Analysis and Applied Mathematics Seminar

Some numerical aspects of Quasiconvexity and Rank-one convexity

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Abstract: This talk is concerned with some numerical aspects of Morrey's Conjecture in dimension 2x2. The problem is to know whether there exists a rank-one convex function defined on 2x2 matrices that is not quasiconvex. The conjecture is first cast as a minimization problem. The later problem is approximated by minimization problems over families of affine piecewise functions. Two methods that could lead to finding counter-examples are suggested.

Monday, March 7 at 4:00 PM in SEO 636