

**Pedro Ponte Castañeda**

University of Pennsylvania

will speak on

**Nonlinear Homogenization**

ABSTRACT:

Most natural and man-made materials are heterogeneous at some length scale, and often at several length scales. In addition, at sufficiently high field intensities, their constitutive response is nonlinear. I will discuss a fairly general homogenization technique — called the linear comparison method — to estimate the average, or homogenized properties of nonlinear heterogeneous materials, and present some recent results for nonlinear composites and polycrystals.

MONDAY, 3 DECEMBER 2007

LECTURE AT 4:00 PM

COFFEE, TEA, AND REFRESHMENTS FROM 3-5 PM

ROOM 617, WACHMAN BUILDING  
DEPARTMENT OF MATHEMATICS