

TEMPLE UNIVERSITY  
Department of Mathematics

# Applied Mathematics and Scientific Computing Seminar

Wednesday, 1 February 2012, 4:00 p.m.  
Room 617 Wachman Hall

(refreshments and social at 3:45 p.m)

## Metastability in Non-linear Elasticity

by Yury Grabovsky  
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**Abstract.** Martensitic phase transitions in solids can be modeled by means of the energy minimization principle, whereby the observed states correspond to strong local minima of the energy functional (metastable states). One of the hallmarks of the martensitic phase transitions is the nucleation and growth of a new phase. We will examine the material and structural conditions necessary for metastability.