

The CU Department of Physics Presents...

Physics Colloquium

Prof. Peter Palffy-Muhoray
Liquid Crystal Institute,
Kent State University

“Light-induced phenomena in liquid crystal rubbers”

Abstract: Liquid crystal elastomers are orientationally ordered elastic solids. Because of the strong coupling between orientational order and mechanical strain, they are extremely responsive to external stimuli. We present observations of light-induced deformations and related phenomena in these materials, and discuss the underlying physics. Modelling the dynamic response is an interesting and challenging problem. We describe our efforts to construct a continuum model, and present preliminary results of simulations. We consider potential applications based on the unique features of these materials.

Wednesday, March 30

4:00 PM

Duane G1B20

3:45 p.m.—Refreshments in G1B31