Boston University Physics Colloquium



Geometric mechanics: from the atomic to the tectonic

Many problems involving the large deformations of soft extended objects such as strings and membranes can be formulated using elementary geometry and physics. I will discuss some of the general and specific features of these problems and their role in the description of patterns on many different length scales in the material world ranging from the deformation of atomically thin nanotubes, the self-similar wrinkles in skin, the aesthetic drapes of a fabric, the intricate folds in origami, the violently crumpled sheet that is the fate of many a calculation gone awry, all the way to the morphology of tectonic subduction zones.

L. Mahadevan

Harvard University

December 2, 2008 (Tuesday) at 3:30pm (Refreshments at 3:15pm) SCI 107, Metcalf Science Center, Boston University Call: Winna Somers (wsomers@bu.edu) (617) 353-9320 Host: Sidney Redner