## **Boulder School for Condensed Matter and Materials Physics Polymers in Soft and Biological Matter** July 9-August 3, 2012

Founded by physical chemists like Flory and brought into the mainstream of theoretical physics by visionaries like de Gennes, over the last eighty years polymer physics has grown into a mature, rich, and exciting discipline. Now expanded to include also colloids, liquid crystals, interfaces, etc, polymer and soft matter physics span fundamental statistical mechanics and field theory, most advanced materials, as well as technological and biological frontiers. Nevertheless, a comprehensive exposition to fundamental concepts of polymer and soft matter science is still largely missing, neglected in most physics departments, ignored by many workers in biological realm, and underappreciated even by chemical engineers. The goal of this year's Boulder summer school is to fill this gap and provide the physics community with a relatively comprehensive course in the fundamentals of polymer and soft matter physics with emphasis on their biological applications.

**Paul Chaikin (New York) Noel Clark (CU Boulder) Alexei Finkelstein (Moscow) Daan Frenkel (Cambridge) Alexander Grosberg (New York)** Jean-Francois Joanny (Institute Curie) Kurt Kremer (Mainz) **Eugenia Kumacheva (Toronto)** Frederick MacKintosh (Amsterdam) **Tom McLeish (Durham) Philip Pincus (Santa Barbara) David Pine (New York) Michael Rubinstein (Chapel Hill)** Samuel Safran (Weizmann Institute) **David Weitz (Harvard) Ekaterina Zhulina (Pittsburgh)** 

Scientific Organizers: Alexander Grosberg (New York University) Eugenia Kumacheva (U. Toronto) Leo Radzihovsky (CU Boulder) Michael Rubinstein (U. North Carolina)

The school will pay for most local expenses, and there are travel grants available for participants from U.S. universities. Students and postdocs interested in participating should submit an electronic application by the February 27 deadline. The application form, and detailed information regarding housing, travel and financial support are available at

The Boulder School in Condensed Matter and Materials Physics provides expert training, not usually available within the traditional system of graduate and postgraduate education, for advanced graduate students and postdoctoral researchers working in condensed matter physics, materials science and related fields. The School is supported by the National Science Foundation, with additional funding provided by the University of Colorado, and meets annually during July in Boulder, Colorado.

Photo Credits: [Rainbow Mountain] Fractal Art by Vicky Brango-Mitchell, [DNA Liquid Crystals] Clark Lab at CU Boulder; and [F-actin cytoskeleton] Gardel Lab U Chicago

## http://boulder.research.yale.edu/