and compactness, traces, the isoperimetric inequality, the reduced boundary and other topics.

Interested faculty and graduate students are encouraged to attend.