



## Differential Equations and Applied Math Seminar

Dr. Ray Treinen, Texas State University

11am-12pm February 3rd, 2017

330 Derrick Hall

**Title:** Sets of finite perimeter for the equilibrium state of three immiscible fluids IX

**Abstract:** We will continue our study of the equilibrium state of three immiscible fluids using sets of finite perimeter. We have established the existence of subsequences of sets that converge to cones in the blow-up limit. After a second blow-up limit, we are able to study the problem in the tangent plane to the blow-up sphere. We will classify all volume constrained minimizers to the energy functional in the plane when the minimizers are cones. We have shown some preliminary results for “good triangles” and we will show how those relate to the energy minimizers.

Interested faculty and graduate students are encouraged to attend.