Mathematics Department Colloquium

Organizer: Vaughan Jones

Thursday, 4:10–5:00pm, 60 Evans

May 3 L. Mahadevan, Harvard University

Elasticity and Geometry

Many problems involving the large deformations of soft extended objects such as strings and membranes can be formulated using elementary geometry and mechanics. 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 such as the aesthetic drapes of a fabric, the intricate folds in origami, the self-similar wrinkles in skin, and the violently crumpled sheet that is the fate of many a calculation gone awry.