VIGRE mini-course on

nonconvex variational problems & applications

Department of Mathematics, University of Utah, Salt Lake City

May 16-27, 2005

Principal Lecturers:

Andrea Braides
University of Rome Tor Vergata
Rome, Italy

"From Discrete Systems to Continuous Variational Problems"

Georg Dolzmann
University of Maryland
College Park, MD

"Macroscopic Models for Phase Transforming Materials"

Topical lectures will be given by faculty of the University of Utah's math department:

Andrej Cherkaev, Elena Cherkaev, David Dobson, Graeme Milton, Klaus Schmitt, Andrejs Treibergs

Topics: the minimal extensions of nonconvex Lagrangians, minimax problems, regularization, bifurcations; applications to geometry, composites, thermodynamics, band-gap materials, inverse problems and optimal design

Tutorials will be organized by **Marian Bocea**:

introduction to convexity, nonconvex variational problems, and Young measures.

There is no registration fee. Some financial support is available, see website for details. Some on-campus housing is available.

for more information, visit:

www.math.utah.edu/vigre/minicourses