

Organizational Meeting

Monday, September 26, 2016

4:00pm - 135 Gates Thomas

Course time and date may be flexible and will be discussed in the first meeting

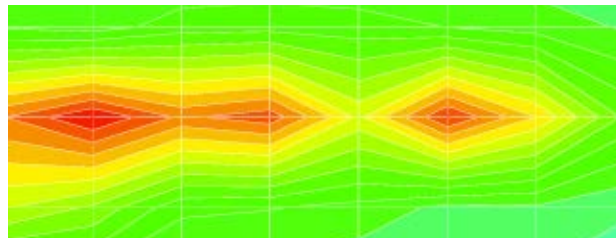
Fall 2016/Winter 2017

Special Topics in Solid Mechanics, Ae/AM/ME225

**“Static and Dynamic Failure of Brittle Solids and Interfaces,
from the Micro to the Mega”**

Instructor: Ares J. Rosakis

TA: Marcello Gori



Course description:

Linear elastic fracture mechanics of homogeneous brittle solids (e.g. geo-materials, ceramics, metallic glasses); small scale yielding concepts; fracture of bi-material interfaces with applications to bonded engineering structures; thin-film and micro-electronic components and systems; dynamic fracture mechanics of homogeneous engineering materials; dynamic shear dominated failure of coherent and incoherent interfaces at all length scales; experimental methods in fracture; dynamic rupture of frictional interfaces with application to earthquake source mechanics; allowable rupture speeds regimes and connections to earthquake seismology.

