

Physics Colloquium

Professor Arjun G. Yodh

(University of Pennsylvania)

“Phase Transitions, Relaxation and Shape Transformations in Soft Materials”

Friday, November 15, 2019

2:30pm—3:30pm

130 Hahn Hall North

I will describe experiments that probe phase transitions and relaxation phenomena in colloid solids and supercooled liquids, and shape transformations in liquid crystal drops. The experiments with colloids capture the mechanisms that facilitate crystal-crystal phase transitions and elucidate the origin of non-exponential relaxation in supercooled liquids. Experiments with drops containing liquid crystal oligomers exhibit remarkable shape transitions which depend on temperature and oligomer chain distribution in surprising ways.