Frontier Science with X-ray Correlation Spectroscopies using Continuous Sources
June 29 & 30, 2011
Robert Purcell Conference Center, Cornell University, Ithaca NY

The purpose:
Future Energy Recovery Linac (ERL) and Ultimate Storage Ring (USR) x-ray sources will be able to deliver coherent hard x-ray beams that are hundreds of time more intense than at most existing storage ring x-ray sources. These intense beams will enable novel ways of probing structural dynamics in matter using correlation spectroscopy (XPCS).

The emphasis is on identifying opportunities and exploring high-impact experiments.

Don Bilderback, Cornell University
"Energy Recovery Linac (ERL) and Ultimate Storage Ring (USR) Properties"

Wes Burghardt, Northwestern University
"XPCS During Shear"

Andrei Fluerasu, National Synchrotron Light Source II
"Dynamics in Soft-matter and Biological Systems: Trends and Opportunities at NSLS-II"

Sol Gruner, Cornell University
"X-ray Detectors: State-of-the-art & Future Possibilities"

Christian Gutt, Deutsches Elektronen-Synchrotron
"X-ray Cross Correlation Analysis (XCCA) and Bond-order in Liquid and Glasses"

Stephen Kevan, University of Oregon
"Probing Magnetic Complexity with Coherent Soft X-ray Beams"

Karl Ludwig, Boston University
"Martensitic Transitions & Opportunities in Non-equilibrium Physics"

Larry Lurio, Northern Illinois University
"Prospects for X-ray Photon Correlation Spectroscopy from Liquid and Soft Matter Surfaces and Interfaces"

Simon Mochrie, Yale University
"Biophysics and Soft Matter"

Michael Pierce, Argonne National Laboratory
"XPCS on Surfaces: Challenges and Opportunities"

Maikel Rheinstadter, McMaster University
"Nanobiology: Membranes and Proteins in Motion"

Alec Sandy, Advanced Photon Source
"Scientific Trends and Opportunities from the Perspective of 8-ID"

Bogdan Sepiol, University of Vienna
"Nanoscale Dynamics, Atomic Diffusion"

Yuya Shinohara, University of Tokyo
"Hierarchical Dynamics of Soft Matter and Opportunities at Japanese Future Light Sources"

Michael Sprung, Deutsches Elektronen-Synchrotron
"Scientific Trends and Opportunities: P10 @ PETRA III"

Mark Sutton, McGill University
"New Opportunities for XPCS"

Go to http://erl.chess.cornell.edu/gatherings/2011_Workshops/index.htm
For more information contact Kathy Dedrick, User Administrator – 607-255-0920