

Neutrons in Soft Matter Science

Complex Materials on Mesoscopic Scales

The Neutron Sciences Directorate (NScD) at Oak Ridge National Laboratory (ORNL) and the Joint Institute for Neutron Sciences (JINS) between University of Tennessee and ORNL are pleased to coordinate the 2nd cyber enabled collaborative graduate course taught by scientists and professors from sixteen contributing institutions. Scattering experiments using neutrons, X-rays and light are critical in studying structure and dynamics of soft-matter systems including water, colloids, polymers, surfactants solutions and biological macromolecules. The present cyber course draws together an array of internationally recognized experts in both fundamental and applied aspects of soft matter scattering to provide a timely and comprehensive didactic presentation of theory, techniques and applications in this field. The course will be taught from the lecturers' institutions and will be available via both live transmission and streaming. Graduate students, scientists, post-docs and faculty in the fields of soft matter physics, biophysics, materials science, chemical engineering, bio-engineering, biomedical engineering, nuclear engineering, chemistry and biology will benefit from this course. For more information on the course or to register, please follow the links at the bottom.

Schedule:

Tuesdays and Thursdays
2:00 to 3:15 pm (Eastern)
9/3/2013 through 12/5/2013

Lecturers:

Simon Billinge, *Columbia University/Brookhaven National Laboratory*
Benjamin Chu, *Stony Brook University*
Juan Colmenero, *University of Basque Country*
Bill Hamilton, *Oak Ridge National Laboratory*
Ken Herwig, *Oak Ridge National Laboratory*
Tim Lodge, *University of Minnesota*
Chuck Majkrzak, *National Institute of Standards and Technology*
Simon Mochrie, *Yale University*
Bradley Olsen, *Massachusetts Institute of Technology*
Dieter Richter, *Jülich Center for Neutron Science*
Sunil Sinha, *University of California, San Diego*
Jeremy Smith, *University of Tennessee/ Oak Ridge National Laboratory*
Eugene Stanley, *Boston University*
Norman Wagner, *University of Delaware*
David Weitz, *Harvard University*
Yang Zhang, *University of Illinois at Urbana-Champaign*

Organizing Committee:

Sow-Hsin Chen, *Massachusetts Institute of Technology*
Takeshi Egami, *University of Tennessee/JINS*
Sunil Sinha, *University of California, San Diego*
Meiyun Chang-Smith, *Coordinator, NScD/JINS, changsmithm@ornl.gov*

<http://jins.tennessee.edu/nsms2013>

<http://neutrons.ornl.gov/education/nsms2013>