

PHYSICS COLLOQUIUM



ARJUN G. YODH

James M. Skinner Professor of Science in the Department of Physics and Astronomy at the University of Pennsylvania

"Self-Assembling Temperature-Sensitive Colloids for Investigation of Phase-Transitions, Frustration, and Glass Dynamics"

Temperature-sensitive microgel particles presents experimenters with a fantastic new variable for creation and control of novel phases and disordered matter. I will describe experiments from my laboratory which exploit this phenomenon to learn news physics about phase-transitions, frustration, and glass dynamics.

Arjun G. Yodh is the James M. Skinner Professor of Science and the Director of The Laboratory for Research on the Structure of Matter (LRSM) and its NSF-supported Materials Science and Engineering Center (MRSEC) at the University of Pennsylvania. Physics & Astronomy is his home department, and he has a secondary appointment in the Department of Radiation Oncology in the Medical School. Yodh received his B.Sc. from Cornell University, and his Ph.D. from Harvard University. He joined the University of Pennsylvania faculty in 1988, following a two-year postdoctoral fellowship at AT&T Bell Laboratories. His current interests span fundamental and applied questions in condensed matter physics, medical and biophysics, and the optical sciences. Areas of ongoing research include: soft materials such as colloids, liquid crystals and other complex fluids, networks and films, carbon nanotubes, optical microscopy and micromanipulation, biomedical optics especially for functional imaging and monitoring of living tissues with diffuse light, photodynamic therapy, and linear/nonlinear optics/spectroscopy. He is a member of several interdisciplinary institutes at PENN including, the Laboratory for Research on the Structure of Matter (LRSM), the Institute of Medicine and Engineering (IME), the Bioengineering Graduate Group, and the Abramson Cancer Center.

**Thursday, November 9, 2017
at 4:10PM in LL. 316**

Refreshments at 3:45PM in LL. 317