Meeting: 1003, Atlanta, Georgia, SS 27A, AMS-SIAM Special Session on Analysis and Applications in Nonlinear Partial Differential Equations, I

1003-35-1215 Changyou Wang* (cywang@ms.uky.edu), Department of Mathematics, University of Kentucky, Lexington, KY 40506. The Aronsson equation and the Calculus of Variations in L-infinity.
In this talk, I will survey some recent results on the relationship between absolute minimizers of L-infinity functional and the Aronsson equation, which is a fully nonlinear, degenerate elliptic equation. The simplest model problem is the equivalence between an absolute minimizing Lipschitz extension (AMLE) and the infinity harmonic function, which was established from the works by Aronsson, Jensen, Crandall-Evans-Gariepy, and others. (Received October 04, 2004)